CONTRACT DOCUMENTS AND PROJECT SPECIFICATIONS

For

Industrial Gas Meter Sets Replacement – Phase II S.T. Wooten Corporation Asphalt Plant



Gas Department Greenville, North Carolina

Project No. JC-01087G

June 5, 2013

Prepared By

GREENVILLE UTILITIES COMMISSION GAS ENGINEERING DEPARTMENT

CONTRACT DOCUMENTS AND PROJECT SPECIFICATIONS

For

Industrial Gas Meter Sets Replacement – Phase II S.T. Wooten Corporation Asphalt Plant

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ADVERTISEMENT FOR BIDDERS

Greenville Utilities Commission GUC – Industrial Gas Meter Sets Replacement – Phase II S.T. Wooten Corporation Asphalt Plant Greenville, North Carolina

Informal bids for the construction and installation of an industrial gas meter/regulator set for S.T. Wooten Corporation Asphalt Plant will be received by the Greenville Utilities Commission in the Engineering Center Conference Room at 801 Mumford Road, P. O. Box 1847, Greenville, NC 27835 until 2:00 p.m. on Wednesday June 5, 2013 and immediately thereafter publicly opened and read.

Bids must be submitted on the complete project. Bids must be enclosed in an envelope, addressed to the Greenville Utilities Commission and the outside of the envelope must be marked **BID FOR S.T. WOOTEN CORPORATION ASPHALT PLANT** as meter set. All bids must be made on blank forms provided and included in the bound document. The name, address, and license number of the Bidder must be plainly marked thereon. Oral or faxed bids are invalid and will be rejected.

Each bid must be accompanied by cash or a certified check, drawn on a bank or trust company authorized to do business in North Carolina, payable to the Greenville Utilities Commission in an amount at least equal to five percent (5%) of the total amount of the bid, as a guarantee that a contract will be entered into. In lieu of cash or a certified check, the Bidder may submit a bid bond in the form prescribed in G.S. 143-129 as amended by Chapter 1104 of the Public Laws of 1951.

Contractors are notified that legislative acts relating to licensing of contractors will be observed in receiving bids and awarding contracts.

The major items of work are listed below:

S.T. Wooten Corporation Asphalt Plant

Construct and install one (1), eight (8) inch meter run and risers, and one (1), six (6) inch regulator run and risers, and all associated tie-in connections and site work

To request bid packages contact Mr. Jonathan Britt, P.E., with Greenville Utilities Commission, 801 Mumford Road, Greenville, NC, 27835 (252) 551-2048.

Plans and specifications are on file and may be examined at the office of the Greenville Utilities Commission in the office of Director of Gas Systems.

The right is reserved to reject any or all bids, to waive informalities, and to award contract or contracts which, in the opinion of the Owner, appear to be in its best interest. The right is reserved to hold any or all proposals for a period of sixty (60) days from the opening thereof.

GREENVILLE UTILITIES COMMISSION

(Owner)

Mr. Anthony C. Cannon (General Manager/CEO)

Greenville Utilities Commission 801 Mumford Road Greenville, NC 27835 (252)551-3303 (FAX)

INSTRUCTION TO BIDDERS

General:

To be valid for consideration, bids must be completed and submitted in accordance with these Instructions To Bidders

Qualification of Bidders:

To demonstrate qualifications to perform the Work, each Bidder must be prepared to submit within five (5) days after Bid Opening and upon Owner's request detailed written evidence such as financial data, previous experience, present commitments and other data as may be requested. Each Bid must contain evidence of Bidder's qualification to do business in North Carolina or covenant to obtain such qualifications prior to award of the Contract.

Examination of Bid Documents and Site:

Before submitting bids, each Bidder must examine the bid documents thoroughly; familiarize Himself with Federal, State and Local laws, ordinances, rules, and regulations affecting the Work; and correlate His observations with requirements of the Bid Documents.

Complete sets of Bid Documents must be used in preparing Bids; the Owner does not assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bid Documents.

The Owner is making copies of the Bid Documents available on the above terms does so only for the purpose of obtaining Bids for the Work and do not confer a license or grant for any other use.

Should a Bidder find discrepancies in, or omissions from, the Contract Documents, or should He be in doubt as to their meaning, He should notify the Owner immediately. The Owner may send written instructions to each person receiving a set of Contract Documents following such notice from a Bidder(s).

Whenever a certain brand, make, or manufacturer is noted in the Specifications, it is intended to denote the quality standard of the article being provided by the Greenville Utilities Commission. It is intended to set forth and convey to the prospective Bidder the general style, type, character, and quality of the article to be used by the Contractor in the execution of the work.

Each Bidder is requested and expected to visit the site of the project to alert the Bidder to local and special conditions which may be encountered during construction of the project such as: labor and transportation, handling and storage of materials, the availability of materials, and site access. Failure to make such investigations shall not relieve the successful Bidder from performing and completing the Work in accordance with the Contract Documents.

Interpretations:

No oral interpretations of the Bid Documents will be made to any Bidder. To be given consideration, requests for interpretations must be received in time to allow preparation of written response at least five (5) days prior to the date fixed for receipt of bids. Interpretations will be issued in the form of a written Addendum (Addenda) to the Bid Documents and mailed to all parties recorded by the Greenville Utilities Commission as having received Bid Documents, prior to scheduled receipt of bids. Only interpretations by formal written addenda will be binding.

All communications in regard to interpretations and any other matters related to this project shall be addressed to Jonathan Britt, P.E., Gas Systems Engineer, Greenville Utilities Commission, 801 Mumford Road, Greenville, North Carolina 27835.

Preparation of Bid Documents:

Bidding documents will be provided as indicated in the Invitation to Bid.

All proposals must be made upon the blank form of Proposal provided in this bid package. Lump sum prices are to be submitted in figures. The prices are to include the furnishing of all materials not specifically stated as being provided by the Owner in the Technical Specifications, equipment, tools, and other facilities, and the performance of all labor work, except such as may be otherwise expressly provided for in the Contract Documents.

Each Bidder is required to bid on all requested lump sum prices listed in the Proposal Form unless otherwise stated. The Bidder shall sign his Proposal correctly and proposals may be rejected if they show any omissions, alterations of form, additions not called for, conditional bid, or any irregularities of any kind.

Each proposal must be submitted in a sealed envelope, marked sufficiently to indicate its contents without being opened. The Contractor's North Carolina License number should be noted in the lower right side of the envelope with the following notation "North Carolina License No. _______". This envelope shall be addressed to or may be enclosed in a second envelope addressed to:

Jonathan Britt, PE, Gas Systems Engineer Greenville Utilities Commission 801 Mumford Road Greenville, North Carolina 27835

Agreement, Bonds, and Insurance:

The Agreement will be prepared by the Greenville Utilities Commission and provided to the successful Bidder. A sample Agreement is included in the bid package for review by the Bidders. The Certificate of Insurance and Bonds shall be drawn on the provided forms.

Each Bid must be accompanied by a Bid Security made payable to the Owner in an amount of five (5) percent of the total Bid and in the form of cash, a certified or bank check or a Bid Bond issued to a surety licensed to conduct business in North Carolina. The Bid Security is to be retained in the event of failure of the successful Bidder to execute the Contract within ten (10) days after the Notice of Award is issued or failure to provide satisfactory surety as required.

A Payment and Performance Bond will be required in the amount of one hundred (100) percent of the bid.

Equal Opportunity Employment:

The Contractor's employment practices shall be in accordance with North Carolina G.S. 126, G.S. 168, and the North Carolina Civil Rights Act of 1964.

Greenville Utilities Commission's policy requires its contractors to document that sufficient good faith efforts have been made to provide equal opportunity for Minority and Women's Business Enterprises (M/WBE) to participate in the subcontracting and material supplier opportunities available under this contract.

Receipt and Opening of Bids:

Bids for the construction and installation of an industrial meter/regulator set, and related facilities in the Greenville Utilities Commission's natural gas distribution system will be received by the Director of Gas Systems, until 2:00 p.m. (EDST) on June 5, 2013,. Any bids received after the time and date specified will not be considered. Conditional bids will not be considered.

Modification and Withdrawal of Bids:

Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a bid must be executed) and delivered to the place where bids are to be submitted at any time prior to the opening of bids.

Modification of Bids After Date For Submission:

The Bidder shall give notice in writing of his claim of right to withdraw his bid within two (2) business days after the conclusion of the bid opening procedure and shall submit original work papers with such notice. Such mistake shall be proved only from the original work papers, documents, and materials delivered as required

herein. Failure to submit Contractor's work papers will be considered as a waiver of any right of withdrawal of bids after the date for submission.

Contractor's work papers are defined as the original work papers, documents, and materials used in the preparation of the Bid.

Award of Contract:

The award of the contract will be to the lowest responsive, responsible Bidder submitting the lowest Bid whose qualifications indicate the award will be in the best interest of the Greenville Utilities Commission and whose bid meets the prescribed requirements.

The Greenville Utilities Commission reserves the right to reject any and all bids and waive any and all informalities and the right to disregard all nonconforming or conditional bids or counterproposals.

Submission of post-bid information shall be in accordance with the Contract Documents.

The Greenville Utilities Commission reserves the right to request a financial statement together with a statement of past related experience, personnel, and equipment available to perform the Contract. Failure or refusal to furnish such a statement or statements shall constitute a basis for disqualifying any Bidder.

The Bidder must agree to commence work on or before a date to be specified in a written Notice to Proceed issued by the Owner and to fully complete the Work within the number of consecutive calendar days stated in the Proposal. Bidder must also agree to pay as liquidated damages, the sum of \$500.00 for each consecutive calendar day thereafter, with exception of Saturdays, Sundays and holidays observed by the Greenville Utilities Commission, as provided for in the Contract Documents.

The Contractor shall obtain and pay for all necessary permits, taxes and licenses required in connection with the Work, and he must strictly comply with all laws, local ordinances, and regulations that may apply to the Work.

No charge of claims of the Contractor will be allowed for hindrance or delay from any cause in the progress of the Work.

GREENVILLE UTILITIES COMMISSION

BID PROPOSAL

GUC – Industrial Gas Meter Sets Replacement – Phase II S.T. Wooten Corporation Asphalt Plant

The undersigned, as Bidder, hereby declares that He, or He and His associates are the only person or persons interested in the proposal as principal or principals; that this proposal is made without connection with any other person, company, or parties making a bid or proposal; and that it is in all respects fair and in good faith without collusion or fraud.

The Bidder further declares that he has examined the site of the Work and informed himself fully in regard to all conditions pertaining to the place where the Work is to be done; that he has examined the Specifications for the Work and all contractual documents relative thereto, and has read all special provisions furnished prior to the bid opening; that he has satisfied himself relative to the work to be performed, and materials and equipment to be furnished.

The Bidder proposes and agrees, if this proposal is accepted, to contract with the Greenville Utilities Commission in the form of contract specified, to furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation, and labor necessary to perform in full and complete the requirements of the Specifications and Contract Documents, to the full and entire satisfaction of the Greenville Utilities Commission with definite understanding that no money will be allowed for extra work except as set forth in the attached General Conditions and Contract Documents, for the lump sum prices for each facility.

Final payment shall be made at the Lump Sum Price listed below for the prescribed facility. All items necessary to complete the installations as described in the Contract Documents shall be included in the Lump Sum Price listed below and no other claim shall be made for payment. The Lump Sum Price shall include all required sales tax, freight charges, and all other applicable taxes and fees.

ITEM 1.0 BID PROPOSAL – S.T. Wooten Corporation Asphalt Plant Meter/Regulator Facility

The Contractor shall provide a lump sum price for the installation of the natural gas facility as described in the Specifications and Plan Sheets STW-1 through STW-6 (see Technical Specifications, Section 3.3 for descriptions of Equipment, Tools, Labor, and Materials to be furnished by Owner and Contractor).

DESCRIPTION OF WORK

Perform site work including provision and installation of stone and installation of rock shield, provide and install fencing per the project plans, construct and install meter and regulator runs, and perform tie-ins for the S.T. Wooten Corporation Asphalt Plant meter set in accordance with the project plans and scope of work described herein.

Our total base lump sum price for the Work as described in the	ese Contract Documents is:	
	dollars (\$).

In submitting the above bids, We represent and warrant that the prices for all items listed above represent Our proposal and bid for the Work herein described.

We understand that the execution of this Proposal Contract does not limit the Greenville Utilities Commission in the use of Its own construction crews or construction crews of one or more other Contractors in the area covered by this Contract.

The Bidder further agrees that:

Bidder's Bond or Certified Check in the amount of \$

- a) The Greenville Utilities Commission, in protecting its best interest, reserves the right to reject any or all bids or waive any defects in favor of the Greenville Utilities Commission. Any changes, erasures, deletions in the lump sum price above, modifications in the bid form, or alternate proposals not specified in the bid proposal shall make the proposal irregular and subject to rejection;
- b) In case of failure on his part to execute the said agreement within ten (10) consecutive calendar days after written notice being given on the award of the Contract, the monies payable by the Securities accompanying this bid shall be paid to the Greenville Utilities Commission, as liquidated damages for such failure; otherwise, the Securities accompanying this bid shall be returned to the undersigned;
- c) That the Work under this Contract will commence not later than ten (10) consecutive calendar days after the date of a written "Notice to Proceed" given by the Greenville Utilities Commission to the Contractor.

Enclosed herewith is the following Security, offered as evidence that the undersigned will enter into agreement for the execution and completion of the Work in accordance with the Plans and Specifications.

If Bond, Name of S	Surety:			
If Check, Name of	Bank:			
This bid is subject	to acceptance	within a period of sixty (6	60) days from the date of this bid	l proposal.
The undersigned a calendar days from			rk included in the Bid Proposal	within thirty (30) consecutive
The undersigned B this Bid:	idder acknow	ledges receipt of the follo	wing Addenda, which have been	n considered in preparation of
	No	Dated	_	
	No	Dated	_	
	No	Dated	_	
CONTRACTOR:			SIGNATURE:	
ADDRESS:			SIGNATURE:	
_				(printed)
_			TITLE:	
DATE:			PHONE:	
FEDERAL TAX I	D #:		FAX #:	

BID BOND

KNOW	ALL	MEN	BY TH	ESE	PRESENTS:	that	we,	the	undersigned,
			as F	Princi	pal, and				as Surety, are
hereby h	eld and	firmly b	ound unto	Greer	nville Utilities (Commissio	<u>n</u> as ()WNE	R in the penal
sum of _						for p	aymen	t of w	hich, well and
truly to b	e made,	we hereb	y jointly an	d sev	erally bind ourse	elves, succ	essors	and as	signs. Signed,
this	da	y of			, 20				
<u>Greenvil</u>	le Utilit	ies Com		ertain	s such that when BID, attached				

NOW, THEREFORE,

- (a) If said BID shall be rejected, or
- (b) If said BID shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said BID) and shall furnish a BOND for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said BID, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

		(L.S.)
	Principal	(/
	Surety	
By:		

IMPORTANT – Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

AGREEMENT

THIS AG	REEMENT is	s dated as of	the day	of	in the	e year 2013 by	y and
between	Greenville	Utilities	Commission	(hereinafter	called	OWNER)	and
		(l	nereinafter calle	d CONTRACT	OR).		
OWNER	and CONTRA	CTOR, in c	consideration of	the mutual co	venants he	ereinafter set	forth,

agree as follows:

Article 1. WORK.

CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

Installation of one (1) industrial meter/regulator set as described on drawings, STW-1 through STW-6.

Article 2. ENGINEER.

The Project has been designed by the GUC who is hereinafter called ENGINEER who assumes all duties and responsibilities and have the rights and authority in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

Article 3. CONTRACT TIMES.

- 3.1 The Work will be completed within **thirty** (30) calendar days after the date when the Contract Times commence to run as provided in Section 12.1 of the General Conditions, and completed and ready for final payment in accordance with paragraph 13.3 of the General Conditions within **thirty** (30) calendar days after the date when the Contract Times commence to run.
- 3.2 Liquidated Damages. OWNER and CONTRACTOR recognize that time is of the essence of this Agreement and the OWNER will suffer financial loss if the Work is not completed within the times specified in paragraph 3.1 above, plus any extensions thereof allowed in accordance with Section 14 of the General Conditions. They also recognize the delays, expense and difficulties involved in proving the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER Five Hundred Dollars (\$500.00) for each day that expires after the time specified in paragraph 3.1 for Substantial Completion until the Work is substantially complete. After Substantial Completion, if CONTRACTOR shall neglect, refuse or fail to complete the remaining Work within the time specified in paragraph 3.1 for completion and readiness for final payment or any proper extension thereof granted by OWNER, CONTRACTOR shall pay OWNER Three Hundred Dollars (\$300.00) for each day that expires after the time specified in paragraph 3.1 for completion and readiness for final payment.

3.3 Cost of Excess Engineering. Refer to GENERAL CONDITIONS, Paragraph 12.3 and add the following: When the construction time exceeds the time stated in the Proposal, the Contractor shall be liable for any and all additional costs incurred by the Owner for engineering and project representative (Construction Observation) fees which occur as a result of the extended contract time.

Article 4. CONTRACT PRICE.

OWNER shall pay CONTRACTOR for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to paragraph 4.1.

4.1 For all Work a Lump Sum as shown in the BID.

Article 5. PAYMENT PROCEDURES.

CONTRACTOR shall submit Applications for Payment in accordance with Item 13 of the General Conditions. Applications for Payment will be processed by OWNER as provided in the General Conditions.

5.1 Progress Payments; Retainage. OWNER shall make progress payments on account of the Contract Price on the basis of CONTRACTOR's Applications for Payment following the completion of the facility as determined by the lump sum price submitted. All such payments will be measured by the schedule of values established in the BID or, in the event there is no schedule of values, as provided in the General Conditions.

An amount equal to 10% of the total amount due on each application for payment will be deducted and retained by the OWNER. Retained monies shall be released after a period of 60 days provided that satisfactory operation of the facility and the site restoration is maintained.

5.2 Final Payment. Upon final completion and acceptance of the Work in accordance with 13.3 of the General Conditions, OWNER shall pay the remainder of the Contract Price as provided in said 13.3.

Article 6. INTEREST.

