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COMMUNITY DEVELOPMENT
SIDEWALK PROJECT
GREENVILLE, NORTH CAROLINA

CITY OF GREENVILLE
NORTH CAROLINA

February 13, 2015

Table of Contents

Instructions to Bidders	4
Defined Terms	10
SCOPE OF WORK	18
MEASUREMENT AND PAYMENT	18
UNIT PRICE	18
CONTRACT	18
PROJECT	18
PROJECT PERIOD.....	18
PROJECT NOTICE TO PROCEED	18
PROJECT LIQUIDATED DAMAGES	18
TIME/DATE SENSITIVE WORK	19
TREE PROTECTION	19
PRUNING AND THINNING OF TREES	19
ADDITIONAL WORK AND CONTACT WITH PROPERTY OWNERS	19
EXCAVATION FOR: CURB, CURB AND GUTTER, SIDEWALK AND DRIVEWAY.....	19
CONCRETE.....	19
TRAFFIC CONTROL.....	21
SP-1, SEEDING AND MULCHING	23
ACKNOWLEDGE OF RECEIPT OF ADDEMDUM NO. 1	25
AGREEMENT.....	26
CONTRACT DOCUMENTS.....	30
MISCELLANEOUS.....	30
CERTIFICATE OF INSURANCE	33
NOTICE OF AWARD	34
NOTICE TO PROCEED	35
ACCEPTANCE OF NOTICE	35
SUPPLEMENTAL CONDITIONS.....	36
TAX STATEMENT AND CERTIFICATION	37
RELEASE OF LIEN AND WAIVER OF CLAIM	38
NONCOLLUSION AFFIDAVIT OF PRIME BIDDER.....	40
PROJECT REQUIREMENTS.....	42
STANDARD SPECIAL PROVISIONS.....	43
SECTION 01010 - PROJECT REQUIREMENTS	57
REFERENCE STANDARDS.....	65
SECTION 01090 - REFERENCE STANDARDS	66
UNIT PRICES	69
SECTION 01150 – UNIT PRICES	70
SUBMITTALS	73
SECTION 01300 - SUBMITTALS.....	74
QUALITY CONTROL.....	77
SECTION 01400 - QUALITY CONTROL	78
TEMPORARY FACILITIES	80
SECTION 01500 - TEMPORARY FACILITIES	81
MAINTENANCE AND PROTECTION OF TRAFIC.....	86
SECTION 01575 – MAINTENANCE AND PROTECTION OF TRAFFIC	87
SECTION 02110 - SITE CLEARING	89
EARTHWORK.....	92

SECTION 02200 - EARTHWORK	93
BITUMINOUS CONCRETE PAVING	105
SECTION 02513 - BITUMINOUS CONCRETE PAVING.....	106
PORTLAND CEMENT CONCRETE CURB AND GUTTER & SIDEWALK.....	113
SECTION 02514 - PORTLAND CEMENT CONCRETE CURB AND GUTTER & SIDEWALK.....	114
COLD MILLING.....	119
SECTION 02576 - COLD MILLING	120
EROSION AND POLLUTION CONTROL	125
SECTION 02910 - EROSION AND POLLUTION CONTROL.....	126
FERTILIZING, SEEDING AND MULCHING.....	131
SECTION 02920 - FERTILIZING, SEEDING AND MULCHING.....	132
STANDARD SPECIAL PROVISIONS	136
SECTION 03305 - CONCRETE.....	137
ADDITIONAL REQUIREMENTS.....	141
DAVIS-BACON PREVAILING WAGES	141
ADDITIONAL REQUIREMENTS.....	146
SECTION 3 REQUIREMENT	146
ADDITIONAL REQUIREMENTS.....	148
Minority and/or Women Business Enterprise WMBE REQUIREMENT	148

**REQUEST FOR INFORMAL BIDS
COMMUNITY DEVELOPMENT
SIDEWALK PROJECT**

GREENVILLE, NORTH CAROLINA

Instructions to Bidders

- (1) Informal bids (G.S. 143-131) for this project shall be submitted to Mr. Niki Jones, Housing Administrator, 201 W 5th Street, P.O. Box 7207, Greenville, North Carolina, 27835-7207, no later than 12:00 p.m., Monday, March 2, 2015. The words "Community Development Sidewalk Project" shall appear on the outside of the envelope.
- (2) The bidder must provide PER UNIT PRICE and TOTAL UNIT BID PRICE for each item on the attached bid form. Quotations will be evaluated on the SUM TOTAL OF ALL ITEM TOTALS. Payment to the successful low bidder will be based on actual quantities installed and accepted at the PER UNIT PRICE for each item quoted.
- (3) Sales taxes may be listed on the proposal, but as a separate item. No charge will be allowed for Federal Excise and Transportation tax from which the City is exempt. Sales taxes must be reported on invoices.
- (4) No proposal may be changed or withdrawn after March 2, 2015. Any modifications or withdrawals requested before this time shall be acceptable only when such request is made in writing to the City of Greenville Purchasing Agent.
- (5) The City of Greenville reserves the right to reject any and all bids, to waive any irregularities and to accept the bid, or part of the bid, it deems most advantageous to the City. Any bid submitted will be binding for sixty (60) days after the date of the bid opening.
- (6) Work is expected to begin on or about May 4, 2015 and be completed by August 3, 2015. Once work begins on this project, it is to continue until complete.
- (7) The City shall deduct as liquidated damages, the sum of one hundred fifty dollars (\$150.00) per day for each and every calendar day completion is delayed in excess of the Contract time set forth above.
- (8) Firms submitting a proposal are attesting that no official or employee of the City of Greenville is directly or indirectly interested in this proposal for any reason of personal gain.
- (9) By submitting a proposal, the firm is attesting that they are an Equal Opportunity Employer.

- (10) Firms submitting a proposal are attesting that they have taken affirmative action to insure equality of opportunity in all aspects of employment.

The City of Greenville adopted a Minority and Women Business Enterprise Plan on October 21, 1991 and encourages the use of Minority and Women Business Enterprises (MBE and WBE) on all construction contracts. Bidders shall submit MBE/WBE information with their bids on the forms furnished for that purpose. This information will be subject to verification by the City prior to contract award. Contractors, subcontractors suppliers or MBE/WBE members of joint ventures intended to satisfy City MBE/WBE goals shall be certified by NCDOT or another Public Agency certification list. The City maintains a Directory of Minority/Women/Disabled Businesses Enterprises which will be made available to bidders upon request.

The bidder shall make good-faith efforts to encourage participation of M/WBEs in projects prior to submission of bids in order to be considered as a responsive bidder. A good faith effort shall include, at a minimum specific affirmative action steps and complete documentation thereof. The following list of factors to determine good-faith efforts is not exclusive or exhaustive:

- a. Whether the bidder attended any pre-solicitation or pre-bid meetings, if scheduled by the City;
- b. Whether the bidder identified and selected specific items of the project for which the contract could be performed by Minority and/or Women Business Enterprises, to provide an opportunity for participation by those enterprises (including, where appropriate, breaking down contracts into economically feasible units to facilitate MBE/WBE participation);
- c. Whether the bidder advertised, a reasonable time before the date the bids are opened, in one or more daily or minority weekly newspaper or trade associations (i.e., N.C. Minority Business Association), trade journals, or other media;
- d. Whether the bidder provided mail notice of his or her interest in bidding on the contract to at least three (3) Minority or Women Business Enterprises (for each identified sub-item of the contract) licensed to provide the specific items of the project a reasonable time prior to the opening of bids;
- e. Whether the bidder provided interested Minority and Women Business Enterprises with information about the plans, specifications, and requirements for the selected subcontracting or material supply work;
- f. Whether the bidder contacted the City Purchasing Office for assistance in identifying minority and women businesses certified with the City;
- g. Whether the bidder negotiated in good faith with Minority or Women Business Enterprises and did not unjustifiably reject as unsatisfactory bids prepared by any Minority or Women Business Enterprises, as determined by the City;
- h. Whether the bidder, where applicable, advised and made efforts to assist interested Minority and Women Enterprises in obtaining bonds, lines of credit, or insurance required by the City or contractor;
- i. Whether the bidder's effort to obtain Minority and Women Business Enterprise

participation and could reasonably be expected by the City to produce a level of participation sufficient to meet the goals of the City.

Bidders are cautioned that even though their submittal indicates they will meet the MBE/WBE goal, they should document their good faith efforts and be prepared to submit this information to protect their eligibility for award of the contract in the event the City's review questions whether the good-faith requirement has been met. Forms for this purpose are included.

The MBE/WBEs listed by the Contractor on the Schedule of MBE/WBE Participation which are determined by the City to be certified shall perform the work and supply the materials for which they are listed unless the Contractors has received prior written authorization from the City to perform the work with other forces or to obtain materials from other sources.

The contractor shall enter into and supply copies of fully executed subcontracts with each MBE/WBE listed on the "Bidder MBE/WBE Information" form to the City Purchasing Office after award of the contract and prior to the issuance of a Notice to Proceed. Any amendments to the subcontracts shall be submitted to the Purchasing Office within five (5) days of execution.

Authorization to utilize other forces or sources of materials may be requested for the following reasons:

- a. The listed MBE/WBE, after having had a reasonable opportunity to do so, fails or refuses to execute a written contract, when such written contract, based upon the general terms conditions, plans and specifications for the project, or on the terms of such subcontractors' or suppliers' written bid, is presented by the contractor.
 - b. The listed MBE/WBE becomes bankrupt or insolvent.
 - c. The listed MBE/WBE fails or refuses to perform his/her subcontract or furnish the listed materials.
 - d. The work performed by the listed subcontractor is unsatisfactory according to industry standards and is not in accordance with the plans and specifications or the subcontractor is substantially delaying or disrupting the progress of the work.
- (11) The BIDDER is specifically advised that any person, firm, or other party to whom it is proposed to award a subcontract under this contract must be acceptable to the City of Greenville, hereinafter referred to as the OWNER.
- (12) The OWNER shall make such investigations as he sees necessary to determine the ability of the BIDDER to perform the work, and the BIDDER shall furnish to the OWNER all such information and data for this purpose as the OWNER may request. The OWNER reserves the right to reject any Bid if the evidence submitted by, or investigation of such BIDDER fails to satisfy the OWNER that each BIDDER is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein. The CONTRACTOR must have a minimum of five (5) years' experience in commercial type mechanical renovations.

- (13) The BIDDER'S attention is directed to the fact that all applicable State law, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full.
- (14) The CONTRACTOR shall not commence work under this contract until he has obtained all insurance required, and such insurance has been approved in writing by the OWNER, nor shall the CONTRACTOR allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor has been obtained and approved.

A. Worker's Compensation:

The CONTRACTOR shall take out and maintain during the life of this contract, Worker's Compensation Insurance for all employees employed at the site of the project under this contract, or as otherwise required by North Carolina General Statutes.

B. Public Liability and Property Damage:

The CONTRACTOR shall take out and maintain during the life of this contract such Public Liability and Property Damage Insurance as shall protect from claims for damage for personal injury, including accidental death, as well as from claims for property damages which may arise from operations under this contract, whether such operation be by himself or by any subcontractor, or by anyone directly or indirectly employed by either of them. The amounts of such insurance shall not be less than \$500,000 for injuries, subject to the same limits per person, and \$1,000,000 for property damage or otherwise needed to protect the interests of the OWNER. The City of Greenville shall be named as an additional insured on all coverage.

C. Other Insurance:

The CONTRACTOR shall furnish such additional insurance as may be required by the General Statutes of North Carolina, including motor vehicle insurance in amounts not less than statutory limits.

D. Cancellation:

Each certificate of insurance shall bear the provision that the policy cannot be altered or canceled in less than ten (10) days after mailing written notice to the assured of such alteration or cancellation, sent registered mail.

E. Proof of Carriages:

The CONTRACTOR shall furnish the OWNER with satisfactory proof of carriage of the insurance required before written approval of such insurance is granted by the OWNER.

- (15) The CONTRACTOR shall give his personal superintendence to the work or have a competent superintendent, satisfactory to the OWNER, on the job 100 percent (100%) of the time during the progress of the work, with authority to act for him.
- (16) The CONTRACTOR shall secure all permits (City of Greenville fees will be waived) for the construction of the work hereinafter described under this contract and shall abide by and do all work in accordance with the Building Code of the State of North Carolina and the Board of Fire Underwriters having jurisdiction.
- (17) The CONTRACTOR shall be responsible for removal from premises all construction residue created by his work. At completion of the work, at the time for final inspection, the CONTRACTOR shall have the work clean and ready for acceptance. Periodic cleaning up shall be done as rubbish accumulates; but no less than once per week during the course of this project. Disposal of residue accumulated shall be the CONTRACTOR'S responsibility.
- (18) Unless otherwise specifically set forth, the CONTRACTOR shall furnish all materials, labor, etc., necessary to fully complete the work according to the true meaning of these specifications, of which intent and meaning the OWNER shall be the interpreter. Except when otherwise indicated, no local terms or classifications will be considered in the interpretation of the contract or the specifications forming a part thereof.
- (19) The work is entirely under the control of the OWNER. The OWNER may require the CONTRACTOR to remove such materials that do not conform to the intent and meaning of the plans and specifications and to dismiss such workmen as they seem to be incompetent or careless. The CONTRACTOR shall furnish the OWNER a complete breakdown of the cost of labor, materials, and subcontractors prior to beginning construction.
- (20) Arbitration is hereby deleted from this contract. Arbitration will not be acceptable as a means for settling claims, disputes and other matters.
- (21) All work shall be executed in the best and the most workmanlike manner in strict accordance with the drawings and specifications by qualified, careful, and efficient workers in accordance with local, State and Federal agencies.
- (22) Partial payments may be allowed once every thirty (30) days or full payment will be made lump sum within thirty (30) consecutive calendar days after acceptance of the work and the submission both of notarized CONTRACTOR'S affidavit and three (3) copies of invoices which are to include the contract, account, and job order numbers. A separate invoice will be required for each intersection where traffic signal work is performed.

The CONTRACTOR'S affidavit shall state: "This is to certify that all costs of materials, equipment, labor, and all else entering into the accomplishment of this contract, including payrolls, have been paid in full."

If there are any change orders approved for this project, overhead and profit shall be limited to ten percent (10%) of the change order amount.

- (23) All work is to be performed in compliance with Federal, State, and local codes, and all necessary permits shall be obtained.
- (24) Specifications and warranty information for all materials proposed for installation shall be submitted with the proposal.
- (25) The CONTRACTOR shall guarantee the materials and workmanship associated with the project against defect due to faulty material, workmanship, and/or negligence. The CONTRACTOR shall make good such defective materials or workmanship within the stipulated guarantee period. All work shall be performed in accordance with manufacturer's recommended installation procedures, best practices and workmanship of the trade and/or skill involved to the satisfaction of the OWNER.
- (26) Executed contract documents, insurance certifications, and, upon completion and acceptance of the work, invoices and other information requested, are to be sent to:

Mr. Niki Sean Jones, Housing Administrator
City of Greenville
PO Box 7207, Greenville, NC 27835-7207

- (27) A performance bond will not be required since it is anticipated that project costs will be less than \$100,000.
- (28) A bid bond will not be required since it is anticipated that project costs will be less than \$100,000.
- (29) Questions relative to technical aspects of the work to be done should be directed to Mr. Tim Corley, PO Box 7207, Greenville, North Carolina 27835-7207, telephone (252) 329-4477 (Engineering Division).

Defined Terms

- 1.1 Terms used in these Instructions to Bidders that are defined in the Standard General Conditions of the Construction Contract (No. 1910-8) (1996 Edition) have the meanings assigned to them in the General Conditions.
- 1.2 Certain additional terms used in these Instructions to Bidders have the meanings indicated below which are applicable to both the singular and plural thereof.
 - 1.2.1 Bidder – one who submits a Bid directly to Owner as distinct from a sub-bidder, who submits a bid to a Bidder.
 - 1.2.2 Issuing Office – the office from which the Bidding Documents are to be issued and where the bidding procedures are to be administered.

Successful Bidder – the lowest, responsible and responsive Bidder to whom Owner (on basis of Owner’s evaluation as hereinafter provided) makes an award.

Owner – the City of Greenville, NC.

Engineer – The Public Works Department, Engineering Division, of the City of Greenville.

2. Copies of Bidding Documents

Complete sets of the Bidding Documents in the number and for the sum, if any, stated in the Advertisement or Invitation to Bid may be obtained from the Issuing Office.

Complete sets of Bidding Documents must be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

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

3. Qualifications of Bidders

To demonstrate qualifications to perform the Work, each Bidder must be prepared to submit within five days after Bid opening upon Owner's request detailed written evidence such as financial data, previous experience, present commitments and other such data as may be called for below (or in the Supplementary Instructions).

Each Bid must contain evidence of Bidder's qualification to do business in the state where the Project is located or covenant to obtain such qualification prior to award of the contract.

4. Examination of Contract Documents and Site.

4.1 It is the responsibility of each Bidder before submitting a Bid:

4.1.1. To examine thoroughly the Contract Documents and other related data identified in the Bidding Documents (including "technical data" referred to below):

4.1.2. To visit the site to become familiar with and satisfy Bidder as to the general, local and site conditions that may affect cost, progress, performance or furnishing of the Work;

4.1.3. To consider federal, state and local Laws and Regulations that may affect cost, progress, performance or furnishing of the Work;

4.1.4. To study and carefully correlate Bidder's knowledge and observations with the Contract Documents and such other related data; and

4.1.5 To promptly notify Engineer of all conflicts, errors, ambiguities or discrepancies that Bidder has discovered in or between the Contract Documents and such other related documents

Reference is made to the Supplementary Conditions for identification of the following:

4.2.1 Those reports of explorations and tests of subsurface conditions at or contiguous to the site which have been utilized by Engineer in preparation of the Contract Documents. Bidder may rely upon the general accuracy of the "technical data" contained in such reports but not upon other data, interpretations, opinions or information contained in such reports or otherwise relating to the subsurface conditions at the site, nor upon the completeness thereof for the purposes of bidding or construction.

4.2.2 Those drawings of physical conditions in or relating to existing surface and subsurface structures (except Underground Facilities) which are at or contiguous to the site that have been utilized by Engineer in preparation of the Contract Documents. Bidder may rely upon the general accuracy of the "technical data" contained in such drawings but not upon other data, interpretations, opinions or information shown or indicated in such drawings or otherwise relating to such structures, nor upon the completeness thereof for the purposes of bidding or construction.

4.2.3 Information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the site is based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities or others, and Owner and Engineer do not assume responsibility for the accuracy or completeness thereof unless it is expressly provided otherwise in the Supplementary Conditions.

Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions and Underground Facilities, and possible changes in the Contract Documents due to differing or unanticipated conditions appear in Paragraphs 4.02 and 4.03 of the General Conditions.

Before submitting a Bid each Bidder will be responsible to obtain such additional or 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 or procedures of construction to be employed by Bidder and safety precautions and programs incident thereto or which Bidder deems necessary to determine its Bid for performing and furnishing the Work in accordance with the time, price and other terms and conditions of the Contract Documents.

On request, Owner will provide each Bidder Access to the site to conduct such examinations, investigations, explorations, tests and studies, as each Bidder deems necessary for submission of a Bid. Bidder must fill all holes and clean up and restore the site to its former conditions upon completion of such explorations, investigations, tests and studies.

Reference is made to the Supplementary Conditions or the Division 1 Project Requirements for the identification of the general nature of work that is to be performed at the site by Owner or others (such as utilities and other prime contractors) that relates to the work for which a Bid is to be submitted. On request, Owner will provide to each Bidder for examination access to or copies of Contract Documents (other than portions thereof related to price) for such work.

The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article 4, that without exception the Bid is premised upon performing and furnishing the Work required by the Contract Documents and applying the specific means, methods, techniques, sequences or procedures of construction (if any) that may be shown or indicated or expressly required by the Contract Documents, that Bidder has given Engineer written notice of all conflicts, errors, ambiguities and discrepancies that Bidder has discovered in the Contract Documents and the written resolutions thereof by Engineer is acceptable to Bidder, and that the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work.

The Provisions of IB-4.1 through 4.8, inclusive, do not apply to Asbestos, Polychlorinated biphenyl (PCB), Petroleum, Hazardous Waste or Radioactive Material covered by Paragraph 4.05 of the General Conditions.

5. Availability of Lands for Work, etc.

The lands upon which the Work is to be performed, rights-of-way and easements for access thereto and other lands designated for use by CONTRACTOR in performing the Work are

identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by the CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities are to be obtained and paid for by Owner unless otherwise provided in the Contract Documents.

6. Interpretations and Addenda.

All questions about the meaning or intent of the Bidding Documents are to be directed to Engineer. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by Engineer as having received the Bidding Documents. Questions received less than ten (10) days prior to the date for opening of Bids may not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

Addenda may also be issued to modify the Bidding Documents as deemed advisable by Owner or Engineer.

7. Deleted

8. Contract Times.

The number of days within which, or the dates by which, the Work is to be substantially completed and also completed and ready for final payment are set forth in the Agreement and incorporated therein by reference in the Instructions to Bidders.

9. Liquidated Damages.

Provisions for liquidated damages, if any are set forth in the Agreement and incorporated therein by reference in the Instructions to Bidders.

10. Substitute and "Or-Equal" Items.

The Contract, if awarded, will be on the basis of materials and equipment described in the Drawings or specified in the Specifications without consideration of possible substitute of "or-equal" items. Whenever it is indicated in the Drawings or specified in the Specifications that a substitute or "or-equal" item or material or equipment may be furnished or used by CONTRACTOR if acceptable to Engineer, application for such acceptance will not be considered by Engineer until after the Effective Date of the Agreement. The procedure for submission of any such application by CONTRACTOR and consideration by Engineer is set forth in Paragraph 6.05 of the General Conditions and may be supplemented in the Division 1 Project Requirements.

11. Subcontractors, Suppliers and Others.

If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers and other persons and organizations (including those who are to furnish the principal items of material and equipment) to be submitted to Owner in advance of a specified date prior to the Effective Date of the Agreement, apparent Successful Bidder, and any other Bidder so requested, shall within five (5) days after Bid opening submit to Owner a list of all such Subcontractors, Suppliers and other persons and organizations proposed for those portions of the Work for which such identification is 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 requested by Owner. An Owner or Engineer who after due investigation has reasonable objection to any proposed Subcontractor, Supplier, other person or organization, may before the Notice of Award is given request apparent Successful Bidder to submit an acceptable substitute, without an increase in Bid price.

If apparent Successful Bidder declines to make any such substitution, Owner may award the contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers and other persons and organizations. The declining to make requested substitutions would not constitute grounds for sacrificing the Bid security of any Bidder. Any Subcontractor, Supplier, other person or organization listed and to whom Owner or Engineer does not make written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to revocation of such acceptance after the Effective Date of the Agreement as provided in Paragraph 6.8.2 of the General Conditions.

Refer to MINORITY & WOMEN BUSINESS UTILIZATION COMMITMENT and MINORITY BUSINESS SUPPLEMENTARY CONDITIONS for the City of Greenville's MBE/WBE goals.

11.3 No CONTRACTOR shall be required to employ any Subcontractor, Supplier, other person or organization against which CONTRACTOR has reasonable objection.

12. Bid Form.

12.1 The Bid Form is included with the Bidding Documents; additional copies may be obtained from Engineer (or the Issuing Office).

12.2 All blanks on the Bid Form must be completed by printing in ink or by typewriter.

12.3 Bids by corporations must be executed in the corporate name by the president or a vice-president (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal must be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation must be shown below the signature.

- 12.4 Bids by partnerships must be executed in the partnership name and signed by a partner, whose title must appear under the signature and the official address of the partnership must be shown below the signature.
- 12.5 All names must be typed or printed in ink below the signature.
- 12.6 The Bid shall contain an acknowledgment of receipt of all Addenda (the numbers of which must be filled in on the Bid Form).
- 12.7 The address and telephone number for communications regarding the Bid must be shown.

Evidence of authority to conduct business as an out-of-state corporation in the state where the Work is to be performed shall be provided in accordance with Paragraph 3 above. State Contractor license number must also be shown.

13. Submission of Bids.

Bids shall be submitted at the time and place indicated in the Advertisement of Invitation to Bid and shall be enclosed in an opaque sealed envelope, marked with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted) and name and address of Bidder and accompanied by the Bid security and other required documents. If the Bid is sent through the mail or other delivery system the sealed envelope shall be enclosed in a separate envelope with the notation "BID ENCLOSED" on the face of it. Facsimile (Fax) bids are not acceptable.

14. Modification and Withdrawal of Bids.

- 14.1 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.
- 14.2 If, within seventy-two (72) hours after Bids are opened, any Bidder files a duly signed, written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid and the Bid security will be returned in accordance with applicable North Carolina laws. Thereafter, that Bidder will be disqualified from further bidding on the Work to be provided under the Contract Documents.

15. Opening of Bids.

Bids will be read privately by City staff. An abstract of the amounts of the base Bids and major alternates (if any) will be made available to Bidders after the opening of Bids.

16. Bids to Remain Subject to Acceptance.

All Bids will remain subject to acceptance for sixty (60) days after the day of the Bid opening, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to that date.

17. Award of Contract.

Owner reserves the right to reject any or all Bids, including without limitation the rights to reject any or all nonconforming, non-responsive, unbalanced or conditional Bids and to reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder, whether because the Bid is not responsive or the Bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by Owner, including but not limited to past performance by the bidder involving other City projects. Owner also reserves the right to waive all informalities not involving price, time or changes in the Work and to negotiate contract terms with the Successful Bidder. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.

In evaluating Bids, Owner will consider the qualifications of Bidders, whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.

Owner may consider the qualifications and experience of Subcontractors, Suppliers, and other persons and organizations proposed for those portions of the Work as to which the identity of Subcontractors, Suppliers, and other persons and organizations must be submitted as provided in the Supplementary Conditions. Owner also may consider the operating costs, maintenance requirements, performance data and guarantees of major items of materials and equipment proposed for incorporation in the Work when such data is required to be submitted prior to the Notice of Award.

Owner may conduct such investigations as Owner deems necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications and financial ability of Bidders, proposed Subcontractors, Suppliers and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to Owner's satisfaction within the prescribed time.

If the contract is to be awarded, it will be awarded to lowest Bidder whose evaluation by owner indicates to Owner that the award will be in the best interests of the Project.

The Owner reserves the right to award any or all parts of a Contract but separate parts of the same Contract will not be awarded to different contractors.

If the contract is to be awarded, Owner will give Successful Bidder a Notice of Award within sixty (60) days after the day of the Bid opening.

18. Contract Security.

Paragraph 5.1 of the General Conditions and the Supplementary Conditions set forth Owner's requirements as to performance and payment bonds. When the Successful Bidder delivers the executed Agreement to Owner, it must be accompanied by the required performance and payment Bonds.

19. Signing of Agreement.

When Owner gives a Notice of Award to the Successful Bidder, it will be accompanied by the required number of unsigned counterparts of the Agreement with all other written Contract Documents attached. Within fifteen (15) days thereafter CONTRACTOR shall sign and deliver the required number of counterparts of the Agreement and attached documents to Owner with the required Bonds. Within ten (10) days thereafter Owner shall deliver one fully signed counterpart to CONTRACTOR. Each counterpart is to be accompanied by a complete set of the Drawings with appropriate identification.

SCOPE OF WORK

This contract provides all materials, equipment, equipment operators, labor and laborers to demolish and remove existing pavement, curb and gutters, sidewalks. It also includes the construction of new sidewalks, along Greenville Boulevard (NCDOT) in Greenville, North Carolina. Also included in this project is the adjustment of existing appurtenances as necessary for the installation of the proposed improvements.

The contractor shall make his determination of equipment and labor forces to be used.

No separate measurement or payment will be made for hauling and dump fees at demolition landfills.

MEASUREMENT AND PAYMENT

Measurement and Payment for each individual project will be by one the following methods:

UNIT PRICE

The Contractor will be paid at the contract unit prices bid and in accordance with the Standard Specifications and/or Project Special Provisions.

CONTRACT

The Contract shall be as defined under Article 101-19 in the Standard Specifications.

PROJECT

A project shall be defined as the construction to be performed at a specific location.

PROJECT PERIOD

The number of calendar days established by the Engineer in consultation with the Contractor to complete a Project.

PROJECT NOTICE TO PROCEED

A written notice to proceed with work on a project at a specific location with a specific scope of work of the Project Notice to Proceed will begin the Project Period.

PROJECT LIQUIDATED DAMAGES

Liquidated Damages will be assessed at the rate of \$150 (one hundred and fifty) per calendar day for

failure to complete the project within the Project Period as defined above.

TIME/DATE SENSITIVE WORK

Section deleted.

TREE PROTECTION

All tree root systems shall be protected during the phases of construction. All tree protection and related work shall be in accordance with the State "Landscape Construction Standards" and in accordance with directives given by the City of Greenville's Building and Grounds Superintendent, Kevin Heifferon at 252-329-4531. There will be no separate measurement or payment for this work.

PRUNING AND THINNING OF TREES

Any pruning shall be carried out by proper arbor cultural standards and in accordance with the "Landscape Construction Standards" Tree Preservation and Protection NCDOT Section 01000 and in accordance with directives given by the City of Greenville's Building and Grounds Superintendent, Kevin Heifferon at 252-329-4531. There will be no separate measurement or payment for this work.

ADDITIONAL WORK AND CONTACT WITH PROPERTY OWNERS

No additional work or deviation from the original sketch drawings shall be allowed without written approval from the Engineer. All contact with property owners shall be through the Project Inspector. Work requested by the property owner, which is not part of the approved sketch drawings/specifications, must be contracted between the property owner and the contractor. Any additional work by the contractor for the homeowner shall not be done until all City work has been completed and accepted. The contractor shall not suggest or recommend additional work to the property owners during the performance of the work contracted with the City.

EXCAVATION FOR: CURB, CURB AND GUTTER, SIDEWALK AND DRIVEWAY

The following items: (30"/24" Concrete Curb and Gutter), (4" Concrete Sidewalk), and (6" Concrete Driveways) shall include the satisfactory pavement sawing, removal and disposal of all materials encountered within the limits of the work. The excavation includes but is not limited to the excavation of existing concrete or asphalt curb, curb and gutter, sidewalk or driveway. There will be no separate measurement or payment for the excavation described in this special provision. The price of the work will be included in the price bid for the individual line item.

CONCRETE

A. Compressive Strength:

All concrete used in the construction of this project shall be 3000-PSI strength at twenty-eight

(28) days, unless otherwise specified. No adjustment will be allowed for the required use of high-early strength concrete. When the Contractor is requested to use high-early strength concrete in certain areas, he must furnish a copy of the delivery ticket to the project inspector prior to allowing traffic to proceed across the item in question before the required seven-day curing period.

The Contractor at the direction of the Engineer shall coordinate with approved testing laboratory for preparation of concrete cylinders. All testing of concrete cylinders shall be done by a testing laboratory designated by the City prior to construction. Not less than five (5) cylinders (six (6) for structures) shall be made for each day's pour.

B. Slump:

The maximum slump of the concrete used on the project shall be as defined in NCDOT Section 1000 of the Standard Specifications. The Contractor shall coordinate with approved testing laboratory to test the slump of the concrete and at a frequency established by the Engineer and in accordance with ASTM C 143. The sample taken for determination of slump will be obtained immediately prior to the concrete being discharged onto the project. Concrete failing to meet requirements for slump will be subject to rejection.

C. Air Content:

The air content of the concrete used on this project shall be as defined in NCDOT Section 1000 of the Standard Specifications. The Contractor shall coordinate with approved testing laboratory necessary to test the air content of the concrete and shall test the air content at a frequency established by the Engineer. The sample taken for the determination of air content will be obtained immediately prior to the concrete being discharged onto the project. Concrete failing to meet specification requirements for air content will be subject to rejection.

D. Acceptance and Testing Standards:

Concrete batching, sampling, testing and evaluation shall be done in accordance with the standards listed below:

ASTM C94	Standard Specifications for Ready Mixed Concrete
ASTM C172	Standard Method of Concrete Sampling
ASTM C470	Tentative Specification for Molds for Forming Concrete Test Cylinders Vertically
ASTM C31	Standard Method of Making and Curing Concrete
ASTM C143	Standard Method of Test for Slump of Portland Cement Concrete
ASTM C42	Obtaining and Testing Drilled Cores and Sawed Beams of Concrete
AASHTO T199-72	Air Content of Freshly Mixed Concrete by the Chace Indicator
ASTM C231-82	Standard Test for Air Content of Freshly Mixed Concrete by the

Pressure. Method

Tests shall be performed by the Contractor using qualified personnel fully trained in the procedures of the above testing standards and the Contractor shall provide the proper equipment necessary to perform these tests.

- E. The type of finish required would be that required by the section of specifications directly applicable to the work being constructed. All exposed surfaces of retaining walls, structures, and etc. shall be given a Class 2 finish as described by NCDOT Section 420-18 (f) of the Standard Specifications unless indicated otherwise in the plans.

- F. **Compressive Strength Quality Assurance for Incidental Concrete**

The following Quality Assurance Specifications shall apply only to incidental concrete used in the construction of this project. Incidental concrete shall be defined as any concrete not used in the construction of rigid pavement or any concrete that is not an integral part of a structure. The acceptability of any questionable structural concrete used in the construction of this project will be evaluated on a case by case basis.

Concrete will be tested and accepted with respect to compressive strength on the basis of the average test results of concrete test cylinders. It shall be the responsibility of the Contractor to coordinate the preparation of test cylinders in accordance with ASTM C31 and to adequately protect the cylinders.

If the average strength of the concrete test results (cylinders and cores) fails to attain seventy percent (70%) of the specified minimum compressive strength at twenty-eight (28) days, all applicable concrete shall be rejected. The Contractor, at no additional cost to the City, shall remove the rejected concrete and replace it with concrete meeting specifications.

TRAFFIC CONTROL

Beginning Work and Street Closings:

The Contractor is responsible for notifying the City Traffic Engineer at (252-329-4467) of any work where the number of travel lanes is reduced from normal conditions.

The Contractor shall install the project advanced warning signs. These signs shall be in place for one (1) week before arborcultural activity begins. The Contractor shall begin arborcultural activity on a street the scheduled date of the closing of the travel lane.

Right of Way Use Permit:

The Contractor will not be responsible for obtaining the Right of Way Use Permit(s) from the City

Engineer for approval to work in the street rights-of-way of Greenville. The City of Greenville Engineering Division will obtain the encroachment agreement from NCDOT.

Traffic Control Plan:

The Contractor based upon the Traffic Control Special Provisions will perform traffic Control. The Traffic Control Special Provisions may refer to plan sheets for major work items.

The Contractor shall be thoroughly familiar with the Greenville Manual of Standard Designs and Details. All traffic control devices and procedures shall conform to the requirements of the Greenville Manual, the current edition of the Manual on Uniform Traffic Control Devices, the current edition of the North Carolina Department of Transportation (NCDOT) Supplement to the Manual on Uniform Traffic Control Devices for Streets and Highways, the NCDOT Roadway Standard Drawings and the current edition of the NCDOT Standard Specifications for Roads and Structures.

The Contractor shall maintain the traffic control as described herein unless the Contractor submits an alternate traffic control plan to the Engineer and it is approved by the Engineer. The Engineer may direct the Contractor to modify traffic control if, in the Engineer's opinion, traffic is not moving safely or efficiently.

Maintenance of Traffic:

The Contractor shall maintain all travel lanes in accordance with the diagrams referenced in the Traffic Control Phasing of NCDOT handbooks.

Construction work, which involves closure of a lane of traffic, will not be allowed during the peak flow hours unless otherwise specified in the contract documents. Work that would require lane detours and closures shall not be conducted from 7:00 AM to 8:30 AM and from 4:30 PM to 6:00 PM Monday through Friday. For purposes of this contract the City Engineer shall designate these roads.

Traffic Control Devices:

The Contractor shall furnish, install, operate, relocate, maintain and remove all temporary traffic control devices necessary for controlling traffic. The Contractor shall notify the City Engineer regarding conflicting permanent signs. Only City forces or NCDOT shall install, remove or relocate any permanent signs within the right-of-way.

Pedestrian Considerations:

The Contractor shall accommodate the needs of all pedestrians.

Measurement:

There will be a separate measurement made for Traffic Control.

Payment:

There will be a separate pay item for Traffic Control.

SP-1, SEEDING AND MULCHING**Description**

The work covered by this special provision includes preparing seedbeds; furnishing, placing, and covering limestone, fertilizer, and seed; compacting seedbeds; furnishing, placing, and securing mulch; mowing; and other operations necessary for the permanent establishment of grasses and legumes from seed on shoulders, slopes, ditches, and on all earth areas disturbed by construction and on portions of areas seeded under previous contracts where in the opinion of the Engineer, there is unsatisfactory vegetative cover.

Methods and Materials:

All work covered in this special provision shall be in accordance with, and all materials shall conform to, the requirements of the Greenville Standard for Landscape.

Measurement:

The quantity of seeding and mulching to be paid for will be the actual number of square yards of seeding and mulching, measured along the surface of the ground, which has been completed and accepted.

Payment:

The quantity of seeding and mulching, measured as provided above, will be paid for at the contract unit price per square yard for "Seeding and Mulching". Such payment will be full compensation for all work covered in this special provision, including seedbed preparation; furnishing and applying seed, limestone, fertilizer, mulch, asphalt, and other materials; and maintenance.

Payment will be made under:

Seeding and Mulching

Acre

City of Greenville					
Contract Bid Form					
Item	Description	Total Quantity	Unit	Unit Price	Total Unit Bid
1	Mobilization (1 each street)	3	LS		
2	Traffic Control (1 each street)	3	LS		
3	Siteprep/Excavation/Grading (1 each street)	3	LS		
4	Remove Existing Curb & Gutter Douglas Avenue 45 LF Fleming Street 30 LF Bancroft Avenue 45 LF	120	LF		
5	Wheelchair Ramp Douglas Avenue 3 Fleming Street 2 Bancroft Avenue 3	8	EA		
6	4" Concrete Sidewalk 5' Width Douglas Avenue 656 LF Fleming Street 385 LF Bancroft Avenue 752 LF	1793	LF		
7	24"/30" Curb and Gutter/Valley Gutter Douglas Avenue 30 LF Fleming Street 30 LF Bancroft Avenue 45 LF	105	LF		
8	Asphalt Driveway/Roadway Patch Douglas Avenue .10 TN Fleming Street .10 TN Bancroft Avenue .25 TN	.45	TN		
9	Seeding and Mulching Douglas Avenue .06 AC Fleming Street .04 AC Bancroft Avenue .07 AC	.17	AC		
10	Adjust Meter/Valve Box Douglas Avenue 7 Fleming Street 5 Bancroft 0	12	EA		
11	Testing Allowance (1 each street)	3	LS	1000.00	1000.00
	TOTAL BID:				

ACKNOWLEDGE OF RECEIPT OF ADDEMDUM NO. 1

AUTHORIZED SIGNATURE _____

AGREEMENT

THIS AGREEMENT is dated as of the _____ day of _____ in the year 2015, by and between the City of Greenville, NC (hereinafter called OWNER) and hereinafter called CONTRACTOR). OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter 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:

Community Development Sidewalk Project

Article 2. ENGINEER.