Pursuant to paragraph 143-134.1, General Statutes of North Carolina, the balance due prime Contractors shall be paid in full within 45 days after respective prime contracts have been accepted by Owner, or occupied by Owner and used for the purpose for which the project was constructed, whichever occurs first. Provided, however, that whenever OWNER determines that delay in completion of the project in accordance with terms of the Drawings and Specifications is the fault of Contractor, the project may be occupied and used for the purposes for which it was constructed without payment of any interest on amounts withheld past the 45 day limit. No payment shall be delayed because of the failure of another prime Contractor on such project to complete his contract. Should final payment to any prime Contractor beyond the date such

contracts have been declared to be completed and accepted by Owner, or occupied by owner and used for the purposes for which the project was constructed, be delayed by more than 45 days, said prime Contractor shall be paid interest, beginning on the 46th day, at the rate of twelve percent per annum on such unpaid balance as may be due. Where a conditional acceptance of a contract exists, and where owner is retaining a reasonable sum pending correction of such conditions, interest on such reasonable sum shall not apply.

Article 7. CONTRACTOR'S REPRESENTATIONS.

In order to induce OWNER to enter into this Agreement CONTRACTOR makes the following representations:

- 7.1. CONTRACTOR has examined and carefully studied the Contract Documents including the Addenda listed in Article 8 and the other related data identified in the Bidding Documents including "technical data."
- 7.2 CONTRACTOR has visited the site and become familiar with and is satisfied as to the general, local and site conditions that may affect cost, progress, performance or furnishing of the Work.
- 7.3 CONTRACTOR is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress, performance and furnishing of the Work.
- 7.4 CONTRACTOR has carefully studied all reports of explorations and tests of subsurface conditions at or contiguous to the site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the site (except Underground Facilities) which have been identified in the section 3.1 of the General Conditions. CONTRACTOR accepts determination set forth in section 3.1 of the General Conditions of the extent of the "technical data" contained in such reports and drawings upon which CONTRACTOR is entitled to rely as provided in section 3.1 of the General Conditions. CONTRACTOR acknowledges that such reports and drawings are not Contract Documents and may not be complete for CONTRACTOR's purposes. CONTRACTOR acknowledges that OWNER and ENGINEER do not assume responsibility for the accuracy or completeness of information and data shown or indicated in the Contract Documents with respect to Underground Facilities at or contiguous to the site. CONTRACTOR has obtained and carefully studied (or assumes responsibility for having done so) all such additional supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto. CONTRACTOR does not consider that any additional examinations, investigations, explorations, tests, studies or data are necessary for the performance and furnishing of the Work at the Contract Price, within the Contract Times and in accordance with the other terms and conditions of the Contract Documents.

- GUC Industrial Gas Meter Sets Replacement Phase II S.T. Wooten Corporation Asphalt Plant
- 7.5 CONTRACTOR is aware of the general nature of work to be performed by OWNER and others at the site that relates to the Work as indicated in the Contract Documents.
- 7.6 CONTRACTOR has correlated the information known to CONTRACTOR, information and observations obtained from visits to the site, reports and drawings identified in the Contract Documents and all additional examinations, investigations, explorations, tests, studies and data with the Contract Documents.
- 7.7 CONTRACTOR has given OWNER written notice of all conflicts, errors, ambiguities or discrepancies that CONTRACTOR has discovered in the Contract Documents and the written resolution thereof by OWNER is acceptable to CONTRACTOR, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

Article 8. CONTRACT DOCUMENTS.

The Contract Documents which comprise the entire agreement between OWNER and CONTRACTOR concerning the Work consist of the following:

- 8.1 This Agreement (pages <u>A-1</u> to <u>A-7</u>, inclusive).
- 8.2 Exhibits to this Agreement: Certificate of Finance Officer and Certificate of Owner's Attorney.
- 8.3 Performance, Payment, and other Bonds, pages PB1-PB6.
- 8.4 Notice to Proceed
- 8.6 General Conditions (pages GC-1 to GC-24, inclusive).
- 8.6 Specifications bearing the title Greenville Utilities Commission "Industrial Gas Meter Sets Replacement Phase II; S.T. Wooten Corporation Asphalt Plant" and consisting of divisions as listed in table of contents thereof.
- 8.7 Drawings consisting of a cover sheet and sheets numbered STW-1 through STW-6 inclusive with each sheet bearing the following general title: S.T. Wooten Corporation Asphalt Plant.
- 8.8 CONTRACTOR's Bid Proposal (pages PP1 to PP4, inclusive).
- 8.9 Addenda numbers ____ to ___, inclusive.
- 8.10 Documentation submitted by CONTRACTOR prior to Notice of Award (pages <u>NA-1</u> to NA-2, inclusive).

- GUC Industrial Gas Meter Sets Replacement Phase II S.T. Wooten Corporation Asphalt Plant
- 8.11 The following which may be delivered or issued after the Effective Date of the Agreement and are not attached hereto: All Written Amendments and other documents amending, modifying or supplementing the Contract Documents pursuant to Item 14 of the General Conditions.

The documents listed in paragraphs 8.2 et seq. above are attached to this Agreement (except as expressly noted otherwise above).

There are no Contract Documents other than those listed above in this Article 8. The Contract Documents may only be amended, modified or supplemented as provided in Item 14 of the General Conditions.

Article 9. MISCELLANEOUS.

- 9.1 Terms used in this Agreement which are defined in Item 1 of the General Conditions will have the meanings indicated in the General Conditions.
- 9.2 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and 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 the Contract Documents.
- 9.3 OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect to all covenants, agreements and obligations contained in the Contract Documents.
- 9.4 Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon OWNER and CONTRACTOR, who agree that the Contract Documents 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.

9.5 OTHER PROVISIONS.

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Agreement in duplicate. One counterpart each has been delivered to OWNER and CONTRACTOR. All portions of the Contract Documents have been signed, initialed or identified by OWNER and CONTRACTOR.

This Agreement will be effective on of the Agreement).	, 2013 (which is the Effective Date
GREENVILLE UTILITIES COMMISSION OF THE CITY OF GREENVILLE, NC	
BY	BY
NAME	NAME
TITLE	TITLE
Attest	Attest
NAME	NAME
TITLE	
Address for giving notices	Address for giving notices
Post Office Box 1847	
Greenville, North Carolina 27835	
	License No.

PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS: that

(Name of Contractor)
(Address of Contractor)
a, hereinafter called (Corporation, Partnership, or Individual)
PRINCIPAL and(Name of Surety)
(Address of Surety)
hereinafter called SURETY, are held and firmly bound unto
(Name of Owner)
(Address of Owner)
hereinafter called OWNER, and unto all persons, firms, and corporations who or which may furnish labor, or who furnish materials to perform as described under the Contract and to their successors and assigns in the total aggregate penal sum of
THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the OWNER, dated the day of, 2013, a copy of which is hereto attached and made a part hereof for the construction of:

Industrial Gas Meter Set at S.T. Wooten Corporation Asphalt Plant

NOW, THEREFORE, if the PRINCIPAL shall promptly make payment to all persons, firms, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extensions or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and for all labor cost incurred in such WORK including that by a SUBCONTRACTOR, and to any mechanic or materialman lienholder whether it acquired its lien by operation of State or Federal law; then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, that beneficiaries or claimants hereunder shall be limited to the SUBCONTRACTORS, and persons, firms, and corporations having a direct contract with the PRINCIPAL or its SUBCONTRACTORS.

PROVIDED, FURTHER, that the said SURETY for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any way affect its obligation on the BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of this contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no suit or action shall be commenced hereunder by an claimant; (a) Unless claimant, other than one having a direct contract with the PRINCIPAL, shall have given written notice to any two of the following: The PRINCIPAL, the OWNER, or the SURETY above named within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished or for whom the work or same by registered mail or certified mail, postage prepaid, in an envelope address to the PRINCIPAL, OWNER, or SURETY, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer. (b) After the expiration of one (1) year following the date of which PRINCIPAL ceased work on said CONTRACT, it being understood, however that if any limitation embodied in the BOND is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

PROVIDED, FURTHER, that it is expressly agreed that the BOND shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the Contract not increasing the contract price more than 25 percent, so as to bind the PRINCIPAL and the SURETY to the full and faithful performance of the CONTRACT as so amended. The term "Amendment", wherever used in this BOND, and whether referring to this BOND of the Contract shall include any alteration addition, extension, or modification of any

character whatsoever. PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of the other beneficiary hereunder, whose claim may be unsatisfied.

		ecuted in (Number) counterparts, each day of, 2013.
ATTEST:		
		Principal
	BY	
(Principal Secretary)		
		(Address)
(SEAL)		
(Witness as to Principal)		
(Address)		
		(Surety)
ATTEST:		
	BY	
(Witness as to Surety)		(Attorney-in-Fact)
(Address)		(Address)

NOTE: Date of BOND must not be prior to date of Contract.

If CONTRACTOR is partnership, all partners should execute BOND. IMPORTANT: surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the Project is located.

PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS: that
(Name of Contractor)
(Address of Contractor)
a, hereinafter called (Corporation, Partnership, or Individual)
PRINCIPAL, AND(Name of Surety)
(Address of Surety)
hereinafter called SURETY, are held and firmly bound unto
(Name of Owner)
(Address of Owner)
hereinafter called OWNER, in the total aggregate penal sum of Dollar (\$) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.
THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the OWNER, dated the day of, 2013, a copy of which is hereto attached and made a part hereof for the construction of:
Industrial Gas Meter Set at S.T. Wooten Corporation Asphalt Plant

NOW, THEREFORE, if the PRINCIPAL shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or

without notice to the SURETY and during the one guaranty period and if the PRINCIPAL shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that it is expressly agreed that the BOND shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the Contract not increasing the contract price more than 20 percent, so as to bind the amended. The term "Amendment", wherever used in this BOND, and whether referring to this BOND of the Contract shall include any alteration addition, extension, or modification of any character whatsoever. PROVIDED, FURTHER, that no final settlement between the OWNER and the PRINCIPAL shall abridge the right of the other beneficiary hereunder, whose claim may be unsatisfied. The OWNER is the only beneficiary hereunder.

IN WITNESS WHEREOF, this in one of which shall be deemed an or	strument is ex iginal, this the	ecuted in (Number) counterparts, each, 2013.
ATTEST:		
		Principal
	BY	
(Principal Secretary)		
(CEAL)		(Address)
(SEAL)		
(Witness as to Principal)		
(Address)		
		(Surety)
ATTEST:		
	BY	
(Witness as to Surety)		(Attorney-in-Fact)
(Address)		(Address)

NOTE: Date of BOND must not be prior to date of Contract.

If CONTRACTOR is partnership, all partners should execute BOND. IMPORTANT: surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the Project is located.

Contractor shall provide a Certificate of Insurance that meets the requirements stated in paragraph 7.3 of the General Conditions.

NOTICE OF AWARD

TO:	
PROJECT Description: Provide labor, equipment and mater Greenville Utilities Commission to install one (1) industrial related appurtenances, and associated site work.	
The OWNER has considered the BID submitted by you for response to its ADVERTISEMENT FOR BIDS and INSTR	
You are hereby notified that your BID has been accepted for amount of \$	r item(s)through in the

You are required by the INSTRUCTIONS TO BIDDERS to execute the AGREEMENT and furnish the required CONTRACTOR'S PERFORMANCE BOND, PAYMENT BOND, CERTIFICATES OF INSURANCE, OPERATOR QUALIFICATION PLAN AND EMPLOYEE CERTIFICATIONS and DEPARTMENT OF TRANSPORTATION (DOT) ANTI-DRUG/ALCOHOL PROGRAM within ten (10) calendar days from the date of this NOTICE OF AWARD.

If you fail to execute said AGREEMENT and to furnish said BONDS within ten (10) days from the date of this NOTICE, said OWNER will be entitled to consider all your rights arising out of the OWNER's acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy Dated this day of, 2013.	y of this NOTICE OF AWARD to the OWNER.		
	GREENVILLE UTILITIES COMMISSION OF THE CITY OF GREENVILLE, NC (Owner) By Anthony C. Cannon Signature		
	Title General Manager/CEO		
ACCEPTANCE OF NOTICE			
Receipt of the above NOTICE OF AWARD is hereby acknowledged			
By			
this the day of, 2013.			
Ву			
Signature			
Title President			

CERTIFICATE OF FINANCE OFFICER

This instrument has been preaudited in the manner required Act.	d by the Local Government Budget and Fiscal Control
	Finance Officer
	Date

CERTIFICATE OF OWNER'S ATTORNEY

I, the undersigned,	, the duly authorized and acting legal representative
of	do hereby certify as follows:
and I am of the opinion the proper parties thereto a representatives have full respective parties named the same of the properties of the	ing contract and surety bonds and the manner of execution thereof at each of the aforesaid agreements has been duly executed by the ting through their duly authorized representatives; that said ower and authority to execute said agreements on behalf of the ereon; and that the foregoing agreements constitute valid and legally exparties executing the same in accordance with terms, conditions and
	Commission Attorney
	Date

NOTICE TO PROCEED

TO:	
DATE:	
PROJECT: GUC – Industrial Gas Meter S S.T. Wooten Corporation Aspl	
	K in accordance with the AGREEMENT dated, 2013, and you are to substantially complete the days thereafter.
The date of completion of all WORK is there	efore, 2013.
	GREENVILLE UTILITIES COMMISSION (Owner)
	Ву
	Signature
	Title
ACCEPTANCE OF NOTICE	
Receipt of the above NOTICE TO PROCEE this the date of	D is hereby acknowledge by
Ву	
Signature	
Title	

GENERAL CONDITIONS

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1. **DEFINITIONS**

The following terms and expressions used in the Contract documents shall be understood as follows:

- **1.1** Wherever the word "GUC" or "OWNER" is used, it shall be understood to mean the Greenville Utilities Commission, Greenville, North Carolina
- **1.2** Wherever the word "CONTRACTOR" is used, it shall be understood to mean the party engaged to perform all work described herein.
- 1.3 Whenever the word "ENGINEER" is used, it shall be understood to mean the Gas System Engineer or his duly appointed successor, or representative, acting within the scope of the duties entrusted to them and as stated in the contract.
- 1.4 Whenever the word "SUBCONTRACTOR" is used, it shall be understood to mean persons, firms, or corporations having a direct contact with the CONTRACTOR, and including those who furnish materials worked to a special design in accordance with the plans and specifications, but not including those who merely furnish materials not so worked.
- 1.5 Whenever the word "Addenda" is used, it shall mean written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the bidding documents or the Contract Documents.
- 1.6 Whenever the word "Agreement" is used, it shall mean the written agreement between the GUC and the CONTRACTOR covering the Work to be performed; other Contract Documents are attached to the Agreement and made a part thereof as provided therein.
- 1.7 Whenever the word "Bid" is used, it shall mean the offer or proposal of the bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
- 1.8 Whenever the word "Shop Drawings" is used, it shall be understood to mean all drawings, diagrams, illustrations, schedules, and other data which are specifically prepared by or for the CONTRACTOR to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams, and other information prepared by a supplier and submitted by CONTRACTOR to illustrate material or equipment for some portion of the Work.
- 1.9 Whenever the word "Specifications" is used, it shall be understood to mean those portions of the Contract Documents consisting of written technical descriptions of material, equipment, construction systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.
- **1.10** Whenever the word "Supplier" is used, it shall be understood to mean a manufacturer, fabricator, supplier, distributor, materialman, or vendor.
- 1.11 Whenever the word "Work" is used, it shall be understood to mean the entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work is the result of performing services, furnishing labor and furnishing and incorporating materials and equipment into the construction, all as required by the Contract Documents.
- 1.12 Whenever the word "Plans" or "Drawings" is used, it shall be understood to mean the Contract Plans, accompanying the specifications and such detail and supplementary drawings as may be furnished from time to time. Plans may be included as part of the specifications. Therefore, the CONTRACTOR is directed to familiarize himself with the contents of the complete contract documents.

- 1.13 Whenever in the specifications or upon the drawings the words "as directed", "as required", "as permitted", or words of like effect are used, it shall be understood that the direction, requirement, or permission of the ENGINEER is intended and similarly the words "approved", "satisfactory", or words of like import, shall mean approved or acceptable or satisfactory to the ENGINEER.
- 1.14 Whenever the word "Contract" or "Contract Documents" is used, it shall mean and include Advertisement; Bid Proposal; Agreement between GUC and CONTRACTOR; Certificate of Finance Officer; Certificate of OWNER's Attorney; Certificate of Insurance; General Conditions; Payment Bond; Notice of Award; Notice to Proceed; Addenda; Change Orders; Technical Specifications, with all amendments, modifications, and supplements issued on or after the Effective date of the Agreement.
- **1.15** Whenever the word "Bidder" is used, it shall mean one who submits a Bid directly to the GUC as distinct from a sub-bidder, who submits a bid to the Bidder.
- **1.16** Issuing Office the office from which the Contract Documents are to be issued and where the bidding procedures are to be administered.
- **1.17** Successful Bidder the lowest responsible and responsive Bidder to whom GUC (on the basis of GUC's evaluation as hereinafter provided) makes an award.