2.1 The Project has been designed by the City of Greenville, Public Works Department, who is hereinafter called ENGINEER and who is to act as OWNER'S representative, assume all duties and responsibilities and have the rights and authority assigned to ENGINEER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

Once the Notice of Award has been issued, the OWNER may assume all or part of the responsibilities of the ENGINEER and RESIDENT PROJECT REPRESENTATIVE.

Article 3. CONTRACT TIMES.

3.1 The Work will be completed and ready for final payment in accordance with paragraph 14.07 of the General Conditions within the times specified below:

Total Contract Completion Time Base Bid – Sixty (60) Working Days

The Contract Times shall commence to run as provided in paragraph 2.03 of the General Conditions.

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 the BID, plus any extensions thereof allowed in accordance with Article 12.03 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 One Hundred Fifty

Dollars (\$150.00) for each day that expires after the time specified in paragraph 3.1.

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 paragraphs 4.1 and 4.2 below:

4.1 For all Work other than Unit Price Work, a Lump Sum as shown in the BID.

All specific cash allowances are included in the BID and have been computed in accordance with paragraph 11.02 of the General Conditions.

4.2 For all Unit Price Work, an amount equal to the sum of the established unit price for each separately identified item of Unit Price Work times the estimated quantity of that item as indicated in the BID.

As provided in paragraph 11.03 of the General Conditions estimated quantities are not guaranteed, and determinations of actual quantities and classification are to be made by ENGINEER as provided in paragraph 9.07 of the General Conditions. Unit prices have been computed as provided in paragraph 11.03 of the General Conditions.

Article 5. PAYMENT PROCEDURES.

CONTRACTOR shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by ENGINEER 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 as recommended by ENGINEER, on or about the 25th day of each month during construction as provided in paragraphs 5.1.1. and 5.1.2. below. All such payments will be measured by the schedule of values established in paragraph 2.07 of the General Conditions (and in the case of Unit Price

Work based on the number of units completed) or, in the event there is no schedule of values, as provided in the General Requirements.

5.1.1. Progress payments will be made less the retainage listed below, less the aggregate of payments previously made and less such amounts as ENGINEER shall determine, or OWNER may withhold, in accordance with paragraph 14.02 of the General Conditions.

Retainage in an amount equal to ten percent (10%) of the total amount due on the Progress

Estimate will be deducted and retained by the Owner.

Retainage shall also apply to materials and equipment not incorporated in the Work (but delivered, suitably stored and accompanied by documentation satisfactory to OWNER as provided in paragraph 14.02 of the General Conditions).

5.1.2. Upon Substantial Completion, retainage may be reduced to an amount sufficient to cover the estimated cost of uncompleted work, less such amounts as ENGINEER shall determine, or OWNER may withhold in accordance with paragraph 14.04 of the General Conditions.

5.2 Final Payment. Upon final completion and acceptance of the Work in accordance with paragraph 14.07 of the General Conditions, OWNER shall pay the remainder of the Contract Price as recommended by ENGINEER as provided in said paragraph 14.07.

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 forty-five (45) days after respective prime contracts have been accepted by Engineer and Owner, or occupied by Owner and used for the purpose for which the project was constructed, whichever occurs first. Provided, however, that whenever Engineer 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 forty-five (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 by Engineer, accepted by Owner, or occupied by Owner and used for the purposes for which the project was constructed, be delayed by more than forty-five (45) days, said prime Contractor shall be paid interest, beginning on the forty-sixth (46th) day, at the rate of twelve percent (12%) 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 paragraph 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 Supplementary Conditions as provided in paragraph 4.02 of the General Conditions. CONTRACTOR accepts determination set forth in paragraph SC - 4.02 of the Supplementary Conditions of the extent of the "technical data" contained in such reports and drawings upon which CONTRACTOR is entitled to rely as provided in paragraph 4.02 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.
- 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 ENGINEER written notice of all conflicts, errors, ambiguities or discrepancies that CONTRACTOR has discovered in the Contract Documents and the written resolution thereof by ENGINEER 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.

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 A1-A7, inclusive).
- 8.2 Exhibits to this Agreement: Certificate of Insurance (page CI1, inclusive).
- 8.3 Notice to Proceed (page NP1, inclusive).
- 8.4 General Conditions (pages 1 to 62, inclusive).
- 8.5 Standard Special Provision (pages SP1-SP12, inclusive).
- 8.6 Addenda numbers () inclusive.
- 8.7. CONTRACTOR's Bid Form (pages BF1-BF9, inclusive).
- 8.8. 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 paragraph 3.04 of the General Conditions.

There are no Contract Documents other than those listed above in this Article 13. The Contract Documents may only be amended, modified or supplemented as provided in paragraph 3.04 of the General Conditions.

MISCELLANEOUS

- 9.1. Terms used in this Agreement, which are defined in Article 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, their partner, successors, assigns and legal representatives to the other party hereto, their partner, 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.

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

This Agreement will be effective on _____ (which is the Effective Date of the Agreement).

CITY OF GREENVILLE _____

BY _____ BY _____

NAME Barbara Lipscomb NAME _____

TITLE City Manager TITLE _____

(CORPORATE SEAL) (CORPORATE SEAL)

Attest _____ Attest _____

TITLE CITY CLERK TITLE _____

Address for giving notices Address for giving notices

PO Box 7207 _____

Greenville, NC 27835-7207 _____

License No. _____

Employer Identification Number _____

APPROVED AS TO FORM

David A. Holec, City Attorney

Date

PRE AUDIT CERTIFICATION

This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

Date

Bernita Demery, Director of Financial Services

Account Number:

Project Code:

CERTIFICATE OF INSURANCE

(SUBSTITUTE CERTIFICATE OF INSURANCE HERE)

NOTICE OF AWARD

DATE:

TO:

PROJECT: Community Development Sidewalk Project

The City of Greenville has considered the bid submitted by you on _____ for the above-described Work in response to its Advertisement for Bids and Instructions to Bidders.

You are required by the Instructions to Bidders to execute the Agreement and furnish the required Contractor's Performance Bond, Payment Bond, and Certificate of Insurance within ten (10) calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said bonds within ten 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 acknowledge and return to the Owner a copy of this Notice of Award.

Dated this _____ day of _____, 2015.

Owner: City of Greenville

BY: _____
Barbara Lipscomb
City Manager

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged:

By: _____ Signature: _____
(Print name)

Title: _____ Company: _____

This the _____ day of _____, 2015.

NOTICE TO PROCEED

DATE:

TO:

PROJECT: Community Development Sidewalk Project

Attached, please find a fully executed copy of the AGREEMENT dated _____. You are hereby notified to commence WORK in accordance with the AGREEMENT on or before _____, 2015 and you are to complete the WORK within forty-five (45) consecutive calendar days thereafter.

The date of COMPLETION of all WORK is _____, 2015.

Pre-Construction Conference conducted on _____, 2015.

Owner: City of Greenville

BY: _____
Barbara Lipscomb
City Manager

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED is hereby acknowledged by

this the _____ day of _____, 2015.

By _____

Signature _____

Title _____

SUPPLEMENTAL CONDITIONS

TAX STATEMENT AND CERTIFICATION

This is to certify that the foregoing or attached statements are a true and complete statement of all State and County Sales or Use Tax paid by the undersigned contractor from _____, 20____, to _____, 20____, inclusive for the materials and equipment that were or will become a part of the construction of the Community Development Sidewalk Project.

(THE FOLLOWING PORTION TO BE FILLED OUT BY GENERAL CONTRACTOR ONLY.)

It is further certified that

Are all of the subcontractors that are, or were engaged by the contractor in the performance of this contract and whose tax statements are also enclosed herewith.

CONTRACTOR OR SUBCONTRACTOR

Sworn and subscribed before me

This ____ day of _____, 20____

NOTARY PUBLIC

My Commission Expires: _____

RELEASE OF LIEN AND WAIVER OF CLAIM

STATE OF: _____ COUNTY OF: _____

(Name)

(Title)

_____, being first duly sworn deposes and says that:
(Contractor)

The undersigned is authorized to execute this Affidavit, Release of Lien and Waiver of Claim on behalf of the Contractor and has personal knowledge of all facts set forth herein;

This Affidavit, Release of Lien and Waiver of Claim is made concerning the construction of the following project: Community Development Sidewalk Project

Project No.: _____

All payrolls, material bills, sales tax, social security tax, state and federal unemployment insurance, and all other liabilities and taxes owed by the Contractor and arising in any manner from the above-described project have been paid in full;

No liens or claims exist in favor of any supplier of materials or labor or in favor of any subcontractor furnishing materials or labor on the above-described project;

Notwithstanding the foregoing, if the City of Greenville or property of the City of Greenville is subject to any claim or lien which arises in any manner from the failure of the Contractor to pay any liability described above, the Contractor will indemnify and hold the City of Greenville harmless for any amount which the City of Greenville is required to pay to discharge such lien or settle such claim and further will pay the City of Greenville's expenses, costs, and attorney fees incurred in connection therewith;

All claims, suits, and proceedings of every name, description, or nature arising out of the above project against the City of Greenville, its officers, employees and agents have been settled;

The Contractor releases and waives any and all claims of every type and description, which the Contractor may have against the City of Greenville arising in any manner from the construction of the above-described project.

(Contractors Signature)

Sworn to and subscribed before me this the _____ day of _____, 20____.

_____ (Title)

_____ (Date)

Notary Public

My Commission Expires _____ (Date)

NONCOLLUSION AFFIDAVIT OF PRIME BIDDER

State of (_____)

County of (_____)

_____, being first duly sworn, deposes and says that:

- (1) He is _____ of _____, the Bidder that has submitted the attached Bid.
- (2) He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;
- (3) Such Bid is genuine and is not a collusive or sham Bid;
- (4) Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees of parties in interest, including this affiant, has in any way colluded, conspired, connived, or agreed, (directly or indirectly) with any other Bidder, firm, or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement, or collusion, or communication, or conference with any other Bidder, firm, or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against the City of Greenville or any person interested in the proposed Contract; and
- (5) The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Signed) _____

(Title) _____

Subscribed and sworn to before me this _____ day of _____, 2015.

Notary

My commission expires _____.

PROJECT REQUIREMENTS

STANDARD SPECIAL PROVISIONS

Standard Specifications

The 2006 edition of the Standard Specifications for Roads and Structures of the North Carolina Department of Transportation hereinafter referred to as the 'Standard Specifications' shall apply on all portions of the project unless otherwise specified herein.

Supervision by the Contractor

At the time work is actually performed, the contractor shall have present on the project one individual who has been authorized to act in a supervisory capacity over all work on the project including work subcontracted. The individual who has been so authorized shall be experienced in the type of work being performed and is to be fully capable of managing, directing, and coordinating the work; of reading and thoroughly understanding the contract and of receiving and carrying out directions from the Engineer or his authorized representatives. He shall be an employee of the contractor, unless otherwise approved by the Engineer.

DEFINITION OF TERMS:

Whenever the following terms are used in the Standard Specifications, in any of the contract documents, or in the plans, the intended meaning of such terms shall be as follows:

"State" or "Department" shall be replaced by the words 'City of Greenville'.

"Engineer" or "Resident Engineer" shall be replaced by the words "City Engineer or his duly authorized representative".

"Sampling and Testing by Department" shall be replaced by the words "Sampling and Testing by City or its approved testing agency".

"Inspection by Department" shall be replaced by the words "Inspection by the City or its duly authorized representative".

"City Standard" shall refer to the "Greenville Manual of Standard Designs and Details".

"City Water Main Standard" and "City Sanitary Sewer Standard" shall refer to the latest edition of the "Greenville Manual of Standard Designs and Details".

"Landscape Construction Standards, shall refer to the Ground Cover Section of the "Manual of Standard Designs and Details" for construction with the jurisdiction of the City Of Greenville.

ADDENDA:

Addenda will be mailed to "Bidders of Record", and will be on file in the Office of the Engineer. It shall be the Bidder's responsibility to make inquiry as to the Addenda issued. All such Addenda shall become part of the contract and all Bidders shall be bound by such Addenda whether or not received or acknowledged by the Bidder.

SUBSURFACE INVESTIGATION:

The Contractor shall make his own subsurface investigations. Any information obtained by the City as a result of its own subsurface investigations will be made available upon request. This information (when available) is provided for informational purposes only and shall not relieve the Contractor of making his own investigations. The Contractor shall obtain all necessary permits prior to making any pavement cuts on existing streets.

AWARDING OF CONTRACT:

The City of Greenville will award the contract or contracts conditioned upon funds being available for construction and other governmental approvals as may be required. The contract will be awarded to the lowest responsible Bidder or Bidders, as required by North Carolina General Statutes. Consideration will be given only to proposals from Contractors who are properly licensed; bonded, experienced in the class of work proposed and who can refer to projects of similar magnitude and character as have been completed by them. The City also reserves the right to reject any and all proposals and to waive informalities or technicalities as it may deem to be in its best interest.

CONTRACT BONDS:

Failure of the Contractor to provide the required bonds, insurance, and executed contract within ten (10) days after he receives the notice of award shall be just cause for the forfeiture of the bid bond or bid deposit and rescinding the award of the contract.

Award may then be made to the next responsible bidder or the work may be readvertised and constructed under contract or otherwise as the City may decide.

Within ten days of notification of award of contracts equal to or exceeding \$100,000, the Contractor shall secure and post a Performance Bond and Labor and Material Payment Bond, each in the amount of 100% of the Total Contract Sum. All such bonds shall be issued by a surety acceptable to the City. The City shall be named as the beneficiary. Cash bonds will not be accepted.

NOTICE TO PROCEED

A Notice to Proceed will be issued to the Contractor upon receipt of a fully executed contract, bonds, insurance certificates, receipt of approval by other governmental agencies (if required) and any other documentation required by the Engineer.

MATERIALS AND EQUIPMENT STORAGE:

The Contractor shall be responsible for locating and providing storage areas for construction materials and equipment. The material and equipment storage shall comply with the local and state ordinances throughout the construction period. The Contractor shall restore the storage area to its original condition upon completion of the project or upon such time as directed by the Engineer. Such restoration shall be at no additional cost to the City.

The Contractor shall be responsible for the safeguarding of materials and equipment against fire, theft and vandalism and shall not hold the City responsible in any way for occurrences of same. The Contractor shall furnish and erect, at no additional cost, whatever works as may be necessary for the protection of the public, including but not limited to barricades, fences, etc. Prior to final payment being made, the Contractor shall obtain a release from the property owner of the storage area utilized for the project.

EXISTING UTILITIES:

The City has contacted all involved utility owners of the effect of this project on their respective utility.

Construction plans and anticipated construction schedules have been provided to the utility owners. Each utility owner will be requested to attend the preconstruction conference to discuss potential conflicts and their schedule for relocation where required. All adjustments or relocations will be made by the utility owner unless otherwise indicated in the Contract Documents.

The owners of utilities in this project include:

Greenville Utilities Commission
Embarq Communications
Suddenlink Communications
NCDOT

The Contractor shall adhere to the provisions of 1985 Underground Damage Prevention Act North Carolina General Statutes 887 Chapter 785 Senate Bill 168 Article 3. To assist the contractor and utility owners in meeting the requirements of this law, there is a "one call system" called "NC ONECALL". Most major utilities with underground facilities in the State subscribe to this service. For calls originating within North Carolina, The NC ONECALL telephone number is 1-800-632-4949. For calls originating outside of North Carolina, the number is 919-855-5760. The Contractor shall include the cost of any coordination and cooperation of utilities in his bid. NCDOT is not a member of ONECALL. The number to call for NCDOT for wires at intersections is 252-830-4393. NCDOT requires seventy-two (72) hours' notice.

No additional compensation shall be allowed for delays or inconveniences sustained by the Contractor due to utility relocation or adjustments. No additional payment will be made for re-mobilization required

by the utility's failure to relocate utility at the request of the Contractor. The Contractor should refer to Section 108-10 (B) paragraph 3 of the Standard Specifications.

Where changes to utility facilities are to be made solely for the convenience of the Contractor, it shall be the Contractor's responsibility to arrange for such changes, and the Contractor shall bear all costs of such changes.

CONSTRUCTION STAKES, LINES AND GRADES:

Construction stakes, lines and grades are the responsibility of the Contractor. This work is incidental to the project scope of work. The entire cost of this work to be distributed among the various other pay items.

TAXES & LICENSES:

North Carolina sales and/or use taxes are applicable to purchases of building materials and other tangible personal property by Contractors for use in performing City contracts. Use tax is also due on construction equipment brought into North Carolina for use in the performance of City contracts (N.C. Revenue Laws, G.S. 105-164.4 and G.S. 105-164.6). Contractors are liable for payment of applicable privilege licenses (N.C. Revenue Laws, G.S. 105-54). Contractors are also liable for payment of applicable franchise, corporate income, license and withholding taxes (N.C. Revenue Laws, G.S. 105-122, G.S. 105-123, G.S. 105-134 and G.S. 105-163.2).

EROSION AND SEDIMENTATION CONTROL MEASURES:

The Contractor shall install and maintain all erosion and sedimentation control measures and devices necessary to comply with the Erosion and Sedimentation Control Plan and applicable local and state ordinances and laws. All erosion and sedimentation control measures and devices shall be installed prior to beginning clearing or grading operations. Such devices shall be maintained in proper working condition from installation throughout the duration of the project.

The Contractor shall indemnify and hold harmless the City for any penalties imposed against the City by any local or state agency for the Contractor's failure to install and properly maintain erosion and sedimentation control devices. The Contractor shall immediately correct any deficiencies in erosion and sedimentation measures identified by the City or local or state agency. If the Contractor fails to correct the deficiencies within twenty four (24) hours after notification, the City will have such corrections performed and assess the cost of these corrections plus a one hundred percent (100%) surcharge against the Contractor.

If any borrow or waste areas are to be utilized, it will be the responsibility of the Contractor to notify the property owner that the property owner is responsible for any damage occurring from the site, either as part of the agreement with the Contractor, or on his own. All work, sediment control structures, and seeding will be at the cost of the property owner or Contractor. The City will not participate in the cost of this work on the waste or borrow areas. Prior to final payment being made, the Contractor shall obtain a release from the property owner or waste site utilized for the project.

HAZARDOUS MATERIALS:

If the Contractor encounters any materials considered or suspected of being hazardous, he shall immediately secure the area and contact the Greenville Fire Department at 252-329-4397 for further instructions.

OSHA REQUIREMENTS

GENERAL CONTRACTOR SAFETY REQUIREMENTS

Supplement to OSHA parts 1910 and 1926.

PART 1 - GENERAL CONTRACTOR REQUIREMENTS

- 1.1 The Contractor shall comply with OSHA (Occupational Safety and Health Administration) Parts 1910 and 1926, Construction Industry Standards and Interpretations, and with this specification.
- 1.2 Requests for variances or waivers from this specification are to be made to the Engineer in writing supported by evidence that every reasonable effort has been made to comply with the contractual requirements. A written request for waiver or a variance shall include:
 - a. Specific reference to the provision or standard in question;
 - b. An explanation as to why the waiver is considered justified; and
 - c. The Contractor's proposed alternative, including technical drawings, materials, or equipment specifications needed to enable the Engineer and City's Risk Manager to render a decision.
- 1.3 No waiver or variance will be approved if it endangers any person. The Contractor shall not proceed under any requested revision of a provision until the Engineer has given written approval. The Contractor is to hold and save harmless the City of Greenville, North Carolina free from any claims or causes of action whatsoever resulting from the Contractor or subcontractors proceeding under a waiver or approved variance.
- 1.4 Copies of OSHA Parts 1910 and 1926, Construction Industry Standards and Interpretations, may be obtained from:

Superintendent of Document
U.S. Government Printing Office
Washington, DC 20402

- 1.5 **SAFETY PROGRAM:** Each Contractor is to demonstrate that he or she has facilities for conducting a safety program commensurate with the work under contract. The Contractor is to

submit in writing a proposed comprehensive safety program to the Contracting Officer for approval before the start of construction operations. The program is to specifically state what provisions the Contractor proposes to take for the health and safety of all employees, including details relevant to the work to be done, the hazards associated with the work, and the actions that will be necessary to minimize the identified hazards.

- 1.6 PRECONSTRUCTION SAFETY MEETING: Representatives for the Contractor are to meet with the Contracting Officer or the Contracting Officer's representative before the start of construction to discuss the safety program and the implementation of all health and safety standards pertinent to the work under this contract.
- 1.7 JOINT SAFETY POLICY COMMITTEE: The Contractor, or designated onsite representative, is to participate in monthly meetings of a Joint Safety Policy Committee, composed of Contracting Local Organization and Contractor supervisory personnel. At these meetings, the Contractor's project manager and the Contracting Officer will review the effectiveness of the Contractor's safety effort, resolve current health and safety problems, and coordinate safety activities for upcoming work.
- 1.8 SAFETY PERSONNEL: Each Contractor is to designate a competent supervisory employee satisfactory to the Contracting Officer to administer the safety program.
- 1.9 SAFETY MEETINGS: A minimum of one on-the-job or toolbox safety meeting is to be conducted each week by all field supervisors or foremen and attended by mechanics and all construction personnel at the job site. The Contractor is to also conduct regularly scheduled supervisory safety meetings at least monthly for all levels of job supervision.
- 1.10 SAFETY INSPECTION: The Contractor shall perform frequent and regular safety inspections of the job site, materials, and equipment, and shall correct deficiencies.
- 1.11 FIRST AID TRAINING: Every Contractor foreman's work crew must include an employee who has a current first aid certificate from the Mine Safety and Health Administration, American Red Cross, or other state-approved organization.
- 1.12 REPORTS: Each Contractor is to maintain an accurate record of all job-related deaths, diseases, or disabling injuries. The records shall be maintained in a manner approved the Engineer. A copy of all reports is to be provided to the Engineer. All fatal or serious injuries are to be reported immediately to the Engineer who will contact the City of Greenville's Risk Manager; and every assistance is to be given in the investigation of the incident, including submission of a comprehensive narrative report to the Engineer. Other occurrences with serious accident potential, such as equipment failures, slides, and cave-ins, must also be reported immediately. The Contractor is to assist and cooperate fully with the Engineer and City's Risk Manager in conducting accident investigations. The Engineer is to be furnished all information and data pertinent to investigation of an accident.

PART 2 - FIRST AID AND MEDICAL FACILITIES

- 2.1 **FIRST AID KITS.** A 16-unit first aid kit approved by the American Red Cross is to be provided at accessible, well-identified, locations at the ratio of at least one kit for each twenty five (25) employees. The first aid kits are to be moisture-proof and dust-tight, and the contents of the kits are to be replenished as used or as they become ineffective or outdated.
- 2.2 **EMERGENCY FIRST AID.** At least one (1) employee certified to administer emergency first aid must be available on each shift and duly designated by the Contractor to care for injured employees. The names of the certified employees shall be posted at the job site.
- 2.3 **COMMUNICATION AND TRANSPORTATION.** Prior to the start of work, the Contractor is to make necessary arrangements for prompt and dependable communications, transportation, and medical care for injured employees. At least one (1) stretcher and two (2) blankets shall be readily available for transporting injured employees.
- 2.4 **FIRST AID AND MEDICAL REPORTS.** The Contractor is to maintain a record system for first aid and medical treatment on the job site. Such records are to be readily available to the Contracting Officer and are to include:
- a. A daily treatment log listing chronologically all persons treated for occupational injuries and illnesses;
 - b. Cumulative record of injury for each individual;
 - c. Monthly statistical records of occupational injuries, classified by type and nature of injury; and
 - d. Required records for worker's compensation.
- 2.5 **SIGNS AND DIRECTIONAL MARKINGS.** Adequate identification and directional markers are to be provided to readily denote the location of all first aid stations.
- 2.6 **EMERGENCY LISTING.** A listing of telephone numbers and addresses of doctor, rescue squad, hospital, police, and fire departments is to be provided at all first aid locations.

PART 3 - PHYSICAL QUALIFICATION OF EMPLOYEES

- 3.1 **GENERAL REQUIREMENTS.** Persons employed throughout the contract are to be physically qualified to perform their assigned duties. Employees must not knowingly be permitted or required to work while their ability or alertness is impaired by fatigue, illness, or any other reason that may jeopardize themselves or others.
- 3.2 **HOIST OPERATIONS.** Operators of cranes, cableways, and other hoisting equipment shall be

examined annually by a physician and provided with a certification stating that they are physically qualified to safely operate hoisting equipment. The Contractor is to submit a copy of each certification to the Contracting Officer.

- 3.3 **MOTOR VEHICLE OPERATORS.** Operators of motor vehicles engaged primarily in the transportation of personnel are to be 18 years of age or older and have a valid state operator's permit or license for the equipment being operated. The operators must have passed a physical examination administered by a licensed physician within the past year showing that they are physically qualified to operate vehicles safely.

PART 4 - PERSONAL PROTECTIVE EQUIPMENT

- 4.1 **HARDHAT AREAS.** The entire job site, with the exception of offices, shall be considered a hardhat area. All persons entering the area are, without exception, required to wear hardhats.

The Contractor shall provide hardhats for visitors entering hardhat areas.

- 4.1.1 **LABELS.** Hardhats shall bear a manufacturer's label indicating design compliance with the appropriate ANSI (American National Standards Institute) standard.
- 4.2 **POSTING.** Signs, at least three (3) by four (4) feet, worded as follows, with red letters (minimum six (6) inches high) and white background shall be erected at access points to designated hardhat area:

CONSTRUCTION AREA
HARDHATS REQUIRED
BEYOND THIS POINT

These signs are to be furnished and installed by the Contractor at entries to shops, construction yards, and job access points.

PART 5 - MACHINERY AND MECHANIZED EQUIPMENT

- 5.1 **SAFE CONDITION.** Before any machinery or mechanized equipment is initially used on the job, it must be inspected and tested by qualified personnel and determined to be in safe operating condition and appropriate for the intended use. Operators shall inspect their equipment prior to the beginning of each shift. Any deficiencies or defects shall be corrected prior to using the equipment. Safety equipment, such as seatbelts, installed on machinery, is to be used by equipment operators.
- 5.2 **TAGGING AND LOCKING.** The controls of power-driven equipment under repair are to be locked. An effective lockout and tagging procedure is to be established, prescribing specific responsibilities and safety procedures to be followed by the person or persons performing repair

work.

OPERATIONS, RIDING ON EQUIPMENT, GETTING ON OR OFF EQUIPMENT, HOURS OF OPERATION

- 5.3.1 OPERATORS. Machinery and mechanized equipment shall be operated only by authorized qualified persons.
- 5.3.2 RIDING ON EQUIPMENT. Riding on equipment by unauthorized personnel is prohibited. Seating safety belts shall be provided for the operator and all passengers.
- 5.3.3 GETTING ON OR OFF EQUIPMENT. Getting on or off equipment while the machinery is in motion is prohibited.
- 5.3.4 HOURS OF OPERATION. Except in emergencies, an equipment operator shall not operate any mobile or hoisting equipment for more than twelve (12) hours without an eight (8)-hour rest interval away from the job.

5.5 ROLLOVER PROTECTIVE STRUCTURES (ROPS)

- 5.5.1 ROLLOVER PROTECTIVE STRUCTURES. OSHA 1926, Subpart W, Overhead Protection, Sections 1000 and 1002, are applicable regardless of the year in which the equipment was manufactured and regardless of the stuck capacity of the equipment.
- 5.5.2 EQUIPMENT REQUIRING ROPS. The requirement for ROPS meeting 5.5.1 above applies to crawler and rubber-tired tractors such as dozers, push-and-pull tractors, winch tractors, tractors with backhoes, and mowers; off-highway, self-propelled, pneumatic-tired earthmovers, including scrapers, motor graders and loaders; and rollers, compactors, and water tankers (excluding trucks and cabs). These requirements shall also apply to agricultural and industrial tractors and similar equipment.

SUBLETTING:

The Engineer reserves the right to waive any subcontracting limits whenever it is deemed to be in the best interest of the City. The limits can be waived only upon written approval from the Engineer.

TERMINATION FOR CONVENIENCE:

The City may terminate the contract upon ten days written notice to the Contractor without cause. Any project assigned prior to the termination notice shall be completed and the Contractor will be paid in accordance with the terms of this contract.

CARE OF WORK:

The Contractor shall furnish and erect, at no additional cost to the City, whatever sidewalks, bridges and culverts, or other works as may be necessary for the protection of the public including but not limited to barricades, fences, etc. and for the safe and proper execution of other public utility lines so as not to interfere therewith or damage or cause damage thereto. The Contractor shall be responsible for all damages to persons or property that occur as a result of his fault, emission, or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all work performed hereunder until completion and final acceptance, whether or not the same has been covered in whole or in part by payments made by the City.

CLEANING UP:

Before acceptance of the project, or as directed by the Engineer, roadway, borrow sources, waste areas, and all ground occupied by the Contractor within the project limits in connection with the work shall be cleaned of all rubbish, excess materials, temporary structures, and equipment.

INDEMNIFICATION:

To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the City and its agents and employees, from and against all claims, damages, losses and expenses, including attorneys' fees, arising out of or resulting from the performance of the work, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) including the loss of use resulting therefrom, and (2) is caused in whole or in part by any negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this paragraph.

In any and all claims against the City or any of its agents or employees by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation under this paragraph shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.

INSURANCE REQUIREMENTS:

Contractor's Liability and Other Insurance:

The Contractor shall purchase and maintain with a company acceptable to the City and authorized to do business with the State of North Carolina, such insurance as will protect him from claims under worker's compensation laws, disability benefit laws or other similar employee benefit laws; from claims for damages because of bodily injury, occupational sickness or disease, or death of his employees, and

claims insured by usual personal injury liability coverage; from claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees including claims insured by usual personal injury liability coverage; and from claims for injury to or destruction of tangible property, including loss of use resulting therefrom - any or all of which may arise out of or result from the contractors operations under the contract documents, whether such operations be by himself or any subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be legally liable. This insurance shall be written for not less than the limits of liability specified below.

Automobile - Bodily injury and property liability covering all owned, non-owned and hired automobiles for limits of not less than \$1,000,000 bodily injury each person, each accident and \$1,000,000 property damage, or \$1,000,000 combined single limit - Bodily injury and property damage combined.

Commercial General Liability - Bodily injury and property damage liability as shall protect the contractor and any subcontractor performing work under this contract from claims of bodily injury or property damage which arise from operations of this contract whether such operations are performed by the contractor, any subcontractor or anyone directly or indirectly employed by either. The amounts of such insurance shall not be less than \$1,000,000 bodily injury each occurrence/aggregate and \$1,000,000 property damage each occurrence/aggregate or \$1,000,000 bodily injury and property damage combined single limits each occurrence/aggregate. This insurance shall include coverage for products/completed operations, personal injury liability and contractual liability assumed under the indemnity provision of this contract and broad form property damage, explosion, collapse and underground property damage (XC&U). The coverage shall be on an occurrence basis.

Worker's Compensation and Employers Liability - Shall meet the statutory requirement of the State of North Carolina, in the amount of \$100,000 each accident and disease - each employee and \$500,000 disease policy limit.

At the time of execution of the contract, the contractor shall provide the City with insurance certificates certifying that the foregoing insurance is in force; and such insurance certificates shall include provisions that the insurance shall not be canceled, allowed to expire or be materially changed without giving the City thirty (30) days advance written notice by registered mail.

The contractor is advised that if any part of the work under the contract is sublet, he shall require the subcontractor(s) to carry insurance as required above. However, this will in no way relieve the contractor from providing full insurance coverage on all phases of the projects, including any that are sublet.

When certain work is to be performed inside rights-of-way owned by railroads, North Carolina Department of Transportation or other agencies, both the contractor and any subcontractor may be required to furnish individual insurance certificates made in favor by the controlling agency, with limits established by that agency.

PRECONSTRUCTION CONFERENCE:

A preconstruction conference will be scheduled as soon as practical after the award of the contract. The Contractor shall attend the conference along with the prospective job superintendent; any anticipated major subcontractors and major material suppliers. A proposed progress schedule in a form satisfactory to the Engineer and a statement of the anticipated monthly progress payments showing the percent of progress each month shall be submitted. The Contractor shall also provide at least two (2) local telephone numbers which may be used to contact the Contractor or his authorized representative in the event of an emergency after normal business hours. Upon receipt of the required documentation, a Notice to Proceed will be issued by the Engineer.

SPECIFICATIONS PROVIDED:

The Contractor will be provided with three (3) sets of specifications. Additional sets may be obtained at the cost of printing.

PERIODIC PAYMENTS:

The City will make periodic payments based on the work progress estimates prepared by the Engineer and the payment request submitted by the Contractor on a monthly schedule established by the Engineer. Payment will be made within twenty (20) calendar days after receipt of a correct payment request.

For contracts less than \$50,000, partial payments may be made twice each month if in the judgment of the Engineer the amount of work performed is sufficient to warrant such payment. No partial payment will be made when the total value of the work performed since the last partial payment, excluding mobilization, amounts to less than \$1,000.00.

Partial payment requests submitted at the end of a quarter, fiscal year or final payment, shall be accompanied by a North Carolina Local Sales or Use Tax Statement for the prime contractor and all subcontractors. Payment requests and tax statements shall be submitted on an original "Application and Certificate for Payment", AIA Document G702, and "Continuation Sheet", AIA Document G703. A form is shown at the end of this section. The tax statement shall show the N.C. Sales Tax and Greenville County tax paid. It shall also list any payments made directly to the North Carolina Department of Revenue. If no tax has been paid during the pay request period, "NONE" shall be entered on the tax form. Each statement shall be signed by a company officer and certified by a Notary Public.

The Contractor shall have a copy of his current payment request on the job site, which may be reviewed by subcontractors upon request.

An amount equal to ten percent (10%) of the total amount due on payment requests will be deducted and retained until fifty percent (50%) of the work has been completed. At this time, the Engineer may reduce the amount of retainage, if, in his opinion, work has been progressing satisfactorily. Any reduction of retainage below five percent (5 %) will be strictly at the discretion of the Engineer. Any reduction of retainage below two percent (2 %) will be at the discretion of the Engineer, and will require consent of

surety. The full contract retainage may be reinstated if the manner of completion of the work and its progress do not remain satisfactory to the Engineer, or for other good and sufficient reason.

Payment will be made on ninety percent (90%) of materials on hand stored on the project site or in a bonded warehouse. Requests for payment of materials on hand shall be accompanied by the original supplier's invoice and proof of insurance coverage of the storage facility.

The Contractor can use a form other than the AIA Document G702 as long as it has a statement that the Contractor certifies the application for payment or adds the following statement to each request for payment:

“I hereby certify that the labor and materials listed on this request for payment have been used in the construction of the Work, or that all materials included in this request for payment and not yet incorporated into the construction are now on the site; and that all lawful charges for labor, materials, etc., covered by previous Certificates for Payment have been paid and that all other lawful charges on which this request for payment is based have been paid for in full or will be paid for in full from the funds received in payment of this request within ten (10) calendar days from receipt of this partial payment from OWNER.”

GUARANTEE:

The Contractor shall guarantee all materials and workmanship for a period of one (1) year from the date of acceptance by the City and shall replace any portions that fail because of faulty materials or workmanship at no additional cost to the City. A six (6) month and eleven (11) month inspections will be held during the warranty period. The Contractor shall immediately repair all defective items upon notification. Items repaired under the provisions shall have an extended warranty period of twelve (12) months of repair of the item.

PROJECT CLOSEOUT DOCUMENTS:

The Contractor shall provide the following documents with the final payment request:

1. Consent of Surety to Final Payment (Contracts equal to or exceeding \$100,000)
2. Contractor's Release and Waiver of Claim
3. N.C. and Pitt Co. Sales or Use Tax Statements and Certifications
4. Itemized Statement of Payments Made to Minority and Women's Business Enterprises (Notarized)

No final payment will be authorized until these documents have been properly completed and submitted by the Contractor.

SALES TAX

Sales taxes may be listed on the proposal, but as a separate item. No charge will be allowed for Federal

Excise and Transportation Tax from which the City is exempt.

The following procedure in handling the North Carolina Sales Tax is applicable to this project. Contractors shall comply fully with the requirements outlined hereinafter, in order that the Owner may recover the amount of the tax permitted under the law.

It shall be the Contractor's responsibility to furnish the Owner documentary evidence showing the materials used and sales tax paid by the Contractor and each of his Subcontractors. Such evidence shall be transmitted to the Owner.

The documentary evidence shall consist of a certified statement, by the Contractor and each of his subcontractors individually showing total purchases of materials for each separate vendor and total sales taxes paid each vendor. Certified statement must show the invoice number, or numbers, covered and inclusive dates of such invoices.

SECTION 01010 - PROJECT REQUIREMENTS

RELATED DOCUMENTS:

The general provisions of the Contract, including the General and Special Conditions and Division-1 Specification sections apply to work of this section.

GENERAL DESCRIPTION OF WORK:

The Project will consist of installing 5' wide concrete sidewalk on the North side of Greenville Boulevard from Kristin Drive to Mall Drive. The project will include all site preparation, utility adjustments, asphalt and concrete work, driveway and curb and gutter construction. The Contractor will install improvements on City of Greenville and NCDOT Right of Way and will be subject to their associated standards and specifications.

OTHER CONSTRUCTION CONTRACTS:

Work at the site performed by others under separate contracts includes the following:

Relocation of Utilities (Electric, Telephone, Etc.)

Adjust Signal Wiring Box, Cable Pedestal, Electric Vault Box, Telephone Manhole

Associated Miscellaneous Work

COORDINATION:

The CONTRACTOR shall plan, schedule, and coordinate his operations in a manner, which will facilitate the simultaneous progress of the Work included under Other Construction Contracts outside the scope of these Contract Documents.

RESPONSIBILITY FOR MATERIALS AND EQUIPMENT:

Items Furnished by CONTRACTOR: The CONTRACTOR shall be fully responsible for all materials and equipment, which he has furnished, and shall furnish necessary replacements at any time prior to expiration of the Guaranty Period.

OFF-SITE STORAGE:

Off-site storage arrangements shall be acceptable to the OWNER for all materials and equipment not incorporated into the work but included in Applications for Payment. Such off-site storage arrangements shall be presented in writing, and shall afford adequate and satisfactory security and protection. Off-site storage facilities shall be accessible to the ENGINEER.

EQUIVALENT MATERIALS AND EQUIPMENT:

Whenever a material or article is specified or described by using the name of a proprietary product or the name of a particular manufacturer or vendor, the specified item mentioned shall be understood as establishing the type, function and quality desired. Other manufacturers' products may be accepted provided sufficient information is submitted to allow the ENGINEER to determine that the products proposed are equivalent to those named.

Requests for review of equivalency will not be accepted from anyone except the CONTRACTOR, and such requests will not be considered until after the Contract has been awarded.