2. BIDDER ELIGIBILITY

- 2.1 Bidders are required to submit evidence that they have practical knowledge of the particular work bid upon and that they have the financial resources to complete the proposed work. Failure on the part of any Bidder to carry out previous contracts satisfactorily, or lack of experience or equipment necessary for the satisfactory and timely completion of this Project, may be deemed sufficient cause for disqualification of said Bidder.
- 2.2 The Bidder must readily and independently document that the Bidder possesses the experience, equipment and financial resources necessary for a timely and professional completion of this project.
- 2.3 The object of any Request for Qualifications is to make it possible for the GUC to have exact information on the financial ability, equipment owned, and experience of the Bidder in order to reduce the hazards involved in awarding contracts to parties apparently not qualified to perform them, and to select those Bidders qualified to properly complete the Work.
- 2.4 Bids will only be accepted from manufacturers, authorized distributors, dealers, or CONTRACTORs who are actively engaged in the sale, manufacture, or type of construction of the item(s) called for in the bid. No proposal will be accepted from or contract awarded to any person, firm, or corporation that is in arrears or is in default to the GUC upon any debt or contract, or that is a defaulter, as surety or otherwise, upon any obligation to said GUC or had failed to perform faithfully any previous Where an installation or assembly is to be performed by a contract with the GUC. SUBCONTRACTOR, the bidder must name the SUBCONTRACTOR, and the GUC reserves the right to determine whether the named SUBCONTRACTOR is fit and capable to perform the required work. If GUC, after due investigation, has reasonable objection to any proposed SUBCONTRACTOR, other person, or organization, it may before giving the Notice of Award request the apparent lowest responsible, responsive Bidder to submit an acceptable substitute without an increase in his Bid price. Any SUBCONTRACTOR, other person, or organization so listed and to whom the GUC does not make written objection prior to the giving of the Notice of Award will be deemed acceptable to the GUC. This does not remove responsibilities for said SUBCONTRACTORs, suppliers, etc., to comply with the Contract Specifications. CONTRACTOR shall not be required to employ a SUBCONTRACTOR, other person, or organization against whom he has reasonable objection. The GUC reserves the right to reject any proposal where an investigation of the available evidence or information does not satisfy the GUC that the bidder is qualified to carry out properly the terms of the Contract. The GUC's decision as to qualifications of the Bidder shall be final.

2.5 The CONTRACTOR shall possess a General CONTRACTOR's license in accordance with North Carolina General Statue 87-10 and meeting the requirements of the North Carolina Administrative Code Title 21; Chapter 12; Section .0200 (5)(F) Section .0204 (c). For further information, contact the North Carolina Licensing Board for General CONTRACTORs (919 571-4183).

3. BID SUBMITTAL

3.1 Examination of Site and Project Information

- **a.** Bidders shall investigate and inspect the sites of the Work contemplated before preparing their Proposals in order to acquaint themselves as to the actual nature, character, conditions, quality, and requirements of the Work, subsurface conditions, and accuracy of estimated quantities required for the completion of each facility.
- **b.** All information given on the drawings or in the contract documents relating to existing subsurface and surface conditions and other structures is from the best sources at present available to the GUC. All such information is furnished only for the information and convenience of the Bidders. The GUC has not performed any subsurface investigations for the areas within the project area.
- **c.** It is agreed and understood that the GUC does not warrant or guarantee that the existing conditions or other structures encountered during the construction will be the same as those indicated on the drawings or in Contract Documents. The Bidder must be satisfied regarding the character, quantities and conditions of the various materials and the work to be done.
- **d.** It is further agreed and understood that the Bidder will not use any of the information made available or obtained in any examination in any manner as a basis or ground of claim or demand of any nature against the GUC arising from or by reason of any variance which may exist between the information offered and the actual conditions, materials, or structures encountered during the Work, except as may otherwise be provided for in the Contract Documents.

3.2 Bid Preparation

- **a.** Bid Proposals must be written in ink or typewritten and shall be submitted on the forms issued. Unsigned bids will not be accepted. No bid may be considered if received after the time shown on page one of the Invitation to Bid. CONTRACTORs are expected to examine all instructions, specifications of the Invitation to Bid, drawings, sites, installations, etc. Failure to do so will be at the CONTRACTOR's risk. Erasures or other changes must be initialed by the person signing the bid.
- **b.** Envelopes containing bids must be sealed and marked in the lower left hand corner with the invitation number, project title, and submitted to the office indicated on page number one (1) of the Invitation to Bid. The name, address, and North Carolina CONTRACTOR license number of the Bidder shall also be clearly marked on the envelope.

3.3 Interpretation

- **a.** If any person contemplating the submission of a bid is in doubt as to the true meaning of any part of the Invitation For Bid or other documents, he should submit a written request for an interpretation thereof to the ENGINEER. An interpretation of the bid invitation document will be made only by written addendum issued to each potential bidder. The GUC will not be responsible for explanations or interpretations of bid invitation documents except as issued in accordance herewith.
- **b.** All notices, request, instructions, approvals, and proposals, must be in writing.

- **c.** If during performance of the project, the CONTRACTOR finds a conflict, error, or discrepancy in the Contract Documents, he shall so report to the ENGINEER in writing at once before proceeding and shall obtain a written interpretation or clarification from the ENGINEER.
- **d.** In resolving such conflicts, errors, and discrepancies, the documents shall be given precedence in the following order: Agreement, Modifications, Addenda, Proposal and Specifications/Drawings. Figure dimensions on drawings shall govern over scale dimensions and detailed drawings shall govern over general drawings.

3.4 Irregular Bid Proposal

Bid proposals shall be considered irregular for the following reasons:

- **a.** If the bid is on a form other than that furnished by the GUC, if the GUC's form is altered, or if any part of the proposal form is detached.
- **b.** If there are unauthorized additions, conditional or alternate pay items, or irregularities or any kind, which make the proposal incomplete, indefinite, or otherwise ambiguous.
- **c.** If the bid does not contain a lump sum price for each pay item listed in the proposal.
- **d.** If the bid is not accompanied by the proposal guaranty specified by the GUC.

3.5 Withdrawal of Bid Due To Error

- **a.** A bidder for a GUC construction contract may withdraw his bid from consideration, if the price bid was substantially lower than the other bids due solely to a mistake therein, provided the bid was submitted in good faith and the mistake was a clerical mistake, as opposed to a judgment mistake, and was actually due to an unintentional arithmetic error or an unintentional omission of a quantity of work, labor, or material made directly in the compilation of the bid, which unintentional arithmetic error or unintentional omission can be clearly shown by objective evidence drawn from inspection of original work papers, documents, and materials used in the preparation of the bid sought to be withdrawn.
- **b.** The bidder shall give notice in writing of his claim of the right to withdraw his bid within two (2) business days after the conclusion of the bid opening procedure.

3.6 Disqualification of Bidder

A bidder shall be considered disqualified for any of the following reasons:

- **a.** Submitting more than one proposal from the same partnership, firm, or corporation under the same or different names.
- **b.** Evidence of collusion among bidders. Bidders participating in such collusion shall be disqualified as bidders for any future work of the GUC until any such participating bidder has been reinstated by the GUC as a qualified bidder.
- **c.** If the bidder is considered to be in "default" for any reason specified in § 2 "Bidder Eligibility" and § 3 "Bid Submittal".

4. AWARD CRITERIA

4.1 Unless otherwise specified all formal bids submitted shall be binding for sixty (60) calendar days following bid opening date.

- 4.2 The award will be made to the lowest responsible and responsive bidder whose proposal conforming to the invitation will be most advantageous to the GUC, price and other factors considered such as completion time, fiscal stability of the bidder, prior experience in the type of work called-for in the Invitation, management resources, owned, service, resale value, etc.
- **4.3** The GUC reserves the right to reject any or all offers and to waive informalities and minor irregularities in offers received.
- 4.4 After notice from the GUC, the successful bidder has ten (10) days to enter into a contract or forfeit as liquidated damages the security deposit. By executing the contract, the CONTRACTOR certifies that he has reviewed the Contract Documents and the project area and accepts the conditions of each.

4.5 Negotiation

In the event the bid from the lowest responsible, responsive bidder exceeds available funds, the GUC may negotiate with the apparent low bidder to obtain a contract price within available funds. The procedures for such negotiations shall be as follows:

- **a.** The GUC and apparent low bidder together will review the project and attempt to find mutually agreeable proposed changes that will effectively reduce the cost of the project.
- **b.** Apparent low bidder will present reasonably documented and substantiated proposed deductions in project cost for each potential project change, which will allow GUC to evaluate each proposed deduction.
- **c.** The parties will attempt to negotiate and sign a reasonable contract for the entire project, the price of which does not exceed available funds.

5. GUARANTY

- **5.1** The CONTRACTOR shall guarantee that all the materials used and all the work done under the contract shall fully comply with the requirements of the plans and specifications and the instructions of the GUC.
- 5.2 Any defects in the completed work or failure of the construction to fully perform or endure the service for which it is intended, which in the opinion of the GUC are caused by or due to the use of materials, skill, or workmanship not in compliance with the said plans, specifications, and instructions, that may appear in the work within a period of twelve (12) months after acceptance by the GUC shall be regarded as prima facie and conclusive evidence that the CONTRACTOR has failed to comply with the said specifications, plans, and instructions. The CONTRACTOR in this event, shall at his own expense, at such time and in such manner as the ENGINEER may direct, repair or take up and reconstruct any such defective work, in full compliance with the original specifications, plans, and instructions.

The repairs required to be made by the CONTRACTOR shall extend only to making good any inherent defects which become manifested in the materials and workmanship under ordinary conditions, and shall not be held to cover any breakage or damage caused by improper use or by accident from circumstances over which the CONTRACTOR has no control.

- 5.3 All direct, indirect and consequential costs of the GUC in exercising such rights and remedies will be charged against the CONTRACTOR and will be deducted from any monies due the CONTRACTOR.
- 5.4 The CONTRACTOR shall not be allowed an extension of contract time because of any delay in performance of the work attributable to the exercise by the GUC of the GUC's rights and remedies hereunder.

6. COVERED WORK

- 6.1 If any work is covered contrary to the written directive of the ENGINEER, it must, if requested by the ENGINEER, be uncovered for ENGINEER's observation and replaced at CONTRACTOR's expense. If required by the ENGINEER, the CONTRACTOR shall correct all defective work whether or not fabricated, installed, or completed, or, if the work has been rejected by the ENGINEER, remove it from the site and replace it with non-defective work. The CONTRACTOR shall bear all direct, indirect and consequential cost of such correction or removal, including but not limited to fees and charges of ENGINEERs, architects, attorneys, and other professionals. Upon failure of the CONTRACTOR to correct the deficiency within a reasonable time, the GUC may, after seven (7) days written notice to the CONTRACTOR, correct and remedy any such deficiency and deduct the costs from any monies due the CONTRACTOR.
- 6.2 If the ENGINEER considers it necessary or advisable that covered work be inspected or tested by others, the CONTRACTOR shall uncover that portion of the work in question, furnishing all necessary labor, material, and equipment. If it is found that such work is defective, the CONTRACTOR shall bear all direct, indirect, and consequential costs of such uncovering, exposure, observation, inspection and testing, and of satisfactory reconstruction, (including but not limited to fees and charges of ENGINEERs, architects, attorneys, and other professional), and the GUC shall be entitled to an appropriate decrease in the contract price. If, however, such work is not found to be defective, the CONTRACTOR shall be allowed an increase in the contract price or an extension of the contract time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, and reconstruction.

7. BONDS, INSURANCE, ETC.

7.1 Bonds

- **a.** Each Bidder shall enclose in his bid package, a bid bond issued by a surety licensed to do business in North Carolina in the amount of five percent (5%) of his bid total. A bank certified check made payable to the GUC will be accepted in lieu of the bid bond.
- **b.** The successful CONTRACTOR shall be required to provide a performance bond in the amount of one hundred percent (100%) of the contract price.

7.2 Indemnification

- a. The CONTRACTOR shall indemnify the GUC, its agents, officers, and employees against any damages to property or injuries to or death of any person or persons, including property and employees or agents of the GUC, and shall defend and indemnify the GUC, its agents, officers, and employees from any claims, demands, suits, actions, or proceedings of any kind, including workers' compensation claims, of or by anyone, in any way resulting from or arising out to the operations in connection with the work described in the contract, including operations of SUBCONTRACTORs and acts or omissions of employees or agents of CONTRACTOR or CONTRACTOR's SUBCONTRACTORs. CONTRACTOR shall procure and maintain, at CONTRACTOR's own costs and expense, any additional kinds and amounts of insurance that, in CONTRACTOR's own judgment, may be necessary for CONTRACTOR's proper protection in the prosecution of the work.
- **b.** The CONTRACTOR shall, at his own expense, appear, defend, and pay all charges of attorneys and other expenses arising there from or incurred in connection therewith, and, if any judgment shall be rendered against the GUC, and/or its officers, agents, and employees, in any such action, the CONTRACTOR shall, at his own expense, satisfy and discharge the same. The CONTRACTOR expressly understands and agrees that any performance bond or insurance protection required by this contract, or otherwise provided by the CONTRACTOR, shall in no way

limit the responsibility to indemnify, keep, and save harmless and defend the GUC, its agents, officers, and employees as herein provided.

- c. The CONTRACTOR shall assume all risks and responsibilities for casualties of every description in connection with the work, except that he shall not be held liable or responsible for delays or damage to the work caused by acts of God, acts of Public Enemy, acts of Government, quarantine restrictions, general strikes through the trade, or by freight embargoes not caused or participated in by the CONTRACTOR. The CONTRACTOR shall have charge and control of the entire work until completion and acceptance of the same by the GUC.
- **d.** The CONTRACTOR shall alone be liable and responsible for, and shall pay, any and all loss or damage sustained by any person or party either during the performance or subsequent to the completion of the work under this agreement, by reason of injuries to persons and damage to property, building, and adjacent work, that may occur either during the performance of the work covered by this contract or that may be sustained as a result of or in consequence thereof, irrespective of whether or not such injury or damage be due to negligence or the inherent nature of the work.
- **e.** The CONTRACTOR shall bear all losses resulting from the amount or character of the work being different, or because the nature of the premises on which the work is done is different from what was expected or on account of the weather, or similar causes.
- **f.** The CONTRACTOR, however, will not be obligated to indemnify the GUC, its officers, agents, or employees against liability for damage arising out of bodily injury to persons or damage to property caused by or resulting solely from the negligence of the GUC or its officers, agents, and employees.

7.3 Insurance

The CONTRACTOR shall not commence work under any contract until he has obtained all the insurance required hereunder and such insurance has been approved by the GUC; nor shall the CONTRACTOR allow any SUBCONTRACTOR to commence work on his subcontract until all similar insurance has been so obtained and approved. Approval of the insurance by the GUC shall not relieve or decrease the liability of the CONTRACTOR hereunder.

- **a.** Worker's Compensation including Occupational Disease and Employer's Liability Insurance: The CONTRACTOR shall take out and maintain during the life of the Contract, Worker's Compensation and Employer's Liability Insurance for all of his employees to be engaged in work on the project under this Contract in an amount no less than the minimum allowed by the State Corporation Commission, and in case any such work is sublet, the CONTRACTOR shall require the SUBCONTRACTOR similarly to provide Workers' Compensation and Employer's Liability Insurance for all of the latter's employees to be engaged in such work.
- **b.** Comprehensive General Liability Insurance: The CONTRACTOR shall maintain during the life of the Contract comprehensive general liability insurance as shall protect him and the GUC and its officers, agents, and employees from claims for damages for personal injury, including death, as well as from claims for property damage, which may arise from operations under the Contract, whether such operations be by the CONTRACTOR or by any SUBCONTRACTOR, or by anyone directly or indirectly employed by either of them. The amount of such insurance shall be not less than a combined single limit of \$1,000,000.00 per occurrence on bodily injury and property damage and \$1,000,000.00 aggregate on completed operations. The comprehensive general liability insurance shall provide the following coverage:

Comprehensive Premises-Operation Products/Completed Operations Hazard Contractual Insurance Underground Hazard
Explosion & Collapse Hazard
Independent CONTRACTOR and SUBCONTRACTOR
Broad Form Property Damage
Personal Injury

c. Automobile liability insurance with minimum combined single limits of \$1,000,000.00 per occurrence. This insurance shall include bodily injury and property damage for the following vehicles:

Owned Vehicles Non-owned Vehicles Hired Vehicles

- **d.** Umbrella Policy: At the option of the CONTRACTOR, primary limits may be less than required, with an umbrella policy providing the additional limits needed. This form of insurance will be acceptable provided that the primary and umbrella policies both provide the insurance coverages herein required. However, any such umbrella policy must have minimum coverage limits of \$3,000,000.00.
- e. The CONTRACTOR, at his cost, shall effect and maintain in the names of the GUC, the ENGINEER and the CONTRACTOR, fire, vandalism and extended coverage insurance (or all-risk, builder's risk insurance if approved by the GUC), upon the entire structure or structures on which the work of this Contract is to be done and upon all material in or adjacent thereto and intended for use thereon to one hundred percent (100%) of the Contract amount. Such insurance may include a deductible provision if the GUC consents to such provision; however, the CONTRACTOR in such case will be liable for paying to the GUC the amount of such deduction whenever a claim arises. The loss, if any, is to be made adjustable with and payable to the GUC as Trustee for whom it may concern. Written evidence of the insurance required herein shall be filed with the GUC not later than thirty (30) days following the date of the award of the Contract. A copy of the evidence of insurance shall be filed with the Director of Finance.
- **f.** All policies shall name the GUC, its officers, agents, and employees as additional insured. This coverage shall be reflected on the Certificates of Insurance (including any endorsements or riders thereto) which will be provided to the GUC. Each Certificate of Insurance shall require that notice be given thirty (30) days prior to cancellation or material change in the policies to the Director of Finance.
- **g.** The insurance required by this Article shall include contractual liability insurance applicable to the CONTRACTOR's obligations under § 5.
- **h.** The CONTRACTOR shall either (1) require each of his SUBCONTRACTORs to procure and to maintain during the life of his contract "SUBCONTRACTOR's Insurance" of the type and in the same amounts as specified in the preceding schedule or (2) insure the activities of his SUBCONTRACTORs in his own policy.

8. MATTERS OF LAW

8.1 Authority

a. The GUC General Manager/CEO or designee has the sole responsibility and authority for negotiating, placing, and when necessary modifying each and every invitation to bid, purchase order, or other award issued by the GUC. Only the General Manager/CEO or designee is authorized to order supplies or services, enter into purchase negotiation, or in any way obligate the GUC for indebtedness. Any purchases contrary to these provisions and authorities shall be void and the GUC shall not be bound thereby.

b. This procurement process, including withdrawal of bids and appeals or protests, is governed by the NC Purchasing Laws.

8.2 Enforcement

This Agreement and the performance thereof shall be governed by and enforced under the laws of the State of North Carolina, and if legal action by either party is necessary for or with respect to the enforcement of any or all of the terms and conditions hereof, then exclusive venue therefore shall lie in the GUC, Greenville, North Carolina.

8.3 Equal Employment

During the performance of the contract, the CONTRACTOR agrees as follows:

- **a.** The CONTRACTOR will not discriminate against any employee or applicant for employment because of race, religion, color, sex, or national origin, except where religion, sex, or national origin is a bona fide occupational qualification reasonably necessary to the normal operation of the CONTRACTOR. The CONTRACTOR agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions for this nondiscrimination clause.
- **b.** The CONTRACTOR also shall not discriminate against any handicapped person in violation of any state or federal law or regulation and shall also post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this additional nondiscrimination clause.
- **c.** The CONTRACTOR, in solicitations or advertisements for employees placed by or on behalf of the CONTRACTOR, will state that such CONTRACTOR is an equal opportunity employer.
- **d.** Notices, advertisements, and solicitations placed in accordance with Federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.
- **e.** The CONTRACTOR will include the provisions of the foregoing paragraphs in every subcontract or purchase order over \$10,000 so that the provisions will be binding upon each SUBCONTRACTOR or vendor.
- **f.** The CONTRACTOR will otherwise comply with all other applicable provisions of local, State, and Federal law.

8.4 Non-Appropriation

In the event that sufficient funds are not appropriated by the GUC; or, if appropriated, are not allocated or available; or, in the event the amounts due hereunder are to be paid with funds given to the GUC by another private or government entity, and such funds are not sufficient for continuation of this agreement during any fiscal year after the GUC's first fiscal year; the GUC may, without breach, upon prior written notice to CONTRACTOR, terminate the contract in whole or in part.

8.5 Novation

The CONTRACTOR shall not assign or transfer, whether by Assignment or Novation, any of its rights, duties, benefits, obligations, liabilities, or responsibilities under the Agreement without the written consent of the GUC; provided, however, that assignments to banks, trust companies or other financial institutions for the purpose of securing a bond may be made without the consent of the GUC. Assignment or Novation of the agreement shall not be valid unless the Assignment or Novation expressly provides that the assignment of any of the CONTRACTOR's rights or benefits under the Agreement is subject to a prior lien for labor performed, services rendered and materials, tools, and equipment supplied for the performance

of the work under the Agreement in favor of all persons, firm, or corporations rendering such labor or services or supplying such materials, tools, and equipment.

8.6 Observance of Laws

The CONTRACTOR at all times shall observe and comply with all Federal, State and City laws, bylaws, ordinances and regulations in any manner affecting the conduct of the work or applying to employees on the project, as well as all orders or decrees which have been promulgated or enacted, by any legal bodies or tribunals having authority or jurisdiction over the work, materials, employees or contract.

8.7 Patents

The CONTRACTOR agrees to indemnify and save harmless the GUC, and all personnel from all suits and actions of every nature and description brought against them, for or on account of the use of patented appliances, products, or processes, and he shall pay all royalties and charges which are legal and equitable. Evidence of such payment or satisfaction shall be submitted upon request of the GUC as a necessary requirement in connection with the final execution of any contract in which such patented appliances, products, or processes are used.

8.8 Permits

The CONTRACTOR shall, at his own expense, secure any business or professional licenses, permits or pay any fees required by the Locality or the State of North Carolina to include securing appropriate business licenses. For further information, contact The North Carolina Department of Commerce's office at (800) 228-8443 or (919) 715-2864.

9. SPECIFICATIONS AND PRODUCT DESCRIPTION

- 9.1 When brand names, model numbers, trade names, catalog numbers, or cuts are listed, they are, unless otherwise specified, included for the purpose of furnishing bidders with information concerning the style, type, or kind of article desired and a bidder may offer an article which he certifies to be equal in quality, performance and other essential characteristics. Any available printed material or literature which describes the product being offered for sale shall be included with the bid. The GUC shall be the sole judge of suitability of substitutes offered. When a formal numbered specification is referred to in this invitation, no deviation will be permitted and the bidder will be required to furnish articles in conformity with that specification.
- **9.2** After the execution of the Contract, substitution of equipment other than those named in the Contract will be considered for one reason only:
 - That the equipment or material proposed for substitution is equal or superior in construction, efficiency, durability or maintenance to that named in the contract.
- 9.3 To receive consideration, the CONTRACTOR's request for substitution must be accompanied by documentary proof of the actual difference in the equipment or material in the form of certified copies of specifications and statement of actual cost difference. Product samples or location of representative installation may be required for submission to receive approval. The GUC shall receive the full benefit of the savings in cost involved in any substitution.
- 9.4 In all cases, the burden of proof that the equipment or material offered for substitution is equal or superior to that named in the Contract shall rest on the CONTRACTOR, and unless the proof is satisfactory to the GUC, the substitution will not be approved.
- **9.5** It will be considered that the CONTRACTOR, in his Proposal, has contacted manufacturers giving a delivery time which will permit completion of the Project within the specified Contract Time.

- 9.6 The ENGINEER will issue in writing any approved substitutions. In the event the CONTRACTOR obtains the ENGINEER's approval on equipment or materials other than that specified, the CONTRACTOR shall, at his own expense, make any changes in the assemblies, structures, or substrates or whatever is necessary to accommodate the substituted equipment or material.
- 9.7 In the event that the ENGINEER is required to provide additional engineering services as a result of substitution of materials or equipment which are not "or equal" by the CONTRACTOR, or changes by the CONTRACTOR in dimension, weight, power requirements, etc., of the equipment and accessories furnished, or if the ENGINEER is required to examine and evaluate any changes proposed by the CONTRACTOR for the convenience of the CONTRACTOR, then the ENGINEER's charges in connection with such additional services shall be charged to the CONTRACTOR by the GUC.
- 9.8 In the event that the ENGINEER is required to provide additional engineering services as a result of the CONTRACTOR's errors, omissions, or failure to conform to the requirements of the Contract Documents, or if the ENGINEER is required to examine and evaluate any changes proposed by the CONTRACTOR solely for the convenience of the CONTRACTOR, then the ENGINEER's charges in connection with such additional services shall be charged to the CONTRACTOR by the GUC.

10. JOBSITE SAFETY MEASURES

- **10.1** Construction site safety is the responsibility of the CONTRACTOR.
- 10.2 The CONTRACTOR shall comply with all Local, State and Federal laws and the Occupational Safety and Health Act in protecting the public, the worksite, and adjacent property from damage. The CONTRACTOR shall provide all sheeting, shoring, barricades, warning lights, signs, and fences required for this protection.
- 10.3 The CONTRACTOR shall provide ample sanitary facilities and drinking water for the workers in accordance with State and City health regulations.

10.4 Excavation

- **a.** Unless otherwise permitted by the ENGINEER, all ditches shall be backfilled at the end of each work day with the exception of the pipe laying area.
- **b.** Ditches left open overnight shall be kept to a minimum; however, any ditches left shall be properly flared and/or barricaded.
- **c.** All ditches shall be backfilled and protected for each weekend unless prior approval for leaving a ditch open is obtained from the ENGINEER or his representative.

10.5 Shoring

All trenches and other excavations shall be supported to provide safe working conditions. The US Department of Labor Occupational Safety and Health Administration (OSHA) requires that all excavations over five feet deep be sloped, shored, sheeted, braced, or otherwise supported. When soil conditions are unstable, excavations shallower than five feet also must be sloped, supported, or shored. The type and method to be used may vary on each different project and that which will provide the safest working conditions shall be utilized.

10.6 Limitations of Work Area

- **a.** The CONTRACTOR shall be limited to a specific area for storage of equipment, and supplies.
- **b.** Parking area for employees of the CONTRACTOR shall be designated in the vicinity of the project, and it shall be the responsibility of the CONTRACTOR to require his personnel to park in

this designated area and not in any area which may interfere with the normal operations in and around the construction area or with access and use of the facility by the GUC.

11. PROGRESS OF WORK

11.1 Conferences

Prior to the issuance of a "Notice to Proceed", the GUC and CONTRACTOR, or their duly appointed representatives, shall meet in a pre-construction conference to organize, schedule, and determine responsibilities for the Work as it pertains to this project.

11.2 Control of Work

- **a.** The ENGINEER will not be responsible for CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, and ENGINEER will not be responsible for CONTRACTOR's failure to perform or furnish the Work in accordance with the Contract Documents.
- **b.** The GUC will not be responsible for the acts or omissions of CONTRACTOR or of any SUBCONTRACTOR, any Supplier, or of any other person or organization performing or furnishing any of the Work.
- **c.** On all questions relating to quantities, the acceptability of materials and equipment, or work, and the interpretation of the Contract Documents, the decision of the ENGINEER is final and binding, and shall be precedent to any payment under the Contract.
- **d.** All work and material are subject to the inspection and approval of the ENGINEER. Unless otherwise authorized, work shall be done only in the presence of the ENGINEER or his authorized representatives. Any work done without proper inspection will be subject to rejection. Inspection of the Work shall not relieve the CONTRACTOR of the obligation to fulfill all conditions of the Contract.
- **e.** The GUC may require the CONTRACTOR to remove from the work any employee that the ENGINEER may deem incompetent, careless, or insubordinate.
- **f.** Certain items of work may be performed by forces of the GUC. The CONTRACTOR shall cooperate fully in scheduling and coordinating with the GUC; such that no delay will result in the performance of such work. If the CONTRACTOR claims that such work delays or causes additional costs, he shall make claims as provided in §14 "Work Changes".
- g. The GUC may award, or may have awarded, contracts to others for other work. The CONTRACTOR shall cooperate fully with such other Contactors by scheduling his own work with that to be performed under other contracts as may be directed by the GUC. The Contactor shall not commit or permit any act that will interfere with the performance of work by any other CONTRACTOR as scheduled. If the CONTRACTOR claims that such work delays or causes additional costs, he shall make claims as provided in §14 "Work Changes".
- **h.** Neither the final certificate of payment nor any provision in the Contract Documents, nor partial or entire occupancy of the premises by the GUC, shall constitute an acceptance of work not done in accordance with the Contract Documents or relieve the CONTRACTOR of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The CONTRACTOR shall remedy any defects in the work and pay for any damage to other work resulting therefrom, which shall appear within a period of one year from the date of final

acceptance of work unless a longer period is specified. The GUC will give notice of observed defects with reasonable promptness.

11.3 Responsibilities of the Contractor

- **a.** Any equipment used on this project must be of sufficient design to accomplish every facet of this work and maintained in a satisfactory working condition throughout the time of construction so as not to delay prompt execution of the project.
- **b.** Any vehicle operated by the CONTRACTOR on new pavement or existing pavement remaining in service shall be equipped with pneumatic tires. The CONTRACTOR shall take necessary precautions to ensure that new pavement is not damaged. All damaged areas shall be repaired by the CONTRACTOR at his cost, in a manner approved by the GUC.
- **c.** The CONTRACTOR shall remove and dispose of all excavated material and shall take necessary precautions to prevent soiling of curbs and adjacent areas. All soiled areas shall be cleaned immediately in a manner approved by the GUC.
- **d.** The CONTRACTOR will be responsible for investigations of subsurface conditions at the project site, and may obtain soil borings at his own expense.
- **e.** When required by the ENGINEER, the CONTRACTOR shall submit certifications that all materials supplied meet the requirements of the Specifications.
- f. Trees, shrubbery, fences, poles, and all other property shall be protected unless their removal is shown on the drawings or authorized in writing by the ENGINEER. When it is necessary to cut roots and tree branches, such cutting shall be done under the supervision and direction of the ENGINEER.
- g. The CONTRACTOR shall protect any work done from disfigurement by vandals, vehicular traffic, or his own employees. Any damaged work must be repaired, if possible, or removed and replaced as directed by the ENGINEER. CONTRACTOR shall protect fresh laid concrete from rainfall.

11.4 Construction Engineering

The CONTRACTOR shall use care in protecting existing property irons and monuments adjacent to the work areas. If a property iron or monument must be removed to install new facilities, the CONTRACTOR shall be responsible for locating the iron or monument in such a manner that it can be accurately replaced by a registered surveyor after the construction of the new facilities is completed. If a property iron or monument is destroyed by the CONTRACTOR, it shall be replaced by a registered surveyor at the CONTRACTOR's expense.

11.5 Working Hours

Work at the job shall only be performed during the hours of 7:00 a.m. to 6:00 p.m. unless otherwise approved by the ENGINEER.

11.6 Use of Explosives

Blasting or other use of explosives shall not be permitted during the performance of this Contract.

11.7 Subcontracts

- a. The CONTRACTOR is required to identify and list SUBCONTRACTORs, Suppliers and other persons and organizations proposed (including those who are to furnish the principal items or material and equipment) for those portions of the Work for which such services are required. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such SUBCONTRACTOR, Supplier, person or organization. If the GUC requires additional information in advance of the Effective Day of the Agreement, the apparent Successful Bidder, and any other Bidder so requested, shall submit to the GUC such additional information on all SUBCONTRACTORs, Suppliers, and other persons and organizations. If the GUC, after due investigation, has reasonable objection to any proposed SUBCONTRACTOR, Supplier, other person or organization, the GUC may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder shall submit an acceptable substitute. That Bidder's Bid price will be changed by the difference in cost occasioned by such substitution and GUC may consider such price adjustment in evaluating Bids and making the contract award.
- **b.** If apparent Successful Bidder declines to make any such substitutions, GUC may award the contract to the next lowest responsible, responsive Bidder that proposes to use acceptable SUBCONTRACTORs, Suppliers and other persons and organizations. Declining to make requested substitutions will not constitute grounds for sacrificing the Bid security of any Bidder. Any SUBCONTRACTOR, Supplier, other person or organization listed and to who the GUC does not make written object prior to the giving of the Notice of Award will be deemed acceptable to the GUC, subject to revocation of such acceptance after the Effective Date of Agreement. No CONTRACTOR shall be required to employ any SUBCONTRACTOR, Supplier, other person or organization against whom CONTRACTOR has reasonable objection.
- **c.** The Contactor shall be as fully responsible to the GUC for the acts and omissions of his SUBCONTRACTORs, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.
- **d.** The CONTRACTOR shall cause appropriate provision to be inserted in all subcontracts relative to the Work to require compliance by each SUBCONTRACTOR with applicable provisions of the Contract for the improvements embraced in the Contract.
- **e.** Nothing contained in any agreement shall create any contractual relation between any SUBCONTRACTOR and the GUC.
- **f.** SUBCONTRACTORs shall maintain the proper North Carolina registration in accordance with § 2.5 and a valid business licenses as required.

12. COMPLETION/STOPPAGES, ETC.

12.1 Time of Completion

- **a.** Final Completion for the Work of the Project will be required within thirty (30) consecutive calendar days from the date of Notice to Proceed.
- **b.** The GUC reserves the right to suspend work in the case of inclement weather.
- **c.** If the work is delayed by an act, default, or negligence on the part of the GUC or by approved nonperformance on the part of the CONTRACTOR, an equivalent extension of time for completion may be granted by the GUC when so requested by the CONTRACTOR.

12.2 Liquidated Damages

a. The GUC is authorized to deduct and retain out of any monies that may be due or become due to the CONTRACTOR under this agreement, the sum of five hundred dollars (\$500) per

working day, not as a penalty but as liquidated damages for each and every day that the work is not completed beyond the time stipulated in the Specifications and General Conditions for substantial completion; provided that due account shall be taken of any authorized adjustment of the completion schedule.

- **b.** Should the CONTRACTOR fail to complete the Work on or before the date stipulated for Final Completion (or such later date as may result from extension of time granted by the GUC), the CONTRACTOR shall pay the GUC, as liquidated damages, the sum of three hundred dollars (\$300) for each consecutive working day that terms of the Contract remain unfulfilled beyond the date allowed by the Specifications and General Conditions after substantial completion of the work, which sum is agreed upon as a reasonable and proper measure of damages which the GUC will sustain by failure of the CONTRACTOR to complete the Work within the time as stipulated. CONTRACTOR acknowledges that actual damage to GUC for late completion would be difficult to estimate accurately and that the liquidated damages specified herein represent a reasonable good faith approximation of the GUC's anticipated damages. In no way shall costs for liquidated damages be construed as a penalty on the CONTRACTOR.
- **c.** The GUC shall retain from final payment (or any remaining retained percentage otherwise to be paid the CONTRACTOR) amounts necessary to compensate the GUC for liquidated damages for which the CONTRACTOR is liable. If the final payment and remaining retained percentage are not sufficient to cover the liquidated damages, the CONTRACTOR shall pay the GUC the damages remaining.

12.3 Substantial Completion

- **a.** When CONTRACTOR considers the entire Work ready for its intended use and restoration is complete CONTRACTOR shall notify the ENGINEER in writing that the entire Work is substantially complete (except for items specifically listed as incomplete) and request that ENGINEER issue a notification of Substantial Completion. Within a reasonable time upon written notice from CONTRACTOR; the GUC and the CONTRACTOR will make an inspection of the Work to determine the status of completion.
- **b.** If the ENGINEER does not consider the Work substantially complete, the CONTRACTOR will be given notification in writing. A punchlist of items to be completed or corrected in order for the Work to be considered substantially complete will be included.
- **c.** If the ENGINEER considers the Work substantially complete, the CONTRACTOR will be given notification in writing, fixing the date of Substantial Completion. A punchlist of items to be completed before final payment will be included.
- **d.** Upon written notice from CONTRACTOR that the entire Work is complete, the ENGINEER will make a final inspection with the CONTRACTOR and will notify the CONTRACTOR in writing of any remaining or additional punchlist items. CONTRACTOR shall immediately take such measures as are necessary to complete or correct the punchlist items.

12.4 Possession Prior to Completion

- **a.** Prior to Substantial Completion of the project, the ENGINEER may request the CONTRACTOR in writing to permit him to use part of the project without significant interference with construction of the other parts of the project. If Contactor agrees, he will certify to the GUC that said part of the project is substantially complete and request the ENGINEER to issue a certificate of Substantial Completion for that part of the project. Within a reasonable time thereafter, the ENGINEER shall make an inspection of the part of the Project to determine its status of completion.
- **b.** If the ENGINEER does not consider that it is substantially complete, the ENGINEER will notify the CONTRACTOR in writing giving his reasons therefore. If ENGINEER considers that

part of the Project is substantially complete, the ENGINEER will execute and deliver a certificate to that effect, fixing the date of Substantial Completion as to that part of the project, attaching thereto a tentative list of items to be completed or corrected before Substantial Completion of the entire project and fixing the responsibility between the GUC and CONTRACTOR for maintenance as to that part of the project.

c. The GUC shall have the right to exclude the CONTRACTOR from any part of the Project which the ENGINEER has so certified to be substantially complete, but the GUC shall allow the CONTRACTOR reasonable access to complete items on the tentative list.