Proposed equivalent and or equal items shall be submitted for review by the procedure set forth in Item No. 10 of the Instructions to Bidders (IB-4 and IB-5).

It is the intent of these specifications to insure that materials and equipment of the highest reliability are supplied. The design of the overall product and selection of materials and equipment included in these specifications have been based upon dimensions, structures, connection wiring, etc. required for the first manufacturer listed in every reference to a quality standard. If material or equipment of another manufacturer (including alternatives specifically referenced) is offered, the cost of any changes in structures, building, piping, wiring, etc., as well as any detailed drawings necessary to show such required changes, shall be borne by the CONTRACTOR with no additional cost to the Owner.

SALVAGE OF MATERIALS AND EQUIPMENT:

Existing materials and equipment removed, and not reused, as a part of the Work shall become the CONTRACTOR's property except the following items which shall remain the Owner's property:

- Fire Hydrants
- Castings
- Utility Boxes
- Signs

Salvaged items not to be reused in the Work, but to remain Owner's property, shall be delivered by CONTRACTOR in good condition to Greenville Utilities Commission Operations Center or to the City of Greenville Public Works Department (depending upon the salvaged item).

The CONTRACTOR shall carefully remove in a manner to prevent damage all materials and equipment specified or indicated to be salvaged and reused or to remain property of the OWNER. He shall store and protect salvaged items specified or indicated to be reused in the Work.

Any items damaged in removal, storage or handling through carelessness or improper procedures shall be replaced by the CONTRACTOR in kind or with new items.

The CONTRACTOR may at his option furnish and install new items in lieu of those specified or

indicated to be salvaged and reused, in which case such removed items will become the CONTRACTOR's property.

Existing materials and equipment removed by the CONTRACTOR shall not be reused in the Work except where so specified or indicated.

LAND FOR CONSTRUCTION PURPOSES:

The CONTRACTOR will be permitted to use available land belonging to the OWNER, on or near the site of the Work, for construction purposes and for the storage of materials and equipment. The location and extent of the areas so used shall be as indicated on the drawings.

The CONTRACTOR shall immediately move stored material or equipment if any occasion arises, as determined by the OWNER, requiring access to the storage area. Materials or equipment shall not be placed on the property of the OWNER until the OWNER has agreed to the location to be used for storage.

EASEMENTS AND RIGHTS-OF-WAY:

The OWNER will provide the easements and rights-of-way for construction. The CONTRACTOR shall confine his construction operations within the limits indicated on the drawings, and shall use due care in placing construction tools, equipment, excavated materials and pipeline materials and supplies, so as to cause the least possible damage to property and interference with traffic.

On Private Property: Easements across private property are indicated on the drawings. The CONTRACTOR shall set stakes to mark the boundaries of construction easement across private property. The stakes shall be protected and maintained until completion of construction and cleanup.

Work Within Highway Rights-of-Way: The OWNER shall obtain Permits. All Work performed and all operations of the CONTRACTOR, his employees or subcontractors, within the limits of highway rights-of-way, shall be in conformity with the requirements and be under the control (through the OWNER) of the highway authority owning, or having jurisdiction over and control of, the right-of-way in each case.

OPERATION OF EXISTING FACILITIES:

The existing utilities must be kept in continuous operation throughout the construction period. No interruption will be permitted which adversely affects the degree of service provided. Provided permission is obtained from the OWNER in advance and portions of the existing facilities may be taken out of service for short periods corresponding with periods of minimum service demands.

NOTICES TO OWNERS AND AUTHORITIES:

The CONTRACTOR shall, as provided in General Conditions, notify owners of adjacent property and

utilities when prosecution of the Work may affect them.

When it is necessary to temporarily deny access by owners or tenants to their property, the CONTRACTOR shall give notices sufficiently in advance to enable the affected persons to provide for their needs. Notices shall conform to any applicable local ordinance and, whether delivered orally or in writing, shall include appropriate information concerning the interruption and instructions on how to limit their inconvenience.

Utilities and other concerned agencies shall be contacted at least 48 hours prior to cutting or closing streets or other traffic areas or excavating near underground utilities or pole lines. The CONTRACTOR shall contact NC ONE-CALL forty eight (48) hours prior to any excavation. Locations of existing utilities by NC ONE-CALL are good for only ten (10) days after the date of location.

EXISTING CITY STREETS:

The Contractor shall provide for the removal and relocation of existing street signs located within the rights of way to allow for construction of sidewalk or utility adjustment. A separate pay item for this work will not be included. Any cost associated with this work should be included in the cost of the sidewalk construction.

UNFAVORABLE CONSTRUCTION CONDITIONS:

During unfavorable weather, wet ground or other unsuitable construction conditions, the CONTRACTOR shall confine his operations to work that will not be affected adversely by such conditions. No portion of the Work shall be constructed under conditions that would affect adversely the quality or efficiency thereof, unless special means or precautions are taken by the CONTRACTOR to perform the Work in a proper and satisfactory manner.

CUTTING AND PATCHING:

As provided in General Conditions, the CONTRACTOR shall perform all cutting and patching required for the Work and as may be necessary in connection with uncovering Work for inspection or for the correction of defective Work.

The CONTRACTOR shall perform all cutting and patching required for the installation of improperly timed Work, to remove samples of installed materials for testing, provide for alteration of existing facilities or the installation of new Work in existing construction. Except when the cutting or removal of existing construction is specified or indicated, the CONTRACTOR shall not undertake any cutting or demolition that may affect the structural stability of the Work or existing facilities without the ENGINEER's concurrence.

The CONTRACTOR shall provide all shoring, bracing, supports and protective devices necessary to safeguard all Work and existing facilities during cutting and patching operations.

Materials shall be cut and removed to the extent indicated on the drawings or as required to complete the

Work. Materials shall be removed in a careful manner with no damage to adjacent facilities or materials. The CONTRACTOR shall remove materials, which are not salvageable, from the site.

All Work and existing facilities affected by cutting operations shall be restored with new materials, or with salvaged materials acceptable to the ENGINEER, to obtain a finished installation with the strength, appearance and functional capacity required. If necessary, entire surfaces shall be patched and refinished.

CLEAN UP:

The CONTRACTOR shall keep the premises free at all times from accumulations of waste materials and rubbish. The CONTRACTOR shall provide adequate trash receptacles about the site, and shall promptly empty the containers when filled.

Construction materials stored on the site shall be kept off the ground, neatly stacked, protected from rain and sun when required by the ENGINEER, and the area around the stored materials shall be kept free of trash, weeds and brush.

The CONTRACTOR shall neatly stack construction materials, such as concrete forms and scaffolding when not in use. The CONTRACTOR shall promptly remove splattered concrete, asphalt, oil, paint, corrosive liquids, cleaning solutions, etc. from surfaces to prevent marring or other damage. Volatile wastes shall be properly stored in covered metal containers and removed daily.

Wastes shall not be buried or burned on the site or disposed of into storm drains, sanitary sewers, streams or waterways. All wastes shall be removed from the site and disposed of in a manner complying with local ordinances and anti-pollution laws.

Adequate cleanup shall be a condition for recommendation of progress payment applications.

APPLICABLE CODES:

References in the Contract Documents to local codes mean the North Carolina State Building Code, City of Greenville Manual of Standard Designs and Details, Greenville Utilities Commission Manual for Design and Construction of Water and Wastewater System Extensions, North Carolina Department of Transportation, and any applicable County or municipal codes.

Other standard codes, which apply to the Work, are designated in the specifications.

REFERENCE STANDARDS:

Reference to the standards of any technical society, organization or association, or to codes of local or state authorities, shall mean the latest standard, code, specification or tentative standard adopted and published at the date of receipt of bids, unless specifically stated otherwise.

ABBREVIATIONS AND SYMBOLS:

Abbreviations used in the Contract Documents are defined as follows:

AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ANSI	American National Standards Institute
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineer
ASTM	American Society for Testing and Materials
AWG	American Wire Gauge
APWA	American Public Works Association
AWWA	American Water Works Association
CRSI	Concrete Reinforcing Steel Institute
CS	Commercial Standard
DEM	Division of Environmental Management of the NC Department of Environment, Health and Natural Resources
DEH	Division of Environmental Health of the NC Department of Environment and Natural Resources
Fed Spec	Federal Specifications
NCDOT	North Carolina Department of Transportation
NEC	National Electrical Code
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
NSPC	National Standard Plumbing Code
OSHA	Occupational Safety and Health Administration
PCI	Prestressed Concrete Institute
PS	Product Standard
SAE	Society of Automotive Engineers
SCPRF	Structural Clay Products Research Foundation
SSPC	Steel Structures Painting Council
UL	Underwriters' Laboratories

US U. S. Bureau of Standards
PRECONSTRUCTION CONFERENCE:

Prior to the commencement of Work at the site, a preconstruction conference will be held at a mutually agreed time and place. The conference shall be attended by:

- The CONTRACTOR and his superintendent
- Principal Subcontractors
- City of Greenville Representatives
- Representatives of Greenville Utilities Commission
- Governmental representatives as appropriate
- Others as requested by CONTRACTOR, OWNER, or ENGINEER

Unless previously submitted to the ENGINEER, the CONTRACTOR shall bring to the conference a tentative schedule for each of the following:

- Progress
- Procurement
- Values for Progress Payment purposes
- Shop Drawings and other submittals

The purpose of the conference is to designate responsible personnel and establish a working relationship. Matters requiring coordination will be discussed and procedures for handling such matters established. The agenda will include:

- CONTRACTOR's tentative schedules
- Transmittal, review, and distribution of CONTRACTOR's submittals
- Processing applications for payment
- Maintaining record documents
- Critical Work sequencing

- Field decisions and Change Orders
- Use of premises, office and storage areas, security, housekeeping, and Owner's needs

- Major equipment deliveries and priorities

- CONTRACTOR'S assignments for safety and first aid

The ENGINEER will preside at the conference and will arrange for keeping the minutes and distributing the minutes to all persons in attendance.

PROGRESS MEETINGS:

Regular progress meetings will be held at an agreed time and place at least monthly and at other times as requested by ENGINEER or required by progress of the Work. The Owner, Contractor, Engineer and all subcontractors active on the site shall be represented at each meeting. The purpose of the meetings will be to review the progress of the Work, maintain coordination of efforts, discuss changes in scheduling and resolve other problems, which may develop.

SITE ADMINISTRATION:

The Contractor shall be responsible for all areas of the site used by him, by other contractors, and all subcontractors in the performance of the Work. He will exert full control over the actions of all employees and other persons with respect to the use and preservation of property and existing facilities, except such controls as may be specifically reserved to the OWNER or others.

The CONTRACTOR has the right to exclude from the site all persons who have no purpose related to the Work or its inspection, and may require all persons on the site (except Owner's employees and ENGINEER) to observe the same regulations, as he requires of his employees.

END OF SECTION 01010

REFERENCE STANDARDS

SECTION 01090 - REFERENCE STANDARDS

PART 1 -- GENERAL

1.01 THE REQUIREMENT

- A. Wherever reference is made to any published standards, codes, or standard specifications, it shall mean the latest standard code, specification, or tentative specification of the technical society, organization, or body referred to, which is in effect at the date of receipt of Bids.
- B. All materials, products, and procedures used or incorporated in the work shall be in strict conformance with applicable codes, regulations, specifications, and standards.
- C. A partial listing of codes, regulations, specifications, and standards includes the following:
- Air Conditioning and Refrigeration Institute (ARI)
 - Air Diffusion Council (ADC)
 - Air Moving and Conditioning Association (AMCA)
 - The Aluminum Association (AA)
 - American Architectural Manufacturers Association (AAMA)
 - American Concrete Institute (ACI)
 - American Gear Manufacturers Association (AGMA)
 - American Hot Dip Galvanizers Association (AHDGA)
 - American Institute of Steel Construction, Inc. (AISC)
 - American Iron and Steel Institute (AISI)
 - American National Standards Institute (ANSI)
 - American Society of Civil Engineers (ASCE)
 - American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRAE)
 - American Society of Mechanical Engineers (ASME)

- American Society for Testing and Materials (ASTM)
- American Standards Association (ASA)
- American Water Works Association (AWWA)
- American Welding Society (AWS)
- American Wood-Preservers Association (AWPA)
- Anti-Friction Bearing Manufacturers Association (AFBMA)
- Consumer Product Safety Commission (CPSC)
- Factory Mutual (FM)
- Federal Specifications
- Instrument Society of America (ISA)
- Institute of Electrical and Electronics Engineers (IEEE)
- National and Local Fire Codes
- Lightning Protection Institute (LPI)
- National Electrical Code (NEC)
- National Electrical Manufacturer's Association (NEMA)
- National Electrical Safety Code (NESC)
- National Electrical Testing Association (NETA)
- National Fire Protection Association (NFPA)
- North Carolina State Building Code
- Regulations and Standards of the Occupational Safety and Health Act (OSHA)
- Southern Building Code Congress International, Inc. (SBCCI)
- Sheet Metal & Air Conditioning Contractors National Association (SMACNA)

- Standard Mechanical Code
- Standard Plumbing Code
- Uniform Building Code (UBC)
- Underwriters Laboratories Inc. (UL)

D. Contractor shall, when required, furnish evidence satisfactory to the Engineer that materials and methods are in accordance with such standards where so specified.

E. In the event any questions arise as to the application of these standards or codes, copies shall be on-site by the Contractor.

PART 2 -- PRODUCTS

(NOT USED)

PART 3 -- EXECUTION

(NOT USED)

END OF SECTION 01090

UNIT PRICES

SECTION 01150 – UNIT PRICES

RELATED DOCUMENTS:

The general provisions of the Contract, including the General, Supplementary Conditions and Division-1 Specification sections apply to work of this section.

SCOPE:

This section covers methods of payment for items of Work under this Contract.

GENERAL:

The Total Bid Price for each part of the Project shall cover all Work required by the Contract Documents. All costs in connection with the proper and successful completion of the Work, including furnishing all materials, equipment, supplies and appurtenances; providing all construction plant, equipment and tools; and performing all necessary labor and supervision to fully complete the Work shall be included in the unit and lump sum prices bid. All Work not specifically set forth as a pay item in the Bid Form shall be considered a subsidiary obligation of CONTRACTOR and all costs in connection therewith shall be included in the prices bid.

ESTIMATED QUANTITIES:

All estimated quantities stipulated in the Bid Form or other Contract Documents are approximate and are to be used only (a) as a basis for estimating the probable cost of the Work and (b) for the purpose of comparing the bids submitted for the Work. The actual amounts of work done and materials furnished under unit price items may differ from the estimated quantities. The basis of payment for work and materials will be the actual amount of work done and materials furnished. CONTRACTOR agrees that he will make no claim for damages, anticipated profits or otherwise on account of any difference between the amounts of work actually performed and materials actually furnished and the estimated amounts therefore. Payment will be made or lump sum prices adjusted according to unit prices bid and as described below.

Mobilization (3% maximum): The unit price bid for mobilization shall be full compensation for preparing for work and associated operations, including but not limited to project bonds and insurance, the necessary movement of personnel, equipment, supplies, and incidentals to or near the project site; for establishing offices and facilities as may be required for the work; and the subsequent removal of personnel, equipment, supplies, and incidentals for the work site at the completion of the work; and all other costs which the Contractor may incur for the work which are excluded from other bid items. One half the total amount will be paid with first partial payment after construction begins, and the remaining one half with the second partial payment. The total amount for mobilization and bonding shall not exceed three percent (3%) of the total bid price.

Traffic Control: Traffic control measures as required are considered a subsidiary obligation and all costs shall be included in the price bid for sidewalk, curb and gutter, and asphalt paving as appropriate.

Site Preparation/Excavation/Grading: This item shall include excavation, removal/addition of earth (including grass, overgrowth, shrubs and small trees) to sub-grade, and any other removal or preparation needed for start of construction. This item includes any backfilling needed for completion of the project. This also includes disposal of all classified or unclassified excavation not needed for the completion of the project. Ground shall slope away from new sidewalk/curb to provide for positive drainage. Any material not used on the job shall become the property of the contractor and shall be disposed of off-site. Any erosion control needed for the project is also paid under this item. Payment shall be per lump sum as listed in the bid schedule.

Remove and Replace Existing Concrete Driveway: Includes removal and disposal of concrete driveways and replacing it with new 6" concrete driveway as indicated on the plans. This item includes all necessary materials, equipment, and labor needed to complete the item in full. Payment will be per square yard removed as listed in the bid schedule.

Remove Existing Curb and Gutter: Includes removal and proper disposal of concrete curb and gutter and base course as required for construction, including sawing joint. Payment will be per lineal foot removed as listed in the bid schedule.

24"/30" Concrete Curb and Gutter (Valley and Standard): This item shall include the materials, equipment, and labor necessary to install concrete curb and gutter including stone base to final grade. Payment will be per linear foot installed, based upon the type installed as listed in the bid schedule.

Asphalt Driveway/Roadway Patch: This item includes all materials, equipment and labor necessary to install/repair existing asphalt driveway made necessary by the removal/installation of any work associated with this contract. Work shall include preparation of the repair and sub-grade, tack as needed, placement of asphalt and compaction. Load tickets will be required for payment of this item and given to the owner at the time of the pay request. Payment shall be per ton of asphalt placed as listed in the bid schedule.

Adjust Existing Meter/Valve Box (Water) to grade: Adjust existing valve boxes as necessary to match the finished grade or to allow for project construction. Payment will be incidental to the bid proposal as listed in the bid schedule.

Seeding and Mulching: This item shall include the labor, equipment and materials necessary to complete the work according to specifications. Payment will be per acre of area seeded and mulched. Where necessary, the Owner may require tack or matting to hold seed and straw in place adjacent to roadways. This shall also include any temporary seeding needed as indicated by the Owner as listed in the bid schedule.

Subsidiary Obligations: All work not specifically set forth as a pay item in the Bid Proposal shall be considered a subsidiary obligation of the Contractor and all costs in connection therewith shall be included in the prices bid. Subsidiary obligations include, but are not limited to temporary drainage

provisions, dewatering, removal and off-site disposal of excess or unsuitable materials and debris, removal and replacement of existing features such as culverts, mailboxes, and lawns, and any construction staking needed to complete project.

Testing Allowance: The testing allowance is for testing of soils as specified in Section 02220, testing of concrete specified in Section 03305, etc. Payment will be made for actual amount invoiced by the Testing Company when authorized by the Engineer.

END OF SECTION 01150

SUBMITTALS

SECTION 01300 - SUBMITTALS

PART 1 - GENERAL

RELATED DOCUMENTS:

The general provisions of the Contract, including the General and Special Conditions and Division-1 Specification sections apply to work of this section.

CONSTRUCTION SCHEDULE:

Before Work is started, the CONTRACTOR for Contract of the project shall submit to the ENGINEER for review three (3) copies of the schedule of the proposed construction operations. The OWNER shall cooperate with the CONTRACTOR in arrangements for continuity of service and operation of valves and other control facilities. The construction schedule shall indicate the sequence of the Work, the time of starting and completion of each part, the installation date for each major item of equipment, and the time for making connections to existing piping, structures, or facilities.

At a minimum, every thirty (30) days the schedule shall be revised as necessary to reflect changes in the progress of the Work. The schedule revisions will be discussed at the monthly progress meeting.

The OWNER may require the CONTRACTOR to add to his plant, equipment, or construction forces, as well as increase the working hours, if operations fall behind schedule at any time during the construction period.

PROGRESS REPORTS:

A progress report shall be furnished to the ENGINEER with each copy of the application for progress payment. If the Work falls behind schedule, the CONTRACTOR shall submit additional progress reports at such intervals as ENGINEER may request.