12.5 Suspension of Work

The work may be suspended by the ENGINEER when deemed in the best interest of the GUC.

12.6 Termination

- **a.** If the CONTRACTOR fails to begin the Work under the Contract within the time specified, or fails to perform the Work with sufficient workmen and equipment or with sufficient materials to insure the completion of said work within the specified time, or shall perform the work in an unsatisfactory manner, or shall neglect or refuse to remove materials or perform anew such work as shall be rejected as defective or unsuitable, or shall discontinue the prosecution of the Work or if the CONTRACTOR shall become insolvent or be declared bankrupt, or shall commit any act of bankruptcy or insolvency, or shall make an assignment for the benefit of creditors, or from any other cause whatsoever shall not carry on the work in an acceptable manner, the GUC shall give notice in writing to the CONTRACTOR and his surety of such failure, delay, neglect, refusal, or default.
- **b.** If the CONTRACTOR, within a period of seven days after such notice, shall not proceed in accordance therewith, then the General Manager/CEO shall, have full power and authority to declare the forfeiture of the Contract, and to forfeit the rights of the CONTRACTOR. The General Manager/CEO at his option may call upon the surety to complete the work in accordance with the terms of this contract or may have the GUC take over the work, including any or all materials and equipment on the ground as may be suitable and acceptable to the GUC and may complete the work by or on its own employees, or may enter into a new contact for the completion of the work. All costs and charges incurred by the GUC, together with the cost of completing the work, shall be deducted from any monies due or which may become due on the contract.

13. REMUNERATION

13.1 Payments to the Contractor

- **a.** Except as hereinafter provided, the GUC will pay by the end of the month all bills submitted by the tenth day of that month; otherwise, by the end of the following month. Unless otherwise provided under the terms of this contract, interest shall accrue at the rate of one percent per month.
- **b.** The GUC will make payments on each Application for Payment approved by the ENGINEER.
- **c.** In making payments, ten percent (10%) of the estimated amount for each Application for Payment shall be retained as described in the Agreement.
- **d.** All materials and work covered by payments shall thereupon become the sole property of the GUC, but this provision shall not be construed as relieving the CONTRACTOR from the sole responsibility for all material and work upon which payments have been made, or the restoration of any damaged work, or as waiving the right of the GUC to require the fulfillment of all the terms of the Contract.

- **e.** Upon completion, final inspection and acceptance, all retainages held shall be released to the CONTRACTOR.
- f. The CONTRACTOR, provided all above conditions have been met, has the right to suspend operations after the 30th day following partial billing, if payment has not been received, without forfeiting any of his rights, unless otherwise agreed upon by the GUC and the CONTRACTOR.

13.2 Contractor Payment to Subcontractors

- **a.** Within seven (7) days after the receipt of amounts paid to the CONTRACTOR by the GUC for work performed by any SUBCONTRACTOR under this agreement, the CONTRACTOR shall either:
 - **1.** Pay the SUBCONTRACTOR for the proportionate share of the total payment received from the GUC attributable to the work performed by the SUBCONTRACTOR under this agreement; or
 - **2.** Notify the GUC and SUBCONTRACTOR on all amounts owed by the CONTRACTOR that remain unpaid after seven (7) days following receipt by the CONTRACTOR of payment from the GUC for work performed by the SUBCONTRACTOR's payment with the reason for nonpayment.
- **b.** The CONTRACTOR shall pay interest to any SUBCONTRACTOR on all amounts owed by the CONTRACTOR that remain unpaid after seven (7) days following receipt by the CONTRACTOR of payment from the GUC for work performed by the SUBCONTRACTOR under this agreement, except for amounts withheld as allowed in subsections a.2 above.
- **c.** Unless otherwise provided under the terms of this Agreement, interest shall accrue at the rate of one percent per month.
- **d.** The CONTRACTOR shall include in each of its subcontracts a provision requiring each SUBCONTRACTOR to include or otherwise be subject to the same payment and interest requirements of each lower-tier SUBCONTRACTOR.
- **e.** The CONTRACTOR's obligation to pay any interest charged to a SUBCONTRACTOR pursuant to this section may not be construed to be an obligation of the GUC. No contract modification may be made for the purpose of providing reimbursement for such interest charge. A cost reimbursement claim may not include any amount for reimbursement for such interest charge.

13.3 Final Payment

After CONTRACTOR has completed all such corrections to the satisfaction of the GUC and delivered in accordance with the Contract Documents all maintenance and operating instructions, schedules, guarantees, Bonds, certificates or other evidence of insurance required by § 7.3, certificates of inspection, marked-up record documents and other documents, CONTRACTOR may make Application for Final Payment following the procedure for Payments to Contractor. The final Application for Payment shall be accompanied (except as previously delivered) by: (1) all documentation called for in the Contract Documents, (2) complete and legally effective releases or waivers (satisfactory to GUC) of all Liens arising out of or filed in connection with the Work. In lieu of such releases or waivers of Liens and as approved by GUC, CONTRACTOR may furnish receipts or releases in full and an affidavit of CONTRACTOR that: (1) the releases and receipts include all labor, services, material and equipment for which a Lien could be filed and (2) all payrolls, material and equipment bills and other indebtedness connected with the Work for which GUC or GUC's property might in any way be responsible have been paid or otherwise satisfied. If any SUBCONTRACTOR or Supplier fails to furnish such a release or receipt in full, CONTRACTOR may furnish a Bond or other collateral satisfactory to GUC to indemnify GUC against Lien.

- b. If, on the basis of ENGINEER's observation of the Work during construction and final inspection, and ENGINEER's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, ENGINEER is satisfied that the Work has been completed and CONTRACTOR's other obligations under the Contract Documents have been fulfilled, ENGINEER will, within ten days after receipt of the final Application for Payment, the ENGINEER shall review and begin processing the Application for Payment. At the same time ENGINEER will also give written notice to the CONTRACTOR that the Work is acceptable subject to the provisions of paragraph (d). Otherwise, ENGINEER will return the Application to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and resubmit the Application. Thirty days after the presentation to the GUC of the Application and accompanying documentation, in appropriate form and substance and with ENGINEER's recommendation and notice of acceptability, the amount recommended by ENGINEER will become due and will be paid by GUC to CONTRACTOR.
- c. If through no fault of CONTRACTOR, final completion of the Work is significantly delayed, GUC shall, upon receipt of CONTRACTOR's final Application for Payment and recommendation of ENGINEER, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed or corrected less the retainage stipulated in the Agreement, and if Bonds have been furnished as required in §7.1, the written consent of the surety to the payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims. A waiver of all claims by GUC against CONTRACTOR, except claims arising from unsettled Liens, from *defective* Work appearing after final inspection pursuant to §13, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from CONTRACTOR's continuing obligations under the Contract Documents; and a waiver of all claims by CONTRACTOR against GUC other than those previously made in writing and still unsettled.
- **d.** The making and acceptance of final payment will constitute:
 - 1. A waiver of all claims by GUC against CONTRACTOR, except claims arising from unsettled liens, from defective Work appearing after final inspection pursuant in §12.3, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from CONTRACTOR's continuing obligations under the Contract Document; and
 - **2.** A waiver of all claims by CONTRACTOR against GUC other than those previously made in writing and still unsettled.

14. WORK CHANGES

- 14.1 The GUC, without invalidating any construction contract, and without notice to any surety, may order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, providing the total amount added or eliminated does not exceed \$100,000. All such changes in the Work shall be authorized by change order, and shall be executed under the applicable conditions of the Contract Documents.
- 14.2 The cost or credit to the GUC resulting from a change in the Work shall be determined by unit prices subsequently agreed upon or by mutual acceptance or a lump sum properly itemized, or on the basis of Cost of Work plus a CONTRACTOR's Fee for overhead and profit as determined below.
- 14.3 The term "Cost of Work" means the sum of costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work. Except as otherwise may be agreed to in writing by the GUC, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items and shall not include any of the costs itemized in §14.4 below.

- **a.** Payroll costs for employees in the direct employ of the CONTRACTOR in the performance of work under schedules of job classifications agreed upon by the GUC and the CONTRACTOR. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise, and payroll taxes. Workers' or workmen's compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. Such employees shall include superintendents and foremen at the site. The expenses of performing work after regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by the GUC.
- **b.** Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and manufacturer's field services required in connection therewith. All trade discounts, rebates, and refunds that are for installed materials and equipment shall accrue to the GUC, and the CONTRACTOR shall make provisions so that they may be obtained. All trade discounts, rebates, and refunds and all returns from the sale of surplus materials and equipment shall accrue to the Contactor.
- **c.** Payment made by the CONTRACTOR to SUBCONTRACTORs for work performed by SUBCONTRACTORs. All SUBCONTRACTORs shall be subject to the provisions of the Contract Document.
- **d.** Supplemental cost including the following:
 - 1. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost less market value of such items used but not consumed that remain the property of CONTRACTOR.
 - **2.** Rentals of all construction equipment and machinery, whether rented from the CONTRACTOR or others, shall be negotiated between the GUC and the CONTRACTOR. These rates shall include all fuel, lubricants, insurance, etc. Equipment rental charges shall not exceed the prorated monthly rental rates listed in the current edition of the *Compilation of Rental Rates for Construction Distributors*. Charges per hour shall be determined by dividing the monthly rates by 176. The rental of any such equipment and machinery shall close when the use thereof is no longer necessary for the Work.
 - **3.** Sales, consumer, use or similar taxes related to the project, and for which CONTRACTOR is liable, imposed by laws and regulations.
 - **4.** Deposits lost for causes other than negligence of CONTRACTOR, any SUBCONTRACTOR or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- 14.4 The term "Cost of Work" shall not include any of the following:
 - **a.** Payroll costs and other compensation of CONTRACTOR's officers, executive, principals (of partnerships and sole proprietorships), general managers engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contacting agents, expediters, timekeepers, clerks and other personnel employed by CONTRACTOR whether at the site or in CONTRACTORs principal branch office for general administration of the work and not specifically included in the agreed upon schedule of job classifications referred to in § 14.3a above all of which are to be considered administrative costs covered by the CONTRACTOR's Fee.
 - **b.** Expenses of CONTRACTOR's principal branch offices other than CONTRACTOR's office at the site.

- **c.** Any part of CONTRACTOR's capital expenses, including interest on the CONTRACTOR's capital employed for the Work and charges against the CONTRACTOR for delinquent payments.
- **d.** Costs due to the negligence of the CONTRACTOR, any SUBCONTRACTOR, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective work, disposal of materials or equipment wrongly supplied and making good any damage to property.
- **e.** Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in §14.3c.
- **14.5** The CONTRACTOR's Fee allowed to the CONTRACTOR for overhead and profit shall be based on the following:
 - **a.** For costs incurred under §14.3a & b, the CONTRACTOR's Fee shall be ten percent. CONTRACTOR's Fee shall not be applied to payroll taxes, social security contributions or unemployment taxes.
 - **b.** For costs incurred under §14.3c, any CONTRACTOR's Fee shall be five percent.
 - c. No fee shall be payable on the basis of costs itemized under §14.3d and 14.4e.
 - **d.** The amount of credit to be allowed by the Contract to the GUC for any such change which results in a net decrease in cost will be the amount of the actual net decrease plus a deduction in CONTRACTOR's Fee by an amount equal to ten percent of the net decrease; and
 - **e.** When both additions and credits are involved in any one change, the adjustment in CONTRACTOR' Fee shall be computed on the basis of the net change in accordance with this subsection.
- 14.6 The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of the CONTRACTOR if a claim is submitted in writing to the ENGINEER for consideration with the claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event. Such delays shall include, but not be limited to, acts of neglect by GUC or others performing additional work as contemplated and specified elsewhere, or to fires, floods, labor disputes, epidemics, abnormal weather conditions or acts of God. No claim for an adjustment in Contract Time will be valid if not submitted in accordance with the requirements of this paragraph.
- 14.7 Should concealed conditions encountered in the performance of the Work below the surface of the ground or hidden in existing structures be at variance with the conditions indicated by the Contract Documents, the Contract Price may be equitably adjusted by change order upon claim by either party and approval of the other party, made within twenty (20) days after the first observance of the conditions.
- 14.8 The CONTRACTOR shall promptly, and before such conditions are disturbed, notify the ENGINEER in writing of: (a) subsurface or latent physical conditions at the site differing materially from those indicated in this contract, or (b) unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this contract.
- 14.9 The ENGINEER shall promptly investigate the conditions, and if he finds that such conditions do so materially differ and cause an increase or decrease in the CONTRACTOR's cost of, or the time required for, performance of this contract, an equitable adjustment shall be made and the Contract modified in writing accordingly. Any claim of the CONTRACTOR for adjustment hereunder shall

not be allowed unless he has given notice as above required; or unless the ENGINEER grants a further period of time before the date of final payment under the Contract.

15. ENVIRONMENTAL PROTECTION

- 15.1 Environmental protection considerations for the purpose of any GUC construction consist of, but are not limited to, the following factors: natural resources including air, water and land; solid waste disposal; noise; control of toxic substances, hazardous materials and radiation; the presence of chemical, physical and biological elements and agents which adversely affect or alter ecological balances; degradation of the aesthetic use of the environment; impact on daily activities such as traffic, and historical, archeological and cultural resources.
- 15.2 The CONTRACTOR shall provide and maintain during the life of the Contract, the environmental protection as defined herein. His operation shall comply with all Federal, State and City laws, ordinances and regulations pertaining to the provisions of this and various other sections of this specification shall also be his responsibility.
 - The CONTRACTOR shall not use equipment from which factory installed anti-pollution and noise control devices have been removed or rendered ineffective through lack of proper maintenance.
- 15.3 The ENGINEER will notify the CONTRACTOR in writing of any noncompliance with the aforementioned Federal, State of City laws or regulations. Such notice, when delivered to the CONTRACTOR or his authorized representative at the site of the Work, shall be deemed sufficient for the purpose. The CONTRACTOR shall, after receipt of such notice, immediately inform the ENGINEER of proposed corrective action and take such action as may be approved. If the CONTRACTOR fails or refuses to comply promptly, the ENGINEER may issue an order stopping all or part of the Work until satisfactory corrective action has been taken. No part of the time lost due to any such stop orders shall be made the subject of a claim for extension of time or for excess costs or damages by the CONTRACTOR. CONTRACTOR is responsible for compliance with laws and regulations and should not depend upon ENGINEER to determine non-compliance.
- 15.4 It is intended that the natural resources within the project boundaries and outside the limits of permanent work performed under this contract be preserved in their existing condition or be restored to an equivalent of the existing condition, as approved by the ENGINEER, upon completion of the Work. The CONTRACTOR shall confine his construction activities to areas defined by the work schedule, Plans, and Specifications.
- 15.5 Except in areas indicated to be cleared, the CONTRACTOR shall not remove, cut, deface, injure, or destroy trees, shrubs and vegetation without special permission from the ENGINEER. No ropes, cables, or guys shall be fastened to or attached to any existing nearby trees for anchorage unless specifically authorized by the ENGINEER. Where such use is permitted, the CONTRACTOR shall be responsible for any damage resulting from such use.
- 15.6 At all times, special measures shall be taken to prevent oil or other hazardous substances from entering the ground, drainage areas and local bodies of water.
- Any and all items having apparent historical or archeological interest which are discovered in the course of construction activities shall be carefully preserved in place and reported immediately to the ENGINEER for determination of action to be taken. Work in the immediate area shall be halted and the artifacts or other evidence shall be protected from all damage, including that resulting from the elements, vandalism, and the effects of excavation, demolition, removal and construction operations until such time as qualified officials are able to conduct appropriate investigations. Work in the immediate area shall not proceed until authorization to proceed is obtained from the ENGINEER. Any such evidence or artifacts found during construction operations or subsequent investigations required by this section shall be delivered into the custody of the GUC and shall not become the property of the CONTRACTOR.

- 15.8 Trash shall be picked up and placed in containers which shall be emptied on a regular schedule. All handling and disposal shall be so conducted as to prevent contamination of the site and other areas and shall not be disposed of in wetlands and shall not be burned. On completion, the area shall be left clean and re-vegetated. Rubbish and debris shall be transported off the construction site and disposed of by the CONTRACTOR in a manner that complies with Federal, State and City requirements. A permit or license and the location of the disposal area shall be provided prior to transporting any material off the project area. Waste materials shall not be burned within the project area.
- 15.9 Dust shall be kept down at all times including non-working hours, weekends, and holidays. Soil at the site, and other areas disturbed by the CONTRACTOR's operations and materials stockpiled for the project shall be sprinkled or treated with dust suppressors or covered as to control dust. No dry power brooming will be permitted. Vacuuming, wet mopping, wet sweeping or wet power brooming shall be used instead. Only wet cutting of concrete and asphalt will be permitted.
- 15.10 The CONTRACTOR shall inspect all vehicles for dirt prior to their leaving the construction site; dirt, soil, and rubble likely to be dislodged during transit shall be removed from the trucks and other vehicles prior to leaving the site. CONTRACTOR shall insure that all equipment transporting material that may become airborne is covered.