Each progress report shall include sufficient narrative to describe current and anticipated delaying factors, their effect on the construction schedule, and proposed corrective actions. Any Work reported complete, but which is not readily apparent to the ENGINEER, must be substantiated with satisfactory evidence.

Each progress report shall also include three (3) prints of the accepted graphic schedule marked to indicate actual progress.

SURVEY DATA:

All field books, notes, and other data developed by the CONTRACTOR in performing surveys required as part of the Work shall be available to the ENGINEER for examination throughout the construction period. All such data shall be submitted to the ENGINEER with the other documentation required for

final acceptance of the Work.

SHOP DRAWINGS, MATERIAL CERTIFICATES AND PRODUCT DATA:

Engineering data covering all equipment and fabricated materials that will become a permanent part of the Work under this contract shall be submitted to the ENGINEER for review prior to installation.

Material Certificates are notarized statements by an official of the supplier certifying that the materials meet the specifications and are used in lieu of or in addition to shop drawings and product data.

All submittals, regardless of origin, shall be stamped with the approval of CONTRACTOR and identified with the name and number of the Contract, the CONTRACTOR's name, and references to applicable specification paragraphs and Contract Drawings. Each submittal shall indicate the intended use of the item in the Work. When catalog pages are submitted, applicable items shall be clearly identified. The current revision, issue number, and date shall be indicated on all drawings and other descriptive data.

The CONTRACTOR's stamp of approval is a representation to the OWNER and the ENGINEER that the CONTRACTOR accepts full responsibility for determining and verifying all quantities, dimensions, field construction criteria, materials, catalog numbers, and similar data, and that he has reviewed or coordinated each submittal with the requirements of the Work and the Contract Documents.

All deviations from the Contract Documents shall be identified on each submittal and shall be tabulated in the CONTRACTOR's letter of transmittal. Such submittals shall, as pertinent to the deviation, indicate essential details of all changes proposed by CONTRACTOR (including modifications to other facilities that may be a result of the deviation) and all required piping and wiring diagrams.

The CONTRACTOR shall accept full responsibility for the completeness of each submission, and, in the case of a resubmission, shall verify that all exceptions previously noted by ENGINEER have been taken into account. In the event that more than one resubmission is required because of failure of the CONTRACTOR to account for exceptions previously noted, the CONTRACTOR shall reimburse the OWNER for the charges of the ENGINEER for review of the additional resubmissions.

Any need for more than one resubmission, or any other delay in obtaining the ENGINEER's review of submittals, will not entitle the CONTRACTOR to extension of the Contract Time unless delay of the Work is directly caused by a change in the Work authorized by a Change Order or by failure of ENGINEER to return any submittal within twenty one (21) days after its receipt in the ENGINEER's office.

The ENGINEER's review of drawings and data submitted by the CONTRACTOR will cover only general conformity to the drawings and specifications, external connections, and dimensions, which affect the layout. The ENGINEER's review does not indicate a thorough review of all dimensions, quantities, and details of the material, equipment, device, or item shown. The ENGINEER's review of submittals shall not relieve the CONTRACTOR from responsibility for errors, omissions, or deviations, or responsibility for compliance with the Contract Documents.

Five (5) copies (or one reproducible copy of large drawings) of each drawing and necessary data shall be submitted to the ENGINEER. The ENGINEER will not accept submittals from anyone but the CONTRACTOR. Submittals shall be consecutively numbered in direct sequence of submittal and without division by subcontracts or trades. Resubmittals shall bear the number of the first submittal followed by a letter (A, B, etc.,) to indicate the sequence of the resubmittal.

When the drawings and data are returned marked DISAPPROVED or RESUBMIT, the corrections shall be made as noted thereon and as instructed by the ENGINEER and five (5) corrected copies (or one corrected reproducible copy) resubmitted.

When corrected copies are resubmitted, the CONTRACTOR shall in writing direct specific attention to all revisions and shall list separately any revisions made other than those called for by the ENGINEER on previous submissions.

When the drawings and data are returned marked APPROVED AS NOTED, APPROVED, or RECORD COPY, no additional copies need be furnished.

END OF SECTION 01300

QUALITY CONTROL

SECTION 01400 - QUALITY CONTROL

RELATED DOCUMENTS:

The general provisions of the Contract including the General and Special Conditions and Division-1 Specification sections apply to work of this section.

TESTING LABORATORY SERVICES:

An independent commercial testing laboratory acceptable to the ENGINEER shall perform all tests, which require the services of a laboratory to determine compliance with the Contract Documents. The laboratory shall be staffed with experienced technicians, properly equipped, and fully qualified to perform the tests in accordance with the specified standards. The CONTRACTOR shall obtain the ENGINEER's approval of the Testing Laboratory before having services performed.

Testing Laboratory Services for Materials Qualification: The CONTRACTOR shall be responsible for all testing laboratory services in connection with concrete materials and mix designs, the design of asphalt mixtures, gradation tests for embedment, fill, and backfill materials, and all other tests and engineering data required for the ENGINEER's review of materials and equipment proposed to be used in the Work. The CONTRACTOR shall pay all costs for services for materials qualifications.

Testing Laboratory Services for Field Quality Control: The testing laboratory for field quality control shall work for the OWNER but is paid for by the CONTRACTOR from the testing allowance. All charges of testing laboratories for field quality control tests made in the field or laboratory on concrete, asphalt mixtures, moisture-density (Proctor) and relative density tests on embedment, fill, and backfill materials, in-place field density tests on embedments and fills, and other materials and equipment, during and after their incorporation in the Work shall be paid by the CONTRACTOR out of the testing allowance as discussed in SECTION 01010. Testing due to failed tests and wasted time due to improper scheduling by the CONTRACTOR will be paid for by the CONTRACTOR, not out of the testing allowance. Field sampling and testing will be performed by the CONTRACTOR or testing laboratory personnel, in the general manner indicated in the specifications, with minimum interference with construction operations. The ENGINEER shall determine the exact time and location of field sampling and testing, and may require such additional sampling and testing as necessary to determine that materials and equipment conform with data previously furnished by the CONTRACTOR and to the Contract Documents.

Arrangements for delivery of samples and test specimens to the testing laboratory will be made by the CONTRACTOR. The testing laboratory shall perform all laboratory tests within a reasonable time consistent with the specified standards and shall furnish a written report of each test.

The CONTRACTOR shall furnish all sample materials and cooperate in the sampling and field-testing activities, interrupting the Work when necessary. When sampling or testing activities are performed in the field by testing laboratory personnel, the CONTRACTOR shall furnish personnel and facilities to assist in the activities.

The OWNER shall not require the CONTRACTOR to retain any testing laboratory against which the CONTRACTOR has reasonable objection, and if at any time during the construction process the services become unacceptable to the CONTRACTOR, he may request in writing that such services be terminated. The request must be supported with evidence of improper testing. If the ENGINEER and the OWNER determine that sufficient cause exists, the CONTRACTOR may terminate the services and engage a different testing laboratory.

Transmittal of Test Reports: Written reports of tests and engineering data furnished by the CONTRACTOR for the ENGINEER's review of materials and equipment proposed to be used in the Work shall be submitted as specified for Shop Drawings in Section 01300.

The testing laboratory retained by the CONTRACTOR will furnish three copies of a written report of each test performed by laboratory personnel in the field or laboratory. Two (2) copies of each test report will be transmitted to the ENGINEER and one (1) copy to the CONTRACTOR within three (3) days after each test is completed.

END OF SECTION 01400

TEMPORARY FACILITIES

SECTION 01500 - TEMPORARY FACILITIES

RELATED DOCUMENTS:

The general provisions of the Contract, including the General and Special Conditions and Division-1 Specification sections apply to work of this section.

WATER:

All water required for and in connection with the Work to be performed and for any specified tests of piping, equipment, devices, etc. or for any other use as may be required for proper completion of the Work shall be provided by and at the expense of the CONTRACTOR. No separate payment for water used or required will be made and all costs in connection therewith shall be included in the Bid.

POWER:

The CONTRACTOR shall provide all power for operation of the CONTRACTOR's equipment, or for any other use by CONTRACTOR.

SANITARY FACILITIES:

The CONTRACTOR under Contract shall furnish temporary sanitary facilities at the site, as provided herein, for the needs of all construction workers and others performing work or furnishing services on the Project.

Sanitary facilities shall be of reasonable capacity, properly maintained throughout the construction period, and obscured from public view to the greatest practical extent. If toilets of the chemically treated type are used, at least one (1) toilet will be furnished for each twenty (20) men. The CONTRACTOR shall enforce the use of such sanitary facilities by all personnel at the site.

MAINTENANCE OF TRAFFIC:

The CONTRACTOR shall conduct his work to interfere as little as possible with public travel, whether vehicular or pedestrian. Whenever it is necessary to cross, obstruct, or close roads, driveways and walks, whether public or private, the CONTRACTOR shall provide and maintain suitable and safe bridges, detours, or other temporary expedients for the accommodation of public and private travel, and shall give reasonable notice to owners of private drives before interfering with them. Such maintenance of traffic will not be required when CONTRACTOR has obtained permission from the owner and tenant of private property, or from the authority having jurisdiction over public property involved, to obstruct traffic at the designated point.

In making open cut street crossings, the CONTRACTOR shall not block more than one-half of the street at a time. Whenever possible, the CONTRACTOR shall widen the shoulder on the opposite side to facilitate traffic flow. Temporary surfacing shall be provided as necessary on shoulders.

BARRICADES:

All sidewalks, driveways, streets, and other public thoroughfares that are closed to traffic or pedestrians shall be protected by effective barricades on which shall be placed acceptable warning signs. Barricades shall be located at the nearest intersecting public street on each side of the blocked section.

All open trenches and other excavations shall have suitable barricades, signs, and lights to provide adequate protection to the public. Obstructions such as material piles and equipment shall be provided with similar warning signs and lights.

All barricades and obstructions shall be illuminated with warning lights from sunset to sunrise. Material storage and conduct of the Work on or alongside public streets and highways shall cause the minimum obstruction and inconvenience to the traveling public.

All barricades, signs, lights and other protective devices shall be installed and maintained in conformity with applicable statutory requirements and, where within railroad and highway rights-of-way, as required by the authority having jurisdiction thereof.

FENCES:

All existing fences affected by the Work shall be maintained by the CONTRACTOR until completion of the Work. Fences which interfere with construction operations shall not be relocated or dismantled until written permission is obtained from the owner of the fence, and the period the fence may be left relocated or dismantled has been agreed upon. Where fences must be maintained across the construction easement, adequate gates shall be installed. Gates shall be kept closed and locked at all times when not in use.

On completion of the Work across any tract of land, the CONTRACTOR shall restore all fences to their original or to a better condition and to their original location.

PROTECTION OF PUBLIC AND PRIVATE PROPERTY:

The CONTRACTOR shall protect, shore, brace, support, and maintain all underground pipes, conduits, drains, and other underground construction uncovered or otherwise affected by their construction operations. All pavement, surfacing, driveways, curbs, walks, buildings, utility poles, guy wires, fences, and other surface structures affected by construction operations, together with all sod and shrubs in yards and parking areas, shall be restored to their original condition, whether within or outside the easement. All replacements shall be made with new materials.

No trees shall be removed outside of the permanent easement, except where authorized by the ENGINEER. Whenever practicable the CONTRACTOR shall tunnel beneath trees in yards and parking areas when on or near the line of trench. Hand excavation shall be employed as necessary to prevent injury to trees. Trees left standing shall be adequately protected against damage by construction operations.

The CONTRACTOR shall be responsible for all damage to streets, roads, highways, shoulders, ditches, embankments, culverts, bridges, and other public or private property, regardless of location or character, which may be caused by transporting equipment, materials, or men to or from the Work or any part or site thereof, whether by him or his Subcontractors. The CONTRACTOR shall make satisfactory and acceptable arrangements with the owner of, or the agency or authority having jurisdiction over, the damaged property concerning its repair or replacement or payment of costs incurred in connection with the damage.

All fire hydrants and water control valves shall be kept free from obstruction and available for use at all times.

DAMAGE TO EXISTING PROPERTY:

The CONTRACTOR will be held responsible for any damage to existing structures, Work, materials or equipment because of his operations and shall repair or replace any damaged structures, Work, materials, or equipment to the satisfaction of, and at no additional cost to, OWNER.

The CONTRACTOR shall protect all existing structures and property from damage and shall provide bracing, shoring, or other work necessary for such protection.

The CONTRACTOR shall be responsible for all damage to streets, roads, curbs, sidewalks, highways, shoulders, ditches, embankments, culverts, bridges, or other public or private property, which may be caused by transporting equipment, materials, or personnel to or from the Work. The CONTRACTOR shall make satisfactory and acceptable arrangements with the agency having jurisdiction over the damaged property concerning its repair or replacement.

TREE AND PLANT PROTECTION:

All trees and other vegetation that must be removed to perform the Work shall be removed and disposed of by the CONTRACTOR; however, no trees or cultured plants shall be unnecessarily removed unless their removal is indicated on the drawings. All trees and plants not removed shall be protected against injury from construction operations.

Trees considered by the ENGINEER to have any significant effect on construction operations are indicated on the drawings and those, which are to be preserved, are so indicated.

The CONTRACTOR shall take extra measures to protect trees designated to be preserved, such as erecting barricades, trimming to prevent damage from construction equipment, and installing pipe and other Work by means of hand excavation or tunneling methods. Such trees shall not be endangered by stockpiling excavated material or storing equipment within the drip-line of the tree or against the trunk.

When the injury or removal of trees designated to be preserved cannot be avoided, or when removal and replacement is indicated on the drawings, each tree injured beyond repair or removed shall be replaced

with a similar tree of the nearest size possible.

All trimming, repair, and replacement of trees and plants shall be performed by qualified nurserymen or horticulturists. Any trimming or removal of any tree within the right-of-way requires a permit obtained through the Urban Forester (252-329-4531).

SECURITY:

The CONTRACTOR shall be responsible for protection of the site, and all work, materials, equipment and existing facilities thereon, against vandals and other unauthorized persons.

No claim shall be made against the OWNER by reason of any act of an employee or trespasser, and the CONTRACTOR shall make good all damage to the Owner's property resulting from his failure to provide security measures as specified.

Security measures shall be at least equal to those usually provided by the OWNER to protect his existing facilities during normal operation, but shall also include such additional security fencing, barricades, lighting, watchman services and other measures as required to protect the site.

PARKING:

The CONTRACTOR under Contract shall provide and maintain suitable parking areas for the use of all construction workers and others performing work or furnishing services in connection with the Project as required to avoid any need for parking personal vehicles where they may interfere with public traffic, Owner's operations or construction activities.

TEMPORARY DRAINAGE PROVISIONS:

The CONTRACTOR shall provide for the drainage of stormwater and such water as may be applied or discharged on the site in performance of the Work. Drainage facilities shall be adequate to prevent damage to the Work, the site, and adjacent property.

NOISE CONTROL:

The CONTRACTOR shall take reasonable measures to avoid unnecessary noise. Such measures shall be appropriate for the normal ambient sound levels in the area during working hours. All construction machinery and vehicles shall be equipped with practical sound muffling devices, and operated in a manner to cause the least noise consistent with efficient performance of the Work.

EROSION CONTROL:

The CONTRACTOR shall be familiar with the applicable provisions of the North Carolina Sedimentation Pollution Control Act of 1973, General Statutes, Chapter 113A, Article 4. The CONTRACTOR shall prevent erosion of soil on the site and adjacent property resulting from his

construction activities. Effective measures shall be initiated prior to the commencement of clearing, grading, excavation, or other operation that will disturb the natural protection.

Work shall be scheduled to expose areas subject to erosion for the shortest possible time, and natural vegetation preserved to the greatest extent practicable. Temporary fast growing vegetation or other suitable ground cover shall be provided as necessary to control runoff.

POLLUTION CONTROL:

The CONTRACTOR shall prevent the pollution of drains and watercourses by sanitary wastes, sediment, debris and other substances resulting from construction activities. No sanitary wastes will be permitted to enter any drain or watercourse other than sanitary sewers. No sediment, debris or other substance will be permitted to enter sanitary sewers and reasonable measures will be taken to prevent such materials from entering any drain or watercourse.

END OF SECTION 01500

MAINTENANCE AND PROTECTION OF TRAFIC

SECTION 01575 – MAINTENANCE AND PROTECTION OF TRAFFIC

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. Work of this section shall be performed in accordance with the requirements of the North Carolina Department of Transportation.
- B. Provide necessary traffic control measures and devices as required.
- C. Provide all bonds necessary to complete the work as the North Carolina Department of Transportation requires.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. All traffic control measures and devices shall conform to the requirements of the North Carolina Department of Transportation's Specifications, more specifically, the N.C.D.O.T. Construction and Maintenance Operation Supplement to the Manual on Uniform Traffic Control Devices, as amended.

PART 3 - EXECUTION

3.1 IMPLEMENTATION

- A. All traffic control measures and devices shall conform to the requirements of the N.C.D.O.T. Specifications, more specifically, the N.C.D.O.T. Construction and Maintenance Operation Supplement to the Manual on Uniform Traffic Control Devices, as amended.
- B. The Engineer has the authority and will suspend all work immediately until all N.C.D.O.T. requirements are met.

3.2 MAINTENANCE OF ACCESS

- A. The Contractor is required to maintain resident's access to their property. At the close of the working day, all driveways will be restored to a usable condition. The Contractor will fill the trench through the driveway so that the Owners will not damage vehicles when passing. Pavements will be replaced within five (5) working days.
- B. Additionally, the Contractor is required to maintain the mail carriers' access to mailboxes. At the close of each working day, all mailboxes and mailbox approaches will be restored to a usable condition as needed. Compacted fill and ABC stone shall be placed in front of and on approaches

to the mailboxes as necessary and will be included in the cost per linear foot of pipe.

- C. The Contractor will coordinate his activities with the Owners' of adjacent properties so as to allow the residents an opportunity to remove their vehicles during periods when driveways are cut or paved and access is not possible.

END OF SECTION 01575

SECTION 02110 - SITE CLEARING

PART 1 - GENERAL

RELATED DOCUMENTS:

The drawings and general provisions of the Contract, including General and Special Conditions and, Division 1 - Specification Sections, apply to work of this section.

DESCRIPTION OF WORK:

The extent of site clearing is shown on the drawings or instructed by the City Engineer's office.

Site clearing work includes, but is not limited to, the following:

- Protection of existing trees, shrubs, and other vegetation designated to remain.
- Removal of trees and other vegetation.
- Clearing and grubbing.
- Removing of above-grade improvements.
- Removing of below-grade improvements.

Related Work Specified Elsewhere:

- Earthwork: 02200
- Erosion and Pollution Control: Section 02910

JOB CONDITIONS:

Easements: The Owner is responsible for obtaining all permanent easements and temporary construction easements. The limits of these easements are indicated on the plans.

Protection of Existing Improvements: Provide protections necessary to prevent damage to existing improvements not indicated to be removed.

Protect improvements on both adjoining properties and on the Owner's easements.

Restore damaged improvements to their original condition, as acceptable to parties having jurisdiction.

Protection of Existing Trees and Vegetation: Protect existing trees and other vegetation which is to remain in place, against unnecessary cutting, breaking or skinning of roots, skinning and bruising of bark, smothering of trees by stockpiling construction materials or excavated materials within drip line, excess foot or vehicular traffic, or parking of vehicles within drip line. Provide temporary guards to protect trees and vegetation to be left standing.

Any location that will be excavated within the drip-line of trees designated to protect must be vertically sawed within the drip-line to the depth of the excavation.

PART 2 - PRODUCTS

Not applicable

PART 3 - EXECUTION

SITE CLEARING:

General: Remove vegetation, improvements, or obstructions interfering with installation of new construction. Remove such items elsewhere on the site or premises as specifically indicated. Removal includes stumps and roots.

Carefully and cleanly cut roots and branches of trees not indicated to be removed where such roots and branches obstruct new construction.

Clearing Permanent Easements in Lawn Areas: Remove existing trees, shrubs and lawn only to the extent necessary to permit the work to progress in an unobstructed manner. Do not indiscriminately clear the vegetation.

Clearing Temporary Construction Easements: Clear the area within the limits of the temporary construction easements only to the extent necessary to accomplish the work.

Site Grubbing: Completely remove stumps, roots, and other debris protruding through the ground surface within the cleared areas. Stumps shall be removed to the extent that they interfere with construction; otherwise the stumps shall be cut below the elevation of the existing ground.

Fill depressions caused by clearing and grubbing operations with satisfactory soil material, unless further excavation or earthwork is indicated.

Place fill material in horizontal layers not exceeding 6" loose depth and thoroughly compact to a density equal to adjacent original ground.

DISPOSAL OF WASTE MATERIALS:

Burning on Site: Burning is not permitted on the site.

Contractor shall obtain a site and legally dispose of all material removed from construction site.

END OF SECTION 02110

EARTHWORK

SECTION 02200 - EARTHWORK

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work of this section.

DESCRIPTION OF WORK:

Extent of earthwork is indicated on drawings.

Preparation of subgrade for sidewalks, curb and gutter, and pavements is included as part of this work.

Definition: "Excavation" consists of removal of material encountered to subgrade elevations indicated and subsequent disposal of materials removed.

Utility Trenching, Backfilling and Compaction consists of excavation and trenching work and shall include the necessary clearing, grubbing, and preparation of the site; removal and disposal of all debris; excavation and trenching as required; the handling, storage, transportation, and disposal of all excavated material; all necessary sheeting, shoring, and protection work; preparation of subgrades; pumping and dewatering as necessary or required; protection of adjacent property; backfilling; pipe embedment; and other appurtenant work.

QUALITY ASSURANCE:

Codes and Standards: Perform excavation work in compliance with applicable requirements of governing authorities having jurisdiction.

Testing and Inspection Service: Employ, at Contractor's expense, testing laboratory to perform soil testing for quality control testing during earthwork operations.

All subgrade and stone base shall be proof rolled in accordance with the City of Greenville standards.

SUBMITTALS:

Test Reports-Excavating: Submit following reports directly to Owner/Engineer from the testing services, with copy to Contractor:

Test reports on borrow material.

JOB CONDITIONS:

Site Information: It is expressly understood that Owner will not be responsible for interpretations or conclusions drawn therefrom by Contractor. Data are made available for convenience of Contractor.

Existing Utilities: Locate existing underground utilities in areas of work. If utilities are to remain in place, provide adequate means of support and protection during earthwork operations.

Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult utility owner immediately for directions. Cooperate with Owner and utility companies in keeping respective services and facilities in operation. Notify Greenville Utilities Commission (GUC) of damaged utilities immediately. GUC will repair damaged utilities by contractor at contractor's expense.

Do not interrupt existing utilities serving facilities occupied and used by Owner or others, during occupied hours, except when permitted in writing by Owner and then only after acceptable temporary utility services have been provided.

Provide minimum of forty eight (48)-hour notice to Owner/Engineer, and receive written notice to proceed before interrupting any utility.

Demolish and completely remove from site existing underground utilities indicated to be removed. Coordinate with utility companies for shut-off of services if lines are active.

Use of Explosives: The use of explosives is not permitted.

Protection of Persons and Property: Barricade open excavations occurring as part of this work and post with warning lights.

Operate warning lights as recommended by authorities having jurisdiction.

Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout and other hazards created by earthwork operations.

PART 2 - PRODUCTS

SOIL MATERIALS:

Definitions:

Satisfactory soil materials are defined as those complying with ASTM D2487 soil classification Groups GW, GP, GM, GC, SM, SW and SP.

Unsatisfactory soil materials are defined as those complying with ASTM D2487 soil classification groups ML, MH, CL, CH, SC, OL, OH and PT.

Aggregate for Aggregate Base Course: Aggregate meeting the requirements of Section 520 of the "Standard Specifications for Roads and Structures" as issued by NCDOT.

Drainage Fill: Washed, evenly graded mixture of crushed stone, or crushed or uncrushed gravel, with 100% passing a 1-1/2" sieve and not more than 5% passing a No. 4 sieve.

Backfill and Fill Materials: Satisfactory soil materials free of clay, rock or gravel larger than 2" in any dimension, debris, waste, frozen materials, vegetable and other deleterious matter.

Select Backfill: Job excavation or borrow material consisting of coarse sands and fine sands with not more than 15% by weight, passing the No. 200 sieve. This does not include clays, silts, organic soils or any materials not acceptable as fill material. Select backfill must receive prior approval from the Engineer before use.

PIPE EMBEDMENT:

Embedment materials both below and above the bottom of the pipe, classes of embedment to be used, and placement and compaction of embedment materials shall conform to the requirements shown on the drawings and to the following supplementary requirements. Embedment materials shall contain no cinders or other material, which may cause pipe corrosion.

Class B Bedding shall be used for all ABS and PVC Composite Truss pipelines and PVC sewer service wyes.

Class B Bedding shall include granular embedment from 4" below the pipe to the spring-line, compacted select backfill embedment to the top of the pipe and hand-placed select backfill embedment at least 12" above the pipe as shown on the attached drawing.

Class D Bedding shall be used for all PVC (SDR 35) pipelines.

Class D Bedding shall include granular embedment from 4" below the pipe to the top of the pipe and compacted select backfill embedment at least 12" above the pipe.

Class F Bedding shall be used for all storm drainage pipe, ductile iron and PVC pressure pipe. Class F embedment shall include backfill material from the bottom of the pipe (and bell holes) to at least 12" above the pipe.

PART 3 - EXECUTION

EXCAVATION:

Utility Excavation:

Excavation shall provide adequate working space and clearances for the work to be performed therein and for installation and removal of concrete forms. In no case shall excavation faces be undercut for

extended footings.

Subgrade surfaces shall be clean and free of loose material of any kind when concrete is placed thereon.

Backfilling and construction of fills and embankments during freezing weather shall not be done except by permission of the ENGINEER. No backfill, fill, or embankment materials shall be installed on frozen surfaces, nor shall frozen materials, snow or ice be placed in any backfill, fill or embankment.

Sidewalk Excavation:

Excavation for the sidewalks, drives, and parking areas shall conform to the lines, grades, cross sections, and dimensions indicated on the drawings and shall include the excavation of all unsuitable material from the subgrade. Subgrade shall conform to proposed line, grade and cross-section. This operation shall include any reshaping and wetting or drying required to obtain proper compaction. All soft or otherwise unsuitable material shall be removed and replaced with suitable material.

Excavation is Unclassified, and includes excavation to subgrade elevations indicated, regardless of character of materials and obstructions encountered.

Unauthorized excavation consists of removal of materials beyond indicated subgrade elevations or dimensions without specific direction of Engineer. Unauthorized excavation, as well as remedial work directed by the Engineer, shall be at Contractor's expense.

Dewatering: Prevent surface water and subsurface or groundwater from flowing into excavations and from flooding project site and surrounding area.

Dewatering equipment shall be provided to remove and dispose of all surface and ground water entering excavations, trenches, or other parts of the work. Each excavation shall be kept dry during subgrade preparation and continually thereafter until the structure to be built, or the pipe to be installed therein, is completed to the extent that no damage from hydrostatic pressure, flotation, or other cause will result.

All excavations for concrete structures or trenches which extend down to or below ground water shall be dewatered by lowering and keeping the ground water level beneath such excavations twelve (12) inches or more below the bottom of the excavation.

The CONTRACTOR shall be responsible for the condition of any pipe or conduit which he may use for drainage purposes, and all such pipe or conduit shall be left clean and free of sediment.

Do not allow water to accumulate in excavations. Remove water to prevent softening of foundation bottoms, undercutting footings and soil changes detrimental to stability of subgrades and foundations. Provide and maintain pumps, sumps, suction and discharge lines, and other dewatering system components necessary to convey water away from excavations.

Establish and maintain temporary drainage ditches and other diversions outside excavation limits to

convey rainwater and water removed from excavations to collecting or run-off areas. Do not use trench excavations as temporary drainage ditches.

Material Storage: Stockpile satisfactory excavated materials where directed, until required for backfill or fill. Place, grade, and shape stockpiles for proper drainage.

Locate and retain soil materials away from edge of excavations. Do not store within drip line of trees indicated to remain.

Dispose of excess soil material and waste materials as herein specified.

TRENCH STABILIZATION:

Subgrades for concrete structures and trench bottoms shall be firm, dense, and thoroughly compacted and consolidated; shall be free from mud and muck; and shall be sufficiently stable to remain firm and intact under the feet of the workmen.

Subgrades for concrete structures or trench bottoms which are otherwise solid, but which become mucky on top due to construction operations, shall be reinforced with crushed rock or gravel. The stabilizing material shall be as specified for granular fills. Not more than 1/2-inch depth of mud or muck shall be allowed to remain on stabilized trench bottoms when the pipe bedding material is placed thereon. The finished elevation of stabilizing subgrades shall not be above subgrade elevations indicated on the drawings.

TRENCH EXCAVATION:

General: No more trenches shall be opened in advance of pipe laying than is necessary to expedite the work. One block or 400 feet (whichever is the shorter) shall be the maximum length of open trench on any line under construction.

Except where tunneling or boring is indicated on the drawings, is specified, or is permitted by the ENGINEER, all trench excavation shall be open cut from the surface.

Alignment, Grade, and Minimum Cover: Vertical and horizontal alignment of pipes, and the maximum joint deflection used in connection therewith, shall be in conformity with requirements of the section covering installation of pipe.

Where pipe grades or elevations are not definitely fixed on the contract drawings or shown in profile, trenches shall be excavated with an absolute minimum depth of backfill cover over the top of the pipe of thirty six (36) inches unless otherwise indicated. Greater than minimum pipe cover depths may be necessary on vertical curves or to provide necessary clearance beneath existing pipes, conduits, drains, drainage structures, or other obstructions encountered at normal pipe grades. Measurement of pipe cover depth shall be made vertically from the outside top of pipe to finished ground or pavement surface

elevation except where future surface elevations are indicated on the drawings.

Limiting Trench Widths: Trenches shall be excavated to a width that will provide adequate working space and sidewall clearances for proper pipe installations, jointing, and embedment. However, the limiting trench widths from the bottom of the trench to an elevation one-foot above the top of installed pipe, and the minimum permissible sidewall clearances between the installed pipe and each trench wall shall be as follows:

Nominal Pipe Size (Inches)	Minimum Trench Width (Inches)	Maximum Trench Width (Inches)
Less than 18	Pipe O.D. Plus 18	Pipe O.D. Plus 24
18 through 27	Pipe O.D. Plus 24	Pipe O.D. Plus 30
28 through 42	Pipe O.D. Plus 24	Pipe O.D. Plus 36
43 through 60	Pipe O.D. Plus 30	Pipe O.D. Plus 36

Stipulated minimum sidewall clearances are not minimum average clearances but are minimum clear distances, which will be required.

Cutting trench banks on slopes to reduce earth load to prevent sliding and caving shall be used in areas where the increased trench width will not interfere with surface features or encroach on right-of-way limits. Slopes shall not extend lower than one foot above the top of the pipe.

Unauthorized Trench Widths: Where, for any reason, the width of the lower portion of the trench, as excavated at any point, exceeds the maximum permitted in the foregoing tables, either pipe of adequate strength, special pipe embedment, or arch concrete encasement, as required by loading conditions and with the concurrence of the ENGINEER, shall be furnished and installed by and at the expense of the CONTRACTOR.

Mechanical Excavation: The use of mechanical equipment will not be permitted in locations where its operation would cause damage to trees, buildings, culverts, or other existing property, utilities, or structures above or below ground. In all such locations, hand-excavating methods shall be used.

Only rubber-tired equipment will be permitted on paved streets unless specifically allowed by the Owner and Engineer on a case-by-case basis.

Mechanical equipment used for trench excavation shall be of a type, design, and construction, and shall be so operated that the rough trench excavation bottom elevation can be controlled, that uniform trench widths and vertical sidewalls are obtained at least from an elevation one foot above the top of the installed pipe to the bottom of the trench, and that trench alignment is such that pipe when accurately laid to specified alignment will be centered in the trench with adequate clearance between the pipe and sidewalls of the trench. Undercutting the trench sidewall to obtain clearance will not be permitted.

Where soil conditions permit, trenches for pipe 10 inches or less in diameter may be excavated by trenching equipment comparable to a Cleveland JS 36. Trenchers shall be capable of being leveled on sloping ground. Trench depths for proper pipe grade according to profiles, elevations, dimensions, etc., on plans must be complied with even if a trencher is utilized.

Cutting Concrete and Asphalt Surface Construction: Cuts in concrete and asphalt pavements shall be no larger than necessary to provide adequate working space for proper installation of pipe and appurtenances. Cutting shall be started with a concrete saw in a manner which will provide a clean groove at least two (2) inches deep along each side of the trench and along the perimeter of cuts for structures.

Concrete and asphalt pavement over trenches excavated for pipelines shall be removed so that the width at any point is not greater than the top edge of the trench. Trench width at the bottom shall not be greater than at the top and no undercutting will be permitted. Pavement cuts shall be made to and between straight or accurately marked curved lines that, unless otherwise required, shall be parallel to the centerline of the trench.

Pavement removed for connections to existing lines or structures shall not be of greater extent than necessary for the installation.

Where the trench parallels the length of concrete walks and the trench location is all or partially under the walk, the entire walk shall be removed and replaced. Where the trench crosses drives, walks, curbs, or other surface construction, the surface construction shall be removed and replaced between existing joints or between saw cuts as specified for pavement.

Excavation Below Pipe Subgrade: Where required, pipe trenches shall be excavated below the underside of the pipe, to provide for the installation of granular embedment.

Artificial Foundations in Trenches (Stabilization Material): Whenever unsuitable or unstable soil conditions, which cannot be corrected by dewatering, are encountered, trenches shall be excavated below grade and the trench bottom shall be brought to grade with additional embedment material for stabilization.

Bell Holes: Bell holes shall provide adequate clearance for tools and methods used in installing pipe. No part of any bell or coupling shall be in contact with the trench bottom, trench walls, or granular embedment when the pipe is jointed.

Where trenching equipment is approved, and a 4-inch minimum bed of pulverized soil is returned to the trench bottom prior to installation of the pipe, the excavation of bell holes will not be required.

PIPE EMBEDMENT:

Placement and Compaction: Granular embedment material shall be spread and the surface graded to provide a uniform and continuous support beneath the pipe at all points between bell holes or pipe joints. It will be permissible to slightly disturb the finished subgrade surface by withdrawal of pipe slings or other lifting tackle.

After each pipe has been graded, aligned, and placed in final position on the bedding material or trench bottom and shoved home, sufficient pipe embedment material shall be deposited and compacted under and around each side of the pipe and back of the bell or end thereof to hold the pipe in proper position and alignment during subsequent pipe jointing and embedment operations.

Embedment material shall be deposited and compacted uniformly and simultaneously on each side of the pipe to prevent lateral displacement.

Hand placed embedment shall be compacted to the top of the pipe in all areas where compacted backfill is specified.

Whenever crushed rock is used as embedment for thirty six (36) inch and larger pipe, the portion above the bottom of the pipe shall be vibrated with a mechanical probe type vibrator during placement to ensure that all spaces beneath the pipe are filled.

TRENCH BACKFILL:

A layer of backfill material not more than eight (8) inches deep may be placed over concrete arch encasement or concrete reaction blocking after the concrete has reached its initial set, to aid curing. No additional backfill shall be placed over arch encasement or blocking until the concrete has been in place for at least three (3) days.

Percentage of Maximum Density Requirements: Compact soil to not less than the following percentages of maximum density at optimum moisture content as determined by ASTM D 698.

Structures, Curb and Gutter, Pavements: Compact top 12" of subgrade and each layer of backfill or fill material at 100% maximum density.

Lawn or Unpaved Areas: Compact top 6" of subgrade and each layer of backfill or fill material at 95% maximum density.

Walkways: Compact top 12" of subgrade and each layer of backfill or fill material at 95% maximum density.

In other areas the backfill shall be compacted to ninety percent (90%) or equal to existing.

Where the trench for one pipe passes beneath the trench for another pipe, backfill for the lower trench shall be compacted to the level of the bottom of the upper trench.

The ENGINEER may require select backfill in upper portion or all portions of trenches in roadways. Refer to payment section.

Job excavation material may be used for compacted backfill when the job excavated material is finely divided and free from debris, organic material, cinders or other corrosive material, and stones larger than three (3) inches in greatest dimension. Masses of moist, stiff clay shall not be used. Each layer of material shall have the best practicable moisture content for satisfactory compaction. The material in each layer shall be wetted or dried as required and thoroughly mixed to ensure uniform moisture content and adequate compaction. Backfill materials shall be placed in uniform layers not exceeding eight (8) inches in uncompacted thickness. Increased layer thickness may be permitted for non-cohesive material if the CONTRACTOR demonstrates to the satisfaction of the ENGINEER that the specified compacted density will be obtained.

The method of compaction and the equipment used shall be appropriate for the material to be compacted and shall not transmit damaging shocks to the pipe.

The top portion of backfill beneath established lawn areas shall be finished with not less than four (4) inches of topsoil corresponding to, or better than, that underlying adjoining lawn areas.

TRENCH SETTLEMENT:

The CONTRACTOR shall be responsible for all settlement of backfill, fills, and embankments, which may occur within the correction period stipulated in the General Conditions.

The CONTRACTOR shall make, or cause to be made, all repairs or replacements made necessary by settlement within thirty (30) days after notice from the ENGINEER or OWNER.

COMPACTION:

General: Control soil compaction during construction providing minimum percentage of density specified for each area classification as indicated below.

Percentage of Maximum Density Requirements: Compact soil to not less than the following percentages of maximum density at optimum moisture content as determined by ASTM D 698.

Structures, Curb and Gutter, Pavements: Compact top 12" of subgrade and each layer of backfill or fill material at 100% maximum density.

Lawn or Unpaved Areas: Compact top 6" of subgrade and each layer of backfill or fill material at ninety five (95%) maximum density.

Walkways: Compact top 12" of subgrade and each layer of backfill or fill material at ninety five (95%) maximum density.

Moisture Control: Where subgrade or layer of soil material must be moisture conditioned before compaction, uniformly apply water to surface of subgrade, or layer of soil material, to prevent free water appearing on surface during or subsequent to compaction operations.

Remove and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified density.

Soil material that has been removed because it is too wet to permit compaction may be stockpiled or spread and allowed to dry. Assist drying by discing, harrowing or pulverizing until moisture content is reduced to a satisfactory value.

BACKFILL AND FILL:

General: Place acceptable soil material in layers to required subgrade elevations, for each area classification listed below.

In excavations, use satisfactory excavated or borrow material.

Under grassed areas, use satisfactory excavated or borrow material.

Under walks and pavements, use subbase material or satisfactory excavated or borrow material, or combination of both.

Backfill excavations as promptly as work permits, but not until completion of the following:

Inspection, testing, approval, and recording locations of underground utilities.

Removal of concrete formwork.

Removal of trash and debris.

Ground Surface Preparation: Remove vegetation, debris, unsatisfactory soil materials, obstructions, and deleterious materials from ground surface prior to placement of fills. Plow, strip, or break-up sloped surfaces steeper than 1 vertical to 4 horizontal so that fill material will bond with existing surface.