16. EROSION CONTROL

- 16.1 The erosion control system shall protect adjacent properties, shall be in accordance with the North Carolina Erosion and Sediment Control Planning and Design Manual, the North Carolina Erosion and Sediment Control Field Manual and City ordinances, and shall be approved by the ENGINEER. All erosion control measures shall be placed prior to commencement of grading. All elements of the erosion control system shall be sized and designed in accordance with the criteria specified in the referenced manuals.
- 16.2 Temporary measures shall be applied throughout the construction of the project to control erosion and to minimize siltation of adjacent property, streets, drainage ditches, storm drains and waterways. The CONTRACTOR, as a minimum, shall employ all erosion control measures indicated on the drawings and specified herein. Disturbed areas that are to be left unfinished for more than 30 days shall be seeded temporarily within seven days of completion of grading operations.
 - **a.** Stockpiled material shall be surrounded at the base with a temporary sediment barrier. Slopes of stockpiled material shall not exceed 2 to 1.
 - **b.** Vehicles leaving the construction site shall be cleaned to remove mud prior to entrance onto public rights of way.
 - **c.** The CONTRACTOR shall be responsible for weekly inspection of temporary erosion control system to insure maximum effectiveness of the protective measures. Any damaged areas of the erosion control system shall be immediately repaired.
- **16.3** Minimum required measures:
 - a. Silt fence
 - **b.** Storm drain inlet protection
 - **c.** Temporary seeding
 - d. Rock check dams
- 16.4 In the event the CONTRACTOR repeatedly fails to satisfactorily control erosion and sedimentation, the GUC reserves the right to employ outside assistance or to use its own forces to provide the erosion control measures indicated and specified. The cost of such work, plus related engineering costs, will be deducted from monies due the CONTRACTOR for other work under this contract.

Change Order

No. ____

Date of Issuance:		Effective Date:		
Project:	Owner:		Owner's Contract No.:	
Contract:			Date of Contract:	
Contractor:			Engineer's Project No.:	
The Contract Documents are i	nodified as follo	ows upon execution	of this Change Order:	
Description:				
Attachments (list documents s	upporting chan	ge):		
CHANGE IN CONTRAC	T PRICE:	CHA	NGE IN CONTRACT TIMES:	
Original Contract Price:	THOE.		Times: Working days Calendar days	
		Substantial comp	oletion (days or date):	
\$		Ready for final p	ayment (days or date):	
[Increase] [Decrease] from previous Change Orders No to No		[Increase] [Decrease] No to No	se] from previously approved Change Orders:	
			eletion (days):	
\$		Ready for final pa	ayment (days):	
Contract Price prior to this Change Order:		Contract Times prior to this Change Order:		
r			pletion (days or date):	
·\$			ayment (days or date):	
[Increase] [Decrease] of this Change Order:		[Increase] [Decrease] of this Change Order:		
\$			oletion (days or date):ayment (days or date):	
Contract Price incorporating this	Change Order:		th all approved Change Orders: oletion (days or date):	
\$			ayment (days or date):	
RECOMMENDED:	ACCE	PTED:	ACCEPTED:	
By:	By:			
Engineer (Authorized Signature)		vner (Authorized Signatu		
Date:	Date: _		Date:	
Approved by Funding Agency (in			Dates	
	EIG	CDC C-941 Change Order		

Change Order

Instructions

A. GENERAL INFORMATION

This document was developed to provide a uniform format for handling contract changes that affect Contract Price or Contract Times. Changes that have been initiated by a Work Change Directive must be incorporated into a subsequent Change Order if they affect Price or Times.

Changes that affect Contract Price or Contract Times should be promptly covered by a Change Order. The practice of accumulating Change Orders to reduce the administrative burden may lead to unnecessary disputes.

If Milestones have been listed in the Agreement, any effect of a Change Order thereon should be addressed.

For supplemental instructions and minor changes not involving a change in the Contract Price or Contract Times, a Field Order should be used.

B. COMPLETING THE CHANGE ORDER FORM

Engineer normally initiates the form, including a description of the changes involved and attachments based upon documents and proposals submitted by Contractor, or requests from Owner, or both.

Once Engineer has completed and signed the form, all copies should be sent to Owner or Contractor for approval, depending on whether the Change Order is a true order to the Contractor or the formalization of a negotiated agreement for a previously performed change. After approval by one contracting party, all copies should be sent to the other party for approval. Engineer should make distribution of executed copies after approval by both parties.

If a change only applies to price or to times, cross out the part of the tabulation that does not apply.

TECHNICAL SPECIFICATIONS

FOR

Industrial Gas Meter Sets Replacement – Phase II S.T. Wooten Corporation Asphalt Plant GREENVILLE UTILITIES COMMISSION OF THE CITY OF GREENVILLE, NC

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GREENVILLE UTILITIES COMMISSION GAS DEPARTMENT

SPECIFICATIONS FOR

Industrial Gas Meter Sets Replacement – Phase II S.T. Wooten Corporation Asphalt Plant

1 SECTION 1 - GENERAL

1.1 Scope of work

The work included under this Contract shall include supplying all necessary materials not supplied by the Greenville Utilities Commission (GUC), labor and equipment to install one (1) industrial meter and regulator set and all necessary appurtenances within the GUC's natural gas facility system as specified herein and detailed on the Plans and/or as designated by the GUC.

Also, the work included under this Contract does not require demolition and removal of piping and equipment.

Installation of the facility will generally include the following:

• S.T. Wooten Corporation Asphalt Plant – one (1), eight (8) inch meter run and risers, one (1) 6" regulator run and risers, and all associated tie-in connections and site work.

The GUC reserves the right to add to or delete from the work once the CONTRACTOR has mobilized. This work must be performed in the order directed by the ENGINEER. The GUC also reserves the right to extend the term of the Contract to allow for completion of any additional work added to this Contract.

Award of this Contract shall in no way restrict the GUC from using its own construction crews or from hiring additional CONTRACTORs to perform the same or similar type work.

1.2 Compliance

The CONTRACTOR shall comply with all provisions of the GUC's *Operation and Maintenance Plan*, dated April 2011 and CFR Title 49, Part 192.

1.3 Bidder Qualifications

All bidders must be pre-qualified by the GUC prior to submission of the Bid Proposal. Contact the GUC for qualification information.

1.4 Operator Qualification (OQ)

CONTRACTORs are required to provide a current copy of the Company's Operator Qualification (OQ) Plan for natural gas distribution and facility work prior to award of the Contract. Copies of all employee OQ qualifications shall be provided to the GUC prior to beginning the work. The OQ written plan and employee records shall be in accordance with Title 49 of the Code of Federal Regulations, Chapter I, Part 192 (49 CFR 192), Subtitle N, "Qualification of Pipeline Personnel." Qualification documentation shall be provided for all new employees prior to performing work on the GUC's natural gas system.

The GUC may, at its discretion, accept the provisions of a CONTRACTOR's Plan. CONTRACTORs shall make available, upon request, written records of their employee's qualifications. At a minimum these records shall include:

- Identification of qualified individual(s)
- Identification of covered task(s) each individual is qualified to perform
- Date that current qualification was received
- Method of evaluation used to obtain qualification
- Name of individual or organization for each covered task

- Training program outlines and materials
- List of non-qualified individuals that will be performing tasks on behalf of the GUC while under the direction of a contract qualified individual.

1.5 Drug and Alcohol Testing

Any and all employees of the CONTRACTOR who will be involved with the installation of the natural gas facility construction and maintenance operations required by this contract shall be required to participate in an anti-drug/drug and alcohol testing program. This program shall be administered in accordance with Title 49 of the Code of Federal Regulations, Chapter I, Part 199 (49 CFR 199), "Drug and Alcohol Testing," and Subtitle A, Part 40, "Procedures for Transportation Workplace Drug and Alcohol Testing Programs." The program must have been in force for no less than 12 months and the CONTRACTOR must show proof of enforcement to the Owner.

The CONTRACTOR shall furnish the GUC with documentation of participation in a qualified drug and alcohol-testing program. Prior to the performance of any fusion, welding and/or tie-in operations, a negative (no evidence of drug or alcohol use) test must be documented for all employees who will be involved with these operations.

1.6 Pre-Bid Conference

A pre-bid conference will not be held for this project. Contact Project Manager or other personnel for questions related to the project. Project site will be open for visitation.

1.7 Bonds – Bid, Payment and Performance

1.7.1 Bid Bond

A bid bond in the amount of five percent (5%) of the total bid is required per 7.1.a <u>Bonds</u> of the *General Conditions*. The Bid Bond shall be submitted with the Bid Form on or prior to the date and time set for bid opening.

1.7.2 Payment and Performance Bonds

The successful Bidder shall be required to provide a performance and payment bond in the amount of one hundred percent (100%) of the contract price per 7.1.b <u>Bonds</u> of the *General Conditions*.

The bond shall be executed with the Contract and delivered to the GUC within ten (10) days after the date of official Notice of Award.

1.8 <u>Insurance</u>

See 7.3 <u>Insurance</u> of the *General Conditions*.

1.9 Work Hours

The normal work hours are 8:00 a.m. to 5:00 p.m.

The CONTRACTOR will typically be allowed to work from 7:00am to 6:00pm on Monday through Friday as long as the work between 7:00 a.m. to 8:00 a.m. and 5:00 p.m. to 6:00 p.m. does not require the presence of any GUC personnel other than the inspector that is assigned to the project.

Work after 6:00pm (night work) is not included in the Contract-specified normal working hours and will not typically be allowed. Occasional work after the normal work hours provided for in this section may be allowed with the GUC's and their client's approval, but is not an expressed privilege of the Contract. The GUC may, upon the request of the CONTRACTOR, allow night work with the understanding that the work as described above is being performed entirely for the convenience of the CONTRACTOR, as long as a GUC inspector is available to be onsite and no other GUC personnel are required to be available for assistance. If

the CONTRACTOR chooses to perform the night work for his convenience, all additional costs, without exception, to the CONTRACTOR including labor, rental equipment, etc., will not be considered a basis for additional compensation to the CONTRACTOR.

Weekend work is not included in the Contract normal working hours and the CONTRACTOR will not be allowed to perform any work required by the Contract except for cleanup.

The following holidays are observed by the GUC and work by the CONTRACTOR on these days, other than cleanup, will not be allowed:

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May 27 (2013) – Memorial Day
July 4 (2013) – July 4<sup>th</sup> Holiday
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1.10 Time for Completion and Liquidated Damages

If awarded the Contract, the CONTRACTOR shall agree to commence the work covered by these Specifications within ten (10) calendar days after receipt of the written "Notice to Proceed" from the Owner or as mutually agreed upon by both parties and to fully complete the work within thirty (30) consecutive calendar days.

Considerations for holidays and inclement weather have been included in the development of the Time for Completion and no extension of the Contract Period will be allowed for weather related downtime, unless the downtime related to inclement weather exceeds the above 10-Year Normals for the Greenville area as recorded by the Greenville Water Treatment Plant.

The GUC may grant to the CONTRACTOR an extension of the Contract Period for additional work resulting from any modification(s) to the scope of the project, for delays caused by the GUC or for other reasons beyond the control of the CONTRACTOR which in the GUC's judgment would justify such extension. A request for a time extension shall be made within seven (7) calendar days following any event causing a delay.

No extension of the Contract Period will be allowed when the actual installed quantities as described in the original contract (Plans and Specifications) are less than twenty five (25) percent in excess of the estimated Contract quantities. If the CONTRACTOR is requested by the GUC to install facilities that are not described in the original contract, then the CONTRACTOR shall submit a written request for an extension of time to complete the work. The GUC will review the request for additional time and make a determination at that time, or defer to a later date within the Contract Period, as to the allowance for additional Contract Time. If the GUC determines that additional Contract Time is justified, then the GUC shall make a determination for the length of extension allowed.

The assessment of liquidated damages for failure to complete the work within the Contract Period shall not constitute a waiver of the GUC's right to collect any additional damages that the GUC may sustain by failure of the CONTRACTOR to carry out the terms of the Contract.

1.11 Project Manager

Mr. Jonathan Britt, P.E., with the GUC (252-551-2048) is the designated Project Manager. Mr. David Malinauskas, P.E., with the GUC (252-551-1594) is an additional point of contact.

1.12 Inspection

The GUC and the Inspector(s) shall have access to the work at all times. The CONTRACTOR shall provide proper facilities for such access and for inspection. The Inspector(s) will be on site to inspect all welds prior to pressure testing the facilities. The GUC shall be present for all special testing or approval of the work that is required by the Specifications, the GUC's instructions, laws, ordinances, or any public authority.

The GUC, in order to be present, shall be given 72 hours notice prior to any required testing or approval. The CONTRACTOR shall have no claim against the GUC for time or monies when sufficient notice is not given.

The GUC may require re-examination of any of the work. If required, the CONTRACTOR shall provide all labor and equipment necessary to expose the any of the Work. If the work is determined to be in accordance with the Specifications, the GUC will pay the costs of re-examination and replacement. If the work is not in accordance with the Specifications, the CONTRACTOR shall pay such costs.

Inspector(s) will be stationed at the work site to inspect welds and report to the GUC as to the progress of the work, the manner in which it is being performed, and also to report whenever it appears that the materials furnished by either the GUC or the CONTRACTOR or the work performed by the CONTRACTOR fails to meet the requirements of the Plans or Specifications.

If a dispute arises between the Inspector and the CONTRACTOR as to the materials furnished or to the manner of performing the work, the Inspector shall have the authority to reject the questionable materials or suspend the work until the issue can be referred to and a decision can be made by the GUC. Inspectors are not allowed to revoke, alter, enlarge, relax or release any requirements of these Specifications or to issue instructions contrary to the Contract Documents. Inspectors shall in no case act as foremen or perform duties for the CONTRACTOR or interfere with the management of the work by the CONTRACTOR.

The GUC will make a final inspection of the work included in the Contract as soon as possible after notification from the CONTRACTOR that the work is substantially complete and ready for inspection. If any of the work is not acceptable at the time of the inspection, the GUC will advise the CONTRACTOR, in writing, as to the particular item(s) to be completed or corrected before the work can be given final approval and final payment for the work is approved.

1.13 Scheduling of work

The CONTRACTOR shall provide a schedule of the work to the GUC prior to beginning the work to ensure it meets the GUC requirements. The schedule shall include specific project milestones and the time frame for completion of each.

1.14 Plans and Specification Contradictions

Where contradictions in the Plans and Specifications occur, the more restrictive provision shall apply unless otherwise authorized by the GUC. The CONTRACTOR shall immediately notify the GUC of any such contradiction and shall abide by the GUC's decision.

1.15 **Superintendence**

The CONTRACTOR shall keep on the work at all times during its progress a competent resident Superintendent, having a minimum of three (3) years experience in the installation of natural gas distribution facilities. The Superintendent shall represent all work performed by all of the CONTRACTOR's crews and shall not function as the foreman for any individual crew when more than one crew is onsite performing work required by the Contract. The Superintendent shall not be replaced without written notice to the GUC except under extraordinary circumstances, as determined by the GUC. The Superintendent will be the CONTRACTOR's representative at the site and shall have authority to act on behalf of the CONTRACTOR. All communications to or from the Superintendent shall be binding as if given to or received from the CONTRACTOR.

1.16 Contractor Crew Requirements

The CONTRACTOR shall provide a sufficient number of crews to efficiently complete the work required by the Contract within the Contract Period. For the purpose of this Contract, the term crew shall be defined as a collective group of CONTRACTOR personnel consisting of a foreman and other necessary personnel knowledgeable and able to perform a specific task or tasks. The CONTRACTOR shall provide the GUC with five (5) working days notice prior to introducing new crews to the Project. The GUC reserves the right to limit the number of crews or request additional crews to complete the work associated with this Project.

1.17 Implied work

All incidental work required through the Plans and/or the Specifications, or as otherwise directed by the GUC, for which no payment is specifically provided, and any and all work or materials not specified herein which may fairly be implied as included in the Contract and necessary to complete the work, and which the GUC shall judge to be so included, shall be executed and/or furnished by the CONTRACTOR without extra compensation.

1.18 Required work Not Covered in Bid Proposal

For any required work that is not covered in the Bid Proposal, a price must be submitted to and approved by the GUC prior to performing the work. Any work performed without prior, written approval from the GUC will be performed at the sole expense of the CONTRACTOR.

1.19 Payment to Contractor

Due to the short duration of the Project, the GUC will make payments to the CONTRACTOR based upon the completion of the facility in its entirety.

An amount equal to 10% of the total amount due for **the** facility will be deducted and retained by the GUC for a period of two (2) months. The two (2) months period is to ensure the facility is operating to the complete satisfaction of the GUC.

1.20 Bid Opening Date

The Bids/Proposals for this project will be received until <u>Wednesday</u>, <u>June 5</u>, <u>2013 at 2:00 p.m.</u>, Eastern Standard Time. Bids must be delivered to the GUC Engineering Center located at 801 Mumford Road, Greenville, NC 27835. Bids must be addressed to Mr. Jonathan Britt, P.E., Gas Systems Engineer.

2 SECTION 2 - GENERAL CONSTRUCTION MATERIALS

The CONTRACTOR shall supply and pay for all labor and materials necessary for the completion of the work specified herein and on the Plans, except as otherwise expressly provided for in the Contract Documents. Unless otherwise specified, all materials shall be new.

2.1 Bituminous Paving

2.1.1 General

All aggregate, mineral filler, bitumen, and prime coat shall be in accordance with the North Carolina Department of Transportation's (NCDOT) *Standard Specifications for Roads and Structures*, latest edition.

2.1.2 Aggregate Base Course

Aggregate base course material shall be NCDOT Type ABC conforming to the requirements of NCDOT Standard Specifications for Roads and Structures, latest edition.

2.1.3 Asphalt Concrete Intermediate Course

Asphalt concrete intermediate course material shall be NCDOT Type I19.0B conforming to the requirements of NCDOT Standard Specifications for Roads and Structures, latest edition.

2.1.4 Asphalt Concrete Surface Course

Asphalt concrete surface course material shall be NCDOT Type S9.5B conforming to the requirements of NCDOT *Standard Specifications for Roads and Structures*, latest edition.

2.2 Select Fill

Material used for bedding or backfill material purposes shall consist of approved materials; typically clean topsoil or other borrow material capable of achieving necessary compaction required for protection of the pipe and trench stabilization, as approved by the GUC.

2.3 **Sand**

Sand shall be naturally occurring sand or manufactured stone sand. Natural sand shall consist of grains of hard, sound material, predominantly quartz, occurring in natural deposits. Manufactured sand shall consist of sound crushed particles of minimum NCDOT Grade B stone, essentially free from flat or elongated pieces, with sharp edges and corners removed. All sand shall be clean and free from foreign matter such as loam, dirt, sticks, roots, leaves, silt, vegetable matter and oil or dyestuffs.

2.4 Concrete

Concrete shall be Class B (3000 psi minimum) for curb and gutters and shall conform to the requirements of NCDOT *Standard Specifications for Roads and Structures*, latest edition Sections 825, 846 and 848.

Miscellaneous concrete used on site shall meet above requirements.

2.5 Concrete Forms

Concrete forms shall be sonotube round, concrete column forms in accordance with ACI Standard Specification for Structural Concrete.

2.6 Fencing

The chain link fence shall be five (5) feet high consisting of two (2) inch mesh. The chain link fabric shall be in accordance with ASTM F654, 9 gauge galvanized, twist selvage top and bottom. Corner and line posts shall be 2½ inch outside diameter and galvanized in accordance with ASTM F1083, spaced a maximum of 10

feet on center. The top rail shall be 15% inch with the chain link fabric secured to line post and rail at a maximum of 12 inch on center using 9 gauge galvanized tie wire, and secured to corner posts using 12 gauge tension bands secured at a maximum of 12 inch on center. Tension bar, fittings, nuts, and bolts shall be in accordance with ASTM F626.

Personnel swing gates shall be locking and be four (5) feet high with a four (4) foot opening. Gate frames shall be fabricated from two (2) inch outside diameter or two (2) inch square members in accordance with ASTM F654, welded at all corners. Chain link fabric shall be installed to match the fence line and gate posts shall be 2½ inch outside diameter and galvanized in accordance with ASTM F1083.

2.7 Site Stone

Site stone shall be #57 free of fillers or debris and provided as required for site repairs due to excavation for meter set installation and finished grade per the project plans. Incidental #57 stone can be obtained from the GUC on an as-needed basis.

3 SECTION 3 - GENERAL CONSTRUCTION REQUIREMENTS

3.1 Standards

The work covered by these Specifications consists of, and includes, the performance of all operations and the furnishing of all labor, equipment, supplies and other facilities and incidental materials, as required, necessary for the construction of each facility complete and tested. The work for each facility shall be complete, tested, accepted and connected to the existing gas distribution system inlet piping and gas service outlet piping as indicated on the Plans.

All work on the natural gas distribution system shall be performed in accordance with: Title 49 of the Code of Federal Regulations, Chapter I, Part 192 (49 CFR 192), "Transportation of Natural and other Gas by Pipeline: Minimum Federal Safety Standards," as amended; the GUC's *Operation and Maintenance Plan*, as amended; and any other applicable standards which are hereby incorporated into these Specifications by reference.

General construction operations applicable to natural gas facilities installation shall be performed in accordance with: Title 29 of the Code of Federal Regulations, Chapter I (29 CFR 1926), *Occupational Safety and Health Standards for the Construction Industry*; and any other applicable standards which are hereby incorporated into these Specifications by reference.

3.2 Mobilization

The CONTRACTOR shall furnish all equipment, materials and labor necessary for the performance of construction preparatory operations, including but not limited to: the movement of personnel, material and equipment to and from the project site; the establishment of the CONTRACTOR's storage and equipment area as allowed by the facility owner; the establishment of signs; and all other facilities necessary to perform the work as specified herein.

Measurement and Payment

The cost of mobilization is considered incidental to the work and a specific contract unit price will not be provided. The cost of any and all bonds, licenses, equipment, materials, labor, etc., required for startup or mobilization operations shall be included in the lump sum price for each facility.

3.3 Equipment, Tools, Labor and Materials

3.3.1 Equipment, Tools, Labor and Materials To Be Furnished By Owner

The GUC shall supply no equipment, tools, or labor necessary for the completion of the work as specified herein.

The GUC shall supply the CONTRACTOR with all pipe, pipe wrap, bottom out fitting, elbows, tees, reducers, flanges, stud bolts, nuts, gaskets, meters, regulators, filters, pipe supports and anchors, appurtenances, valves, and valve box, necessary for the completion of the Work specified herein and as included in the bill of materials from the project plans. Material furnished by the GUC will be available to the CONTRACTOR at the GUC's storage facilities located at the Operations Center, 801 Mumford Road, Greenville, North Carolina. The CONTRACTOR shall requisition materials on the form provided by the GUC and shall account for or return all materials so requisitioned. No separate payment will be made to the CONTRACTOR for time, labor and equipment necessary for the CONTRACTOR to receive and haul materials from the GUC's storage facilities to the work site(s); such costs are to be included in and absorbed by the price bid for each site in the CONTRACTOR's proposal.

3.3.2 Equipment, Tools, Labor and Materials To Be Furnished By Contractor

The CONTRACTOR shall supply and pay for all labor and materials necessary for the completion of the work specified herein. The CONTRACTOR shall supply any and all materials incidental to the installation of each facility not supplied by the GUC as described in 3.3.1 Equipment, Tools, Labor and

<u>Materials To Be Furnished by OWNER</u>, including but not limited to: select fill, sand and stone; concrete; asphalt; testing equipment and fittings and appurtenances; erosion and sediment control materials, possible traffic control signage. Unless otherwise specified, all materials shall be new.

The CONTRACTOR shall provide and pay for all equipment, tools and labor necessary for the proper completion of the work specified herein, including but not limited to: excavation and trenching equipment; pipe cutting, welding equipment and supplies; pipeline testing equipment and appurtenances; and any and all applicable safety equipment which may be required for the demolition and pipe removal of the existing facilities and the construction and installation of the new facilities.

Workmanship, tools, equipment and materials shall be of good quality meeting established industry standards. The CONTRACTOR shall, as required by the GUC, furnish satisfactory evidence as to the kind and quality of materials that the CONTRACTOR provides.

Only equipment that will not damage the surfacing along any improved roadways that access the site shall be used. When crossing improved roadways with equipment that will damage them; wood boards, flat pads or other approved methods shall be used to prevent damage to the roadway that accesses each site. The CONTRACTOR shall repair any and all resulting damage at no cost to the GUC.

The CONTRACTOR shall, as required by the GUC, furnish a complete list of equipment that will be employed on the job from the commencement of the work and until the GUC accepts the job.

3.4 Inspection By The GUC

The CONTRACTOR shall produce evidence, as required by the GUC and Inspector(s) that any and all items of the work have been installed in accordance with the project Plans and Specifications. The Inspector(s) will evaluate welds and the GUC will conduct field inspections and witness field tests as specified herein.

3.5 Submittals

All submittals shall be identified as required by the GUC, and shall be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and any and all other data which may be required by the GUC to show that the materials and equipment the CONTRACTOR proposes to provide and use are in accordance with required Specifications.

3.5.1 Record Drawing Documents

The GUC will collect Record Drawing information for this project. The CONTRACTOR shall allow the GUC access to the work during the installations and prior to backfill operations such that the necessary data collection can be completed. The Contractor shall be prepared to assist with Record Drawing coordination if necessary.

No claims for time extensions or monetary considerations will be allowed by the GUC for the work required by the Record Drawing data collection.

3.6 Site Construction

The CONTRACTOR shall confine construction operations to the immediate vicinity for each of the project sites as shown on the Plans and in no case shall the CONTRACTOR encroach beyond the limits as set by the GUC and the facility owner. The CONTRACTOR shall further use due care in placing construction tools, equipment, excavated materials, and facility materials and supplies so as to cause the least possible damage to property and the least interference with the operation of the vehicles navigating the project sites. The placing of such tools, equipment, and materials shall be subject to the approval of the GUC and the property/facility owners. Any damage resulting from the placement of equipment and materials or construction operation occurring on any of the project sites shall be the sole responsibility of the CONTRACTOR. The CONTRACTOR shall make satisfactory settlement for any damage directly with the owner involved.

The CONTRACTOR shall conduct the construction in such a manner to cause the least inconvenience to the operations of the facility. The CONTRACTOR shall not unnecessarily interfere private improvements, including landscaping; nor unnecessarily damage such improvements. The CONTRACTOR shall repair any damage to such improvements to pre-construction condition, or as otherwise directed by the GUC.

3.7 On Site Maintenance of Traffic

The CONTRACTOR shall be required to provide maintenance of traffic plan for vehicles within the site to have the ability to navigate the site as necessary. When requested by the GUC, the CONTRACTOR shall provide such a plan for portions of the work prior to beginning work to be performed under this Contract. The submitted traffic plan shall be reviewed by the GUC for compliance with the requirements set forth by the facility owner.

Where or if it becomes necessary to close the access road to the work site, the amount of closure shall be generally limited to the immediate work area and shall be in accordance with the requirements set by the facility owner. In the event that an entire section is required to be closed, the CONTRACTOR will be required to notify and receive authorization from the GUC prior to closing the section of road and upon reopening the road.

All materials, equipment and labor used for traffic control measures shall meet the requirements of the NCDOT and the Manual on Uniform Traffic Control Devices (MUTCD).

Measurement and Payment

Maintenance of traffic is considered incidental work and will not be measured for payment. The cost of any and all equipment and labor required for maintenance of traffic, as specified herein, shall be included in the lump sum price for each facility.

3.8 Pavement Removal and Disposal

Pavement removal includes removal of all layers of bituminous asphalt and concrete pavement as indicated on the project Plans.

The limits of the cutting the asphalt pavement are indicated on the project Plans. Additional removal of the asphalt pavement will not be permitted without the approval from the GUC. Where pavement is cut and replaced, the CONTRACTOR shall cut the edges to a straight and even line before repairing the pavement. Non-uniform edges will not be permitted or accepted.

All pavements removed as part of the work shall be removed from the jobsite and disposed of in accordance with the requirements of Federal, State, County, City of Greenville, and all applicable environmental regulations.

Measurement and Payment

The removal and disposal of pavement as described above, is considered incidental work and will not be measured for payment. The cost of any and all equipment, material and labor required for pavement removal and disposal operations shall be included in the lump sum price.

The CONTRACTOR should be aware that the thickness and materials of the surface and subgrades may vary.

Pavement removed and disposed of in excess of what is allowable and reasonable shall be performed at the expense of the CONTRACTOR and will not be measured for payment.

3.8.1 Curb and Gutter Removal and Disposal

Work consists of the removal of concrete curbing and gutters, which includes the cutting of or the breaking of the concrete structure using conventional excavating, hand and pneumatic equipment.

Cutting of the concrete sections shall be performed using appropriate saw(s) and shall be in a neat and workmanlike manner. The CONTRACTOR shall only remove sections in accordance with the project Plans.

All curbing and gutter sections removed as part of the work shall be removed from the jobsite and disposed of in accordance with the requirements of Federal, State, County, City of Greenville, and all applicable environmental regulations.

Measurement and Payment

Removal and disposal of concrete curb and gutter sections, as described above, is considered incidental work and will not be measured for payment. The cost of any and all equipment, material and labor required for concrete curb and gutter section removal and disposal operations shall be included in the lump sum price.

3.9 Erosion & Sediment Control

The CONTRACTOR shall be required to provide a means of protecting and minimizing the effects of erosion and sediment displacement to the construction area and all immediate surrounding areas that may be affected by the construction activity for each site.

Erosion and sediment control measures, including but not limited to: temporary stone construction entrances; silt fences; storm drain inlet protectors; topsoil; temporary seeding; and permanent seeding shall be directed by the GUC, in accordance with the *North Carolina Erosion and Sediment Control Planning and Design Manual*, the *North Carolina Erosion and Sediment Control Field Manual*, latest editions.

Measurement and Payment

Due to the nature of this project, only minimal erosion control measures are expected. Basic erosion control to minimize effects to the construction areas and surrounding properties is considered incidental and will not be measured for payment. The cost of any and all equipment, materials, and labor required for erosion and sediment control, as specified herein, shall be included in the lump sum price for each facility.

3.10 Pipe and Materials Handling

The CONTRACTOR shall load, unload, haul, receive, sign for, store, and otherwise be responsible for all materials. All materials shall be handled and placed in a manner that prevents damage and does not interfere with the ingress and egress of vehicle and pedestrian traffic on each site. The CONTRACTOR shall ensure that materials and equipment do not impede access to the site.

All pipes, meters, regulators, filter, valves and appurtenances shall be lifted, rolled, or otherwise handled either manually or by mechanical means so as not to sustain any damage. In all cases, materials shall be handled and stored in a manner suitable to the GUC; which will facilitate inspection.

3.11 Facility Installation

Measurement and Payment

The facility installation will be paid for in the lump sum price for each facility. The lump sum price shall include the cost of any incidental materials, welding rods, equipment, labor required for facility demolition and removal of pipe, pavement, and concrete; pipe installation for above grade piping and below grade connections, including: trenching, tie-in excavation, installation of stopper fitting, pipe, tees, elbows, flanges, reducers, end

caps, filters, meters, regulators, valves, appurtenances; shoring; pipe bedding; select fill; backfill; testing, purging, testing apparatus, such as blind flanges, spool pieces and end caps; pavement removal and restoration and concrete work; fencing, site grading and clean up.

3.11.1 Location of Other Utilities

The locations of existing utilities are not shown on the drawings. The GUC assumes no responsibility for the existence and/or location of any other utilities in the work area. It shall be the responsibility of the CONTRACTOR, to investigate and verify the existence and location of all utilities within the vicinity of the work at each site.

The CONTRACTOR shall coordinate with the GUC and the facility owner prior to any excavation as to ascertain the existence of any abandoned or operational underground utilities surrounding the project site, which could adversely affect the CONTRACTOR to perform the work.

The CONTRACTOR is required to maintain a minimum clearance of two feet between any underground utility line and cutting edge of any power-operated excavating equipment. Care should be taken or excavation should be performed with hand tools if the excavation is within two feet of any utility.

If during the course of the excavation, a utility line has been exposed, before backfilling, the CONTRACTOR must inspect these facilities to ascertain if the facilities have been damaged. If damage of any kind is discovered or suspected, it is the CONTRACTOR's responsibility to notify the facility owner immediately.

The work shall be coordinated and performed in a manner so that all existing fire hydrants, without exception, shall be accessible at any time during the work. The CONTRACTOR shall maintain the existing ditches, drainage structures, culverts and flows at all times during the work.

3.11.2 Alignment

The CONTRACTOR shall field verify all dimensions as noted on the drawings. If the CONTRACTOR reveals from field verification that the proposed facility piping will not fit on any site, the GUC shall be notified immediately. Each facility shall be installed true to the horizontal and vertical alignment as indicated on the Plans or as otherwise directed by the GUC. The CONTRACTOR shall make no deviations to the proposed horizontal and/or vertical arrangement of the facility piping unless otherwise directed to do so by the GUC. The CONTRACTOR shall notify the GUC prior to tie-in operation to discuss the final tie-in alignment to service piping.

3.11.3 Required Cover

All sites will require the Contractor to determine the depth of the existing service piping. The depth of this piping is typically installed with a minimum cover of thirty-six (36) inches between the top of the main and the finished grade. If the piping is less than thirty-six (36) inches, the CONTRACTOR shall notify the GUC.

The CONTRACTOR may, upon the approval of or at the direction of the GUC, install the pipe with less than the specified minimum cover, based on field conditions dictating that shallower cover is the most practical installation.

3.11.4 <u>Tie-in Excavation</u>

Tie-in excavation and trenching will be necessary at each facility to allow for the connection of the existing supply and service piping. The excavations shall be such that the tie-in pits will be minimal as reasonably possible to allow for pressure testing and tie-in welds.

The CONTRACTOR shall dig the trench and tie-in pits true to the Plans. The bottom of the trench and pits shall be graded with suitable material as to provide firm uniform support for the pipe. If sharp objects, debris or hard rock is encountered, they shall be removed and the pipe shall be bedded with sand or clean fill as required by the GUC at such locations.

3.11.4.1 Tie-in Stabilization

Where the depth of the trench or tie-in pit requires stabilization, the CONTRACTOR shall provide a method of trench stabilization as directed and approved by the GUC.

All materials and installation methods required for shoring, sheeting, bracing and any other required means of trench stabilization shall conform to any and all requirements of 29 CFR 1926 and applicable appendices.

Trench stabilization system members shall be securely connected together and installed in a manner that prevents sliding, falling, kick-outs or other predictable failures of the trench or sides of the pits. Support systems shall be installed and removed in a manner that protects employees from all forms of trench and/or pit failure or from being struck by members of the support system. Cross braces installed above the pipe to support the sheeting shall be removed only after pipe embedment has been completed.

Where trench and/or pit sheeting is required to be left in place, as directed by the GUC, such sheeting shall be cut-off at a minimum of three (3) feet below finished grade and the cut-off portion removed. Sheeting left in place shall not be braced against the pipe, but shall be supported in a manner that will eliminate concentrated loads and horizontal thrusts on the pipe.

3.11.4.2 <u>Installing Pipe and Fittings</u>

Belt slings and/or padded calipers, which are sized to the particular pipe being installed, shall be used to handle the pipe provided such slings or calipers are free of all characteristics that might damage the pipe wall and ends. The inside of all piping shall be clean and free of slag, welding rod, metal cuttings, weld splatter, dirt and other foreign matter prior to assembling. The inside of all piping shall be cleaned by wire brushing, swabbing and blowing with compressed air. Each pipe joint shall be thoroughly swabbed to remove all dirt and foreign matter from inside of the pipe before the joints are lined and tacked. The swabbing operations shall be carried out at each pipe joint prior to tacking operations.

All open ends of pipe that will not be immediately connected to the system shall be securely closed with a waterproof night cap to prevent the entrance of small animals or the introduction of foreign matter of any nature and shall not be reopened until work is resumed. The CONTRACTOR shall exercise care in joining sections of pipe in order to minimize the possibility of any foreign matter whatsoever inside the pipe and piping runs after its completion. Any foreign matter or obstruction that hinders the operation of the facility after its completion shall be removed at the expense of the CONTRACTOR.

Inspection of the trench or tie-in pit shall be made by the CONTRACTOR prior to lowering the pipe to ensure that no rocks or other sharp objects that may damage the pipe are located within the trench. The pipe shall be placed in such a manner so that bends will rest in the trench without any stress.

All flanged fittings shall be inspected prior to assembly. Flanged faces and threads shall be inspected and all foreign material removed before assembly. The CONTRACTOR shall torque the threaded fasteners with industry standard requirements for the specific threaded fasteners and gaskets used in assembling the flanges.

3.11.4.3 Backfilling

Backfilling operations shall include the furnishing of all labor, materials and equipment necessary for the backfilling and compaction of all trenches and tie-in excavations for each facility.

Trenches and tie-in excavations shall not be backfilled until the pipe has proper bedding and cover, and smooth, firm and continuous support along the entire length of the pipe

Unsuitable material encountered during trench excavation shall not be used as backfill. Unsuitable material shall be removed to the limits established by the GUC and replaced with select fill. Cost for select fill shall be considered incidental to the project should it be required.

Select fill shall be considered typically clean topsoil or other borrow material capable of achieving necessary compaction required for protection of the pipe and trench stabilization, as approved by the GUC.

All backfill material shall be free from all objects that might damage the pipe. Wherever it is deemed necessary by the GUC, hand labor shall be used in starting the backfill. The backfill placed from the bottom of the ditch to the top of the pipe shall be placed in the trench simultaneously on both sides of the pipe for the full width of the trench in layers not to exceed six (6) inches in depth. The backfill material shall be thoroughly compacted under and on each side of the pipe to provide solid backing against the external surface of the pipe and to remove all voids. The trench may be backfilled from one foot above the pipe to the top of the trench with mechanical equipment provided the machine is operated parallel to the trench, and the material is placed in the trench in layers not to exceed six inches for the full width.

The CONTRACTOR shall use materials removed during the excavation operation for the backfilling operation, unless these materials are unsuitable as determined by the GUC.

All trenched pipe and tie-in pits shall be adequately compacted by means of rolling, tamping with mechanical rammers, or hand tamping such that no future settlement of the backfill will occur. If vibratory rollers are used for backfill compaction, vibratory motors shall not be activated until at least three (3) feet of backfill has been placed and compacted around the pipe. Flooding shall not be permitted as a means of backfill consolidation. Backfill compaction achieved by means of driving any type of construction equipment and/or vehicles, other than those specifically designed for trench compaction work, across any part of the trench shall not be permitted. The CONTRACTOR shall place additional fill soil and compact backfill areas where settlement occurs.

3.11.5 Removal of Facilities

Prior to removing any existing facilities on the site, the GUC will have already isolated and purged the facilities of natural gas. The CONTRACTOR will be required to unbolt and remove equipment, cut sections of below grade piping and properly dispose of unwanted materials as directed by the GUC. The limits of removal for each facility are indicated on the Plans. Prior to demolishing the facilities, the CONTRACTOR shall meet with the GUC to discuss the limits of removal and which equipment shall be salvaged.

The CONTRACTOR shall ensure at the tie-in locations, the pipe is cut correctly, to allow for proper beveling of the pipe to facilitate tie-in operations.

3.12 Clean Up

The CONTRACTOR shall keep the site reasonably clear of construction debris during the progress of the work. Cleanup shall consist of all work necessary to restore the affected area to pre-construction condition as quickly as

possible. This operation shall include, but not be limited to, the removal of excess piping material, excess excavated materials and equipment.

The CONTRACTOR will keep all paved surfaces clear of soil (compacted or loose) and loose gravel or stone. When a mechanical sweeper is used, the sweeper attachment shall be covered to minimize dust and shall utilize a wet sweeper system.

Final cleanup and restoration shall be performed within five (5) working days of completion of work at site or as directed by the GUC. The work required prior to final cleanup and restoration shall include the tie-in to the supply and service piping for each site. This cleanup shall continuously follow, as described above, to the GUC's satisfaction.

3.13 Pavement and Concrete Replacement

It is the intent of these Specifications that the CONTRACTOR returns all paved surfaces and curb and gutter affected by the work to as near pre-construction condition as possible in conformance with approved methods. The CONTRACTOR assumes all responsibility for the restoration of pavement.

No permanent asphalt paving shall be performed unless the atmospheric temperature is above 40° Fahrenheit. Where required, rolling shall be performed with an approved 10-ton roller. Hand operated vibratory plate equipment will not be allowed for finishing work on the surface course.

In all cases, the type of paving section used shall be as directed by the GUC prior to commencing paving operations.

3.13.1 Parking Lot Pavement Replacement

Parking lot pavements shall be restored in conformance with the applicable sections of the NCDOT "Standard Specifications for Roads and Structures", latest edition.

Parking lot asphalt replacement requires the pavement section to consist of three (3) inches of NCDOT Type S9.5A intermediate course mixture and one (1) inch of NCDOT Type SF9.5A surface course mixture over a compacted subgrade consisting of 10 inches of ABC stone.

<u>Bituminous Concrete Intermediate Course</u>: The binder course shall be placed on a prepared base course in accordance with Section 640 of the NCDOT "Standard Specifications for Roads and Structures" (latest edition) for Type S9.5A material.

<u>Bituminous Concrete Surface Course</u>: The work shall be performed in accordance with Section 640 of the NCDOT "Standard Specifications for Roads and Structures" (latest edition) for Type I-2 material.

<u>Aggregate Base Course</u>: Aggregate base course shall conform to Section 520 of the NCDOT "Standard Specifications for Roads and Structures" (latest edition).

3.13.2 Curb and Gutter Replacement

Curb and gutter replacement shall be replaced with like material as specified in 2.5 <u>Concrete</u> to the thickness of the adjacent to the undisturbed sections. The finish shall be floated or broomed to match the existing surface. Joints shall be tooled to match the spacing of the existing sections.

4 SECTION 4 - MATERIALS FOR GAS FACILITY INSTALLATION

Material descriptions are included to provide the CONTRACTOR with information necessary for proper equipment selection and installation procedures. The GUC will provide materials as described in 3.3.1 Equipment, Tools, Labor and Materials To Be Furnished By OWNER

4.1 **Pipe**

4.1.1 Steel Gas Pipe

All steel gas pipes shall be either electric resistance welded or seamless in accordance with API standard 5L, Grade B. The appropriate API monogram, size, grade and process of manufacturer shall be stenciled on the pipe. All steel gas pipes shall be bare, with no coating and have a standard wall thickness.

4.2 Pipe Fittings

4.2.1 Steel Pipe Fittings

Steel pipe fittings shall have ends beveled for welding to match the wall thickness of the existing and proposed steel pipe. All steel gas pipe fittings used in the Work shall be standard weight, long radius, weld end fittings conforming to ANSI B16.9 specifications.

Each fitting or other component must bear a marking as prescribed in the specification or standard to which it was manufactured, or to indicate size, material, manufacturer, pressure rating, type, grade and model. All markings must remain clearly visible until the item is installed.

4.2.2 Flanges

Flanges shall be forged steel, raised faced, weld neck, ANSI 150 pressure rating in accordance with ASME B16.5 specifications. The wall thickness shall match the proposed steel pipe.

4.2.3 <u>Transition Fitting</u>

Steel to polyethylene transition fittings shall meet or exceed 49 CFR 192, ASTM D2513 and ASTM A53 specifications. The steel portion of the fitting shall be coated with electrostatically applied epoxy and the end shall be beveled for welding and tapered to match the pipe bore. The polyethylene portion of the fittings shall be composed of the same material as the existing pipe. The longitudinal pull-out strength of the transition from steel to polyethylene shall exceed the yield factor of polyethylene pipe.

4.3 <u>Valves</u>

All valves to be installed at each facility shall be wrench operated, low maintenance or no maintenance valves as indicated on the Plans, manufactured by *Kerotest Manufacturing Corp.* or GUC Equivalent.

Above grade valves shall be steel, ANSI 150 pressure rating, full opening, ball type, flanged end by weld end. The weld end shall be beveled and the wall thickness shall match the proposed pipe.

Below grade valves shall be steel, ANSI 150 pressure rating, full opening, ball type, weld end by weld end. The weld end shall be beveled and the wall thickness shall match the proposed pipe.

4.4 Valve Box

Valve boxes shall be installed to facilitate the operation of the valve. Valve boxes, extension pieces, collars and covers shall be 2-piece screw type adjustable or 2-piece sliding type adjustable boxes as manufactured by

Bingham and Taylor or GUC approved equivalent. Valve box covers shall have the word "GAS" embossed on top.

4.5 <u>Miscellaneous Materials</u>

Other special material specifications are indicated on the Plans, listed on the bill of materials for the facility.

5 SECTION 5 - FACILITIES INSTALLATION

5.1 Contractor Qualifications

The CONTRACTOR shall use only competent and skilled workmen for the performance of any and all work on the natural gas facilities, as specified herein. The workmen shall not perform any welding operations on any pipe or associated fittings within the system until they have been qualified to perform such operations in accordance with the test requirements specified in 5.1.1 Welding Qualifications.

The CONTRACTOR shall furnish evidence, as required by and to the satisfaction of the GUC, that the specified testing requirements have been met for each employee prior to their utilization on the work.

Measurement and Payment

Qualification of the CONTRACTOR's personnel for welding operations is considered incidental and will not be considered for payment. All costs associated with qualifying the CONTRACTOR's personnel, including but not limited to testing and certification, as specified herein, shall be included in the lump sum price for each facility.

5.1.1 Welding Qualifications

Testing and certification of welders, whether by destructive or nondestructive inspection methods, shall be in accordance with the Minimum Federal Safety Standards for welding and the American Petroleum Institute Standard 1104 (API 1104), "Standard for Welding Pipelines and Related Facilities," which are hereby incorporated by reference and made a part of these Specifications.

The Contractor shall provide documentation to the GUC, as evidence that all welders performing welds for the Contractor on GUC's facilities are certified according to the above requirements.

5.2 Welding

All steel pipe and/or fittings, connections and other fabrications within each facility shall be welded, unless otherwise specified or directed by the GUC.

All welds shall be performed in accordance with the requirements of API 1104 and all other requirements as set forth in the GUC's, Natural Gas System Operations and Procedures Manual. The kind, character and disposition of all welds shall be subject to the approval of the GUC.

Measurement and Payment

Welding operations are considered incidental work and will not be measured for payment. The cost of any and all equipment, material and labor required for the performance of welding operations and inspection thereof, including: welding rods, fluxes, filler metals, wind guards and welding machines, shall be included in the lump sum price for each facility.

5.2.1 Procedure

All welding material and/or equipment shall, at all times, be protected from damage and kept in good working condition. Filler metals and fluxes shall be protected from deterioration and excessive moisture changes. Welding rods and other materials that show signs of deterioration or damage shall be replaced. Welding machines, which, in the opinion of the GUC, are in poor repair or are not of sufficient capacity to perform the Work shall be replaced at the Contractor's expense.

Suitable wind guards shall be provided to protect the Work during periods of excessive wind.

The Contractor shall, at the direction of the GUC, temporarily suspend all welding operations whenever conditions are not conducive to the performance of good work.

All steel pipe, fittings, connections and fabrications shall be butt welded by either the oxyacetylene or the shielded metal arc welding process using a manual welding technique, unless alternative methods have been submitted to and approved by the GUC.

All surfaces to be welded shall be properly cleaned and free of material that may be detrimental to the integrity of the completed weld. The ends of pipe and/or fittings at all welded joints shall be properly beveled using an appropriate pipe-beveling machine. The beveled edge of the pipe shall be clean free of rust, paint moisture, burr, and the like, prior to line-up of the pipe joints for welding.

Each completed weld shall be free of overlaps, undercuts, excessive convexity, scale, oxides, pinholes, non-metallic inclusions, air pockets and all other defects.

Arc burns on the pipe and/or fittings shall be removed by grinding, provided the resulting pipe wall thickness is not less than ninety (90) percent of the required design wall thickness. Arc burns that grinding cannot repair and repair attempts that result in less than ninety (90) percent of the original wall thicknesses shall be cut out.

All welds shall be air-cooled. Accelerated cooling by any method shall not be permitted.

5.2.2 Inspection

Visual or nondestructive testing procedures shall be implemented, as required by the GUC, to determine the quality of all (100%) the welds at each facility, except at the tie-ins.

The GUC may, at his discretion, require x-ray or other nondestructive testing of any and all welds prior to the initiation of coating or coating repair procedures. Should any weld prove to be defective for any reason, the Contractor shall assume any and all costs associated with the testing, cutting out and replacement of the weld.

The CONTRACTOR shall be required to notify the GUC concerning the completion of all welding at each facility. The GUC will have an Inspector, inspect the welds performed on each facility once the CONTRACTOR has given the GUC notification of completion and prior to pressure testing.

The Inspector shall make all determinations as to what constitutes an acceptable weld as well as the disposition of all defective welds. These determinations shall be made upon completion of either a visual or a radiograph inspection.

5.3 Valves, Equipment and Supports

Valves, pipe, fittings, filters, meters, and regulators shall be installed along the horizontal and vertical piping runs as indicated on the Plans. The location of equipment and above grade valves on each facility will be strictly adhered to.

The CONTRACTOR shall take extreme care in the installation of meters and regulator as not hinder the equipment's operation and performance. The CONTRACTOR will be responsible to install concrete supports as indicted on the Plans.

Prior to installation, all valves shall be fully opened and fully closed a sufficient number of times to ensure that all parts are in proper working order.

Below grade valves and valve boxes shall be installed so as not to hinder the operation of the valve. The valve shall be installed on undisturbed soil. Valve boxes shall be insulated from the valve by blocking under the valve box with brick, concrete block or suitable masonry material. Similar material can be used to block underneath the valve if inadequate soils are encountered.

Backfill shall be carefully tamped around each valve box to a distance of four (4) feet on all sides of the box, or to the undisturbed trench face if less than four (4) feet, such that the valve box is level to grade.

All valves shall be in the open position during pressure testing, and shall remain as such upon completion of the tests. Under no circumstances shall the CONTRACTOR operate any valves within the existing gas distribution system, or otherwise interrupt or restore gas service to any customer. GUC personnel shall perform all valve operations and gas-in operations as required.

Measurement and Payment

Payment shall be made for installation of valves, equipment and supports only. Payment shall be made as part of lump sum price of fabrication of the meter set. Materials shall be provided by the GUC per the bill of materials.

5.4 Pressure and Leak Testing

Each facility shall be pressure and leak tested, as specified herein. The CONTRACTOR shall provide the necessary materials, blind flanges, pancakes, spool pieces, appurtenances, labor and pumps required to pressurize each facility in a satisfactory and efficient manner. All pressure and leak testing shall be done in the presence of the GUC. Tests done without supervision will not be accepted and the CONTRACTOR shall be required to retest at his expense.

The CONTRACTOR will be required to test each facility in its entirety, without the meters or regulators within the piping run and the inlet and outlet piping capped prior to their connection points.

Each facility shall be pressure tested using compressed air or nitrogen. Water shall not be used as a test medium for the testing of the facilities. The method and procedure for each pressure test shall be subject to the approval of the GUC.

Natural gas shall not be admitted into any facility prior to the GUC's approval and the successful completion of all required pressure tests.

Measurement and Payment

Pressure and leak testing operations are considered incidental work and will not be measured for payment. The cost of any and all equipment, material and labor required for pressure and leak-testing operations shall be included in the lump sum price for the facility.

5.4.1 Preparation

Prior to testing, each facility shall be thoroughly cleaned to remove all foreign matter which may have been trapped inside the pipe during construction. The CONTRACTOR shall provide the required equipment to clean the facility of all debris. The facility shall be tested as soon as possible following satisfactory cleaning.

Twenty-four (24) hours prior to commencing any testing operations, the CONTRACTOR shall submit a test schedule to the GUC for approval.

5.4.2 <u>Procedure</u>

All pressure tests shall be monitored by means of chart recording devices with an attached pressure gauge located, as directed by the GUC, at each facility to be tested. The chart recording devices shall be capable of recording the sustained test pressure for the duration of the test. The gauge shall be liquid filled and capable of measuring pressures to a minimum of two hundred (200) psig. The CONTRACTOR shall provide evidence of recent and accurate calibration of all chart-recording instruments. The date and time of the commencement and completion of the pressure test shall be recorded on the pressure chart, which shall be signed by the CONTRACTOR's superintendent and the GUC. The original test chart shall be submitted along with a Test Record form to the GUC for verification.

Each facility shall be tested at one hundred (100) psig or as directed by the GUC for a period no less than four (4) hours.

The hourly pressure along with the ambient temperature at the beginning and end of the test shall be recorded for the duration of the test on the GUC's standard form. The date and time of the commencement and completion of the pressure test shall be recorded on the form, which shall be signed by the CONTRACTOR's inspector and submitted to the GUC for verification.

After correcting for temperature changes, the test shall show no loss of pressure over the duration of the test.

All tie-ins not included in the pressure test shall be leak tested with a foaming leak locating solution after the main line has been placed into service.

Any and all breaks, leaks or defects in the pipe, valves, equipment or fittings is discovered during the pressure and/or foaming leak locating solution tests, shall be located, repaired or replaced, and retested by the CONTRACTOR, at the CONTRACTOR's expense, as directed by the GUC.

5.5 Purging

Upon the successful completion of the pressure and/or foaming leak locating solution test, and after the facility has been cleaned and approved in every respect to the satisfaction of the GUC, the CONTRACTOR shall remove the blind caps at the tie-in locations and commence tie-in operations.

The CONTRACTOR will not be responsible for admittance of natural gas into the facilities. The GUC may request that the CONTRACTOR be available during the gas up operations at each facility to ensure the tie-in welds at each facility are satisfactory.

Under no circumstances shall the CONTRACTOR operate any existing valves within the GUC distribution system.

5.6 Tie-Ins to Existing Distribution System and Service Piping

It is the responsibility of the CONTRACTOR to connect the work to existing supply and service piping as shown on the Plans or as directed by the GUC.

The Plans depict generalized tie-ins. The CONTRACTOR shall be aware that additional pipe and fittings or alignment changes may be necessary to properly and efficiently complete the tie-in operations. The CONTRACTOR shall install the necessary fitting(s) required to complete the tie-in as shown on the Plans or as directed by the GUC.

Under no circumstances shall the CONTRACTOR operate any valves within the existing gas distribution system, or otherwise interrupt or restore gas service to any customer. GUC personnel shall perform all valve operations and service restorations, as required.

Measurement and Payment

The cost of any and all equipment, material and labor required for tie-ins to the existing distribution system and service piping shall be included in the lump sum price for the facility.