When existing ground surface has a density less than that specified under "Compaction" for particular area classification, break up ground surface, pulverize, moisture-condition to optimum moisture content, and compact to required depth and percentage of maximum density.

Placement and Compaction: Place backfill and fill materials in layers not more than 8" in loose depth for material compacted by heavy compaction equipment and not more than 4" in loose depth for material compacted by hand-operated tampers.

Before compaction, moisten or aerate each layer as necessary to provide optimum moisture content. Compact each layer to required percentage of maximum dry density or relative dry density for each area classification. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice.

Place backfill and fill materials evenly adjacent to structures, piping or conduit to required elevations. Take care to prevent wedging action of backfill against structures or displacement of piping or conduit by carrying material uniformly around structure, piping or conduit to approximately same elevation in each lift.

GRADING:

General: Uniformly grade areas within limits of grading under this section, including adjacent transition areas. Smooth finished surface within specified tolerances, compact with uniform levels or slopes between points where elevations are indicated, or between such points and existing grades.

Grade areas adjacent to building lines to drain away from structures and to prevent ponding.

Finish surfaces free from irregular surface changes, and as follows:

Lawn or Unpaved Areas: Finish areas to receive topsoil to within not more than 0.10' above or below required subgrade elevations.

Walks: Shape surface of areas under walks to line, grade and cross-section, with finish surface not more than 0.10' above or below required subgrade elevation.

Pavements: Shape surface of areas under pavement to line, grade and cross-section, with finish surface not more than 1/2" above or below required subgrade elevation.

Compaction: After grading, compact subgrade surfaces to the depth and indicated percentage of maximum or relative density for each area classification.

Patches in streets and driveways shall be graded to depth required to match existing pavement or to provide minimum pavement specified.

FIELD QUALITY CONTROL:

Quality Control Testing During Construction: Allow testing service to inspect and approve subgrades and fill layers before further construction work is performed. Perform field density tests in accordance with

ASTM D 1556 (sand cone method) or ASTM D 2167 (rubber balloon method), as directed by the owner.

MAINTENANCE:

Protection of Graded Areas: Protect newly graded areas from traffic and erosion. Keep free of trash and debris.

Repair and re-establish grades in settled, eroded, and rutted areas to specified tolerances.

DISPOSAL OF EXCESS AND WASTE MATERIALS:

Removal from Owner's Property: Remove waste materials, including excess and/or unacceptable excavated material, trash and debris, and dispose of it off Owner's property.

END OF SECTION 02200

BITUMINOUS CONCRETE PAVING

SECTION 02513 - BITUMINOUS CONCRETE PAVING

PART 1 - GENERAL

RELATED DOCUMENTS:

The general provisions of the Contract, including General and Special Conditions and Division-1 Specification sections apply to work of this section.

Related Work Specified Elsewhere:

- Earthwork: Section 02200
- Portland Cement Concrete Curb, Gutter & Sidewalk: Section 02514

DESCRIPTION OF WORK:

The extent of work under this item includes the placement of aggregate base course and bituminous concrete pavement.

Bituminous concrete paving shall also mean bituminous paving, asphalt, or asphalt concrete as may be used in other sections of the specifications or drawings.

SUBMITTALS:

Material Certificates: Bituminous Concrete Paving:

Provide two (2) copies of materials certificates signed by the material producer and the Contractor, and notarized, certifying that each material item complies with, or exceeds, specified requirements.

JOB CONDITIONS:

Weather Limitations: Construction operations shall be conducted in accordance with the weather limitations given in the applicable sections of "Standard Specifications for Roads and Structures" as issued by NC Department of Transportation. No asphalt concrete shall be placed when the temperature is less than 40 degrees F in the shade away from artificial heat.

Grade Control: Establish and maintain required lines and elevations as necessary to match existing grades and/or proposed grades on the drawings.

PART 2 - PRODUCTS

MATERIALS:

Aggregate for Aggregate Base Course: Aggregate meeting the requirements of Section 1010-2 of "Standard Specifications for Roads and Structures" as issued by NCDOT

Bituminous Surface Course, Type I-2 or Approved Superpave: Materials meeting the requirements of Section 645 of "Standard Specifications for Road and Structures" as issued by NCDOT

Tack Coat: Material meeting the requirements of Section 605-2 of "Standard Specifications for Roads and Structures" as issued by NCDOT

PART 3 - EXECUTION

GENERAL:

Install the aggregate base course, bituminous concrete base course, bituminous surface course, prime coat and tack coat in accordance with the applicable provisions of "Standards Specifications for Roads and Structures" as issued by the North Carolina Department of Transportation, except as otherwise noted herein.

SUBGRADE:

Shape surface of areas under base course to line, grade and cross-section shown on drawings, with finish surface not more than 1/2" above or below the required subgrade elevation.

Patches in driveways and roadways shall be graded to depth required to match existing pavement or to provide minimum pavement specified.

AGGREGATE BASE COURSE:

Place base course material on prepared subgrade in layers of uniform thickness. Grade the base course evenly to thickness indicated on drawings and compact to 100%. AASHTO T 180.

Maintain a uniform surface on the base course until the placement of the bituminous surface course is complete.

TACK COAT:

Tack coat shall be applied to contact surfaces of previously constructed asphalt or portland cement concrete and surfaces abutting or projecting into asphalt concrete pavement. All application of tack coat shall be in conformance with Section 605 of the NCDOT Standard Specifications for Roads and Structures.

Tack coat shall be uniformly applied at a rate 0.02 to 0.05 gallons per square yard. No more tack coat material shall be applied than can be covered with base, binder, or surface course during the following day's operations. No base, binder or surface mixture shall be deposited thereon until the tack coat has sufficiently cured to properly receive paving.

All exposed surfaces, not intended to contact paving, shall be protected sufficiently to prevent tack coat from being tracked or splattered on said surfaces. After the tack coat has been applied, it shall be protected until it has cured for a sufficient length of time to prevent it from being picked up by traffic.

BITUMINOUS SURFACE COURSE:

Apply tack coat at the rate of 0.05 to 0.15 gal. per sq yd. to in- place asphalt or concrete contact surfaces and other surfaces which will contact paving.

Place bituminous concrete mixture at not less than 225 degrees F., spread and strike off. Place each bituminous concrete course to required grade, cross-section and compacted thickness.

Provide joints between old and new pavements and between successive days' work for continuous bond between adjoining work. Clean contact surfaces and apply tack coat.

Rolling: Begin rolling when bituminous concrete mixture will bear roller weight without excessive displacement. Repair surface defects with hot bituminous concrete material as rolling progresses. Cut out and patch defective areas and roll to blend with adjacent satisfactory paving. Continue rolling until maximum density is attained and roller marks eliminated.

Protect paving from damage and vehicular traffic until bituminous concrete mixture has cooled and attained its maximum degree of hardness.

THERMOPLASTIC PAVEMENT MARKING:

The Contractor shall install ALKYD-MALEIC thermoplastic in accordance with , and in conformance with the North Carolina Department of Transportation (NCDOT) Standard Specifications for Roads and Structures, and Amendments included elsewhere in this contract, NCDOT Roadway Standard Drawings, and the Federal Highway Administration (FHWA) Manual of Uniform Traffic Control Devices (MUTCD).

The work covered by this special provision consists of marking the pavement surface with pavement markings to direct and control the movement of traffic and shall consist of remarking existing markings at locations specified herein. The Contractor shall furnish all services, labor, and equipment necessary for the required pavement preparation, premarking, and pavement marking installation. Sufficient personnel experienced in the handling and application of the material shall be provided to assure work is done properly.

The Contractor shall install the following markings with ALKYD-MALEIC thermoplastic as indicated on the plans. The items below are included in the lump sum payment.

- Left or Right Turn Arrows
- Straight Arrow Symbols
- Combination Straight Arrow and Left or Right Turn Arrow
- Railroad Crossing Symbols, including Transverse bands
- School Crossing Symbols, including traverse bands
- “ONLY” Word Message
- “XING” Word Message
- Bicycle Symbols
- 24” Stop bar Lines
- 12” Crosswalk Lines
- 4” Yellow Center Lines
- 4” White Skip Lines
- 4” White Parking Lines
- 6” White Lines

The quantities shown on the bid proposal form are a guide for bid prices, and it should be understood and agreed that the City is not obligated to install pavement markings in excess of its normal requirements.

PAVEMENT MARKING OBSERVATION PERIOD

Following completion of all work required, there will be a 180 day observation period for the thermoplastic pavement markings before final acceptance.

Thermoplastic pavement markings that fail to meet all requirements of this contract during the observation period shall be removed and preplaced at no expense to the City of Greenville. The contractor shall replace all thermoplastic pavement markings failing the requirements of the specifications within thirty (30) days following notification by the engineer.

Thermoplastic marking replacement shall be performed in accordance with the requirements specified herein for the initial application, including but not limited to surface cleaning, etc. During the 180 day observation period, the thermoplastic pavement markings installed under this contract shall be warranted by the contractor against failures such as discoloration, chipping, spalling, poor adhesion, and loss of reflectivity caused by improper materials or the effects of improper cleaning, application methods, or application equipment.

CONSTRUCTION METHODS

General

The work covered in this provision consists of premarking and installing thermoplastic pavement markings in accordance with the manufacturer's installation instructions, unless otherwise specified herein. All surface preparations including surface cleaning and surface pretreatment shall be done by the contractor in accordance with the manufacturer's recommendations, subject to the approval of the engineer.

Time Limitations for Placement and Replacement:

For all divided and multi-lane facilities place all center line and lane line markings, railroad symbols, and school symbols by the end of each workday's operation. Place edge line markings and other symbols on these facilities within three (3) days after they have been obliterated.

A multi-lane facility is defined as any roadway having more than two-lanes to include a two-lane/two-way roadway with a center two-way left turn lane.

For all two-lane, two-way facilities, place all centerline markings, railroad and school symbols within two (2) days after they have been obliterated by the operation. Place all edge line markings and other symbols on these facilities within fifteen (15) days after they have been obliterated by the operation.

Premarkings

Premark each installation of pavement marking materials prior to application on new pavement and when required to replace pavement marking, except when existing markings are visible. Use premarking to guide in the placement of pavement markings. Get the premarking inspected and approved before placing the pavement marking materials.

Review and record the existing pavement markings prior to resurfacing and re-establish the new pavement markings using the record of existing markings in conjunction with the North Carolina Department of transportation Highway Design Branch Roadway Standard Drawings, unless otherwise directed.

Lateral Deviation requirements

Lines shall be of the length and longitudinal placement as shown on the typical drawings. The Contractor shall provide sufficient control points to service as guides for application of markings. The markings shall be straight or of uniform curvature and shall conform uniformly to tangents, curves, and transitions. The finished lines shall be free from waviness, the lateral deviation of the finished line shall not exceed ½ inch from the proposed location alignment at any point. Any greater deviation may be sufficient cause for requiring the contractor to remove and correct such markings at no cost to the City of Greenville.

Maintenance

Pavement markings installed by the contractor which deteriorate, or which fail to adhere to the pavement, or which lack reflectorization, shall be replaced by the contractor at no cost to the City of Greenville.

Pavement markings to be replaced shall be as determined by the engineer.

Thermoplastic Application and Equipment

The equipment used to install hot thermoplastic pavement marking material shall be in conformance with the requirements prescribed in NCDOT's Standard Specifications for Roads and Structures. Thermoplastic shall be ALKYD-MALEIC and have a uniform thickness as specified by the type marking.

Glass beads shall be applied in the proper ratio to immediately produce a highly reflective marking. "Drop on Beads" shall be uniformly applied to the surface of the molten thermoplastic material so that the beads are partially embedded. The beads shall be applied at a rate to obtain the minimum reflectance values. The rate of bead application shall be no less than 8 lbs. per 100 square feet of the line surface area.

At the time of installation, the in-place marking shall have the minimum reflectance values shown below, as obtained with a Mirolux 12 Retroreflectometer. The reflectance values shown below shall be maintained for a minimum of thirty (30) days from the time of placement of the marking material.

- WHITE: 375 mcd/lux/m²
- YELLOW: 250 mcd/lux/m²

The marking shall, upon cooling, be uniformly reflectorized and have the ability to resist deformation caused by traffic throughout its entire length. The contractor shall protect the marking until dry by placing guarding or warning devices as necessary. In the event any vehicle crosses the wet markings, such marking shall be reapplied and tracks made by the moving vehicles shall be removed by the contractor.

FIELD QUALITY CONTROL:

General: Test the in-place bituminous concrete courses for compliance with requirements for thickness and surface smoothness. Repair or remove and replace unacceptable paving as directed by the Engineer.

Thickness: In-place compacted thickness will not be acceptable if exceeding following allowable variation from required thickness:

- Base Course: 1/2", plus or minus
- Surface Course: 1/4", plus or minus.

Surface Smoothness: Test finished surface of each bituminous concrete course for smoothness, using 10' straightedge applied parallel with, and at right angles to centerline of paved area. Surfaces will not be acceptable if exceeding the following tolerances for smoothness:

- Base Course Surface: 1/4".
- Wearing Course Surface: 1/8".

Check surfaced areas at intervals as directed by the Engineer.

BASIS OF PAYMENT:

The quantity of Bituminous Concrete Pavement Removal and Replacement, measured as provided above, shall be paid for at the contract unit price per square yard for “Bituminous Concrete Pavement Removal and Replacement.”

Such prices and payment shall be full compensation for all preparation, materials, testing, tools, equipment, labor and all other requirements necessary to complete the work.

END OF SECTION 02513

**PORTLAND CEMENT CONCRETE CURB AND GUTTER &
SIDEWALK**

SECTION 02514 - PORTLAND CEMENT CONCRETE CURB AND GUTTER & SIDEWALK

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of Contract, including General, Supplemental General and Supplementary Conditions and Division-1 Specification sections, apply to work of this section.

DESCRIPTION OF WORK:

Extent of portland cement concrete paving is shown on drawings including curbs, gutters, drainage structures, and walkways.

Prepared subbase is specified in "Earthwork" section 02200.

Concrete and related materials are specified in Section 03305.

QUALITY ASSURANCE:

Codes and Standards: Comply with local governing regulations if more stringent than herein specified.

SUBMITTALS:

Furnish samples, manufacturer's product data, test reports, and materials' certifications as required in referenced sections for concrete and joint fillers and sealers.

JOB CONDITIONS:

Traffic Control: The Contractor shall maintain access for vehicular and pedestrian traffic as required for other construction activities.

Utilize flagmen, barricades, warning signs and warning lights as required.

PART 2 - PRODUCTS

MATERIALS:

Forms: Steel, wood, or other suitable material of size and strength to resist movement during concrete placement and to retain horizontal and vertical alignment until removal. Use straight forms, free of distortion and defects.

Use flexible spring steel forms or laminated boards to form radius bends as required.

Coat forms with a non-staining form release agent that will not discolor or deface surface of concrete.

Reinforcing Bars: Deformed steel bars, ASTM A 615, Grade 40.

Concrete Materials: Comply with requirements of applicable Division-3 sections for concrete materials, admixtures, bonding materials, curing materials, and others as required.

Expansion Joint Materials: Bituminous Fiber, 1/2" thick, complying with NCDOT Standard Specifications for Roads and Structures, Section 420-12.

Joint Filler Materials: Hot poured rubber asphalt conforming to NCDOT Standard Specifications for Roads and Structures, Section 1028-2.

Liquid-Membrane Forming Curing Compound: Complying with ASTM C 309, Type 2, Class A unless another type acceptable to Engineer. Moisture loss not more than 0.055 gr./sq. cm. when applied at 200 sq. ft./gal.

CONCRETE MIX, DESIGN AND TESTING:

Comply with requirements of applicable Division-3 sections for concrete mix design, sampling and testing, and quality control and as herein specified.

Design mix to produce normal-weight concrete consisting of portland cement, aggregate, water-reducing or high-range water-reducing admixture (super-plasticizer), air-entraining admixture and water to produce the following properties:

Compressive Strength: 3000 psi, minimum at 28 days, unless otherwise indicated.

Slump Range: Not greater than 3".

Air Content: 5% plus or minus 1.5%.

PART 3 - EXECUTION

SURFACE PREPARATION:

Remove loose material from compacted sub-base surface immediately before placing concrete.

FORM CONSTRUCTION:

Set forms to required grades and lines, rigidly braced and secured. Install sufficient quantity of forms to allow continuous progress of work and so that forms can remain in place at least 24 hours after concrete placement.

Check completed formwork for grade and alignment to following tolerances.

Top of forms shall not be more than 1/4" in 10'.

Vertical face on longitudinal axis shall not be more than 1/4" in 10'.

Clean forms after each use, and coat with form release agent as often as required to ensure separation from concrete without damage.

CONCRETE PLACEMENT:

General: Comply with requirements of Division-3 sections for mixing and placing concrete, and as herein specified.

Do not place concrete until subbase and forms and have been checked for line, grade and compaction. Moisten sub-base if required to provide a uniform dampened condition at time concrete is placed. Do not place concrete around manholes, water meters, valve boxes or other structures until they are at required finish elevation and alignment.

Place concrete using methods that prevent segregation of mix. Consolidate concrete along face of forms and adjacent to transverse joints with internal vibrator. Keep vibrator away from joint assemblies, reinforcement, or side forms. Use only square-faced shovels for hand spreading and consolidation. Consolidate with care to prevent dislocation of reinforcing, dowels, and joint devices.

Deposit and spread concrete in a continuous operation between transverse joints, as far as possible. If interrupted for more than 1/2-hour, place a construction joint.

Curbs and Gutters: Automatic machine may be used for curb and gutter placement at Contractor's option. If machine placement is to be used, submit revised mix design and laboratory test results that meet or exceed minimums specified. Machine placement must produce curbs and gutters to required cross-section, lines, grades finish, and jointing as specified for formed concrete. If results are not acceptable, remove and replace with formed concrete as specified.

JOINTS:

General: Construct expansion, weakened-plane (contraction), and construction joints true-to-line with face perpendicular to surface of concrete. Construct transverse joints at right angles to the centerline, unless otherwise indicated.

When joining existing structures, place transverse joints to align with previously placed joints, unless otherwise indicated.

Weakened-Plane (Contraction) Joints: Provide weakened-plane (contraction) joints, sectioning concrete

sidewalk at 5' intervals. Construct weakened-plane joints for a depth equal to at least 1/4 concrete thickness, as follows:

Tooled Joints: Form weakened-plane joints in fresh concrete by grooving top portion with a recommended cutting tool and finishing edges with a jointer.

Sawed Joints: Form weakened-plane joints using powered saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut joints into hardened concrete as soon as surface will not be torn, abraded, or otherwise damaged by cutting action. Saw cuts must be made within 24 hours of initial set.

Inserts: Use embedded strips of metal or sealed wood to form weakened-plane joints. Set strips into plastic concrete and carefully remove strips after concrete has hardened.

Construction Joints: Place construction joints at end of placements and at locations where placement operations are stopped for a period of more than 1/2-hour, except where such placements terminate at expansion joints.

Locate expansion joints at 50' o.c. for each sidewalk section and 90' o.c. for each curb and gutter section unless otherwise indicated, and at beginning and end of all curb and gutter radii, Connections with rigid objects including existing curb and gutter and catch basins.

Extend joint fillers full-width and depth of joint, and not less than 1/2" or more than 1" below finished surface where joint sealer is indicated. If no joint sealer, place top of joint filler flush with finished concrete surface.

Furnish joint fillers in one-piece lengths for full width being placed, wherever possible. Where more than one length is required, lace or slip joint filler sections together.

Protect top edge of joint filler during concrete placement with a metal cap or other temporary material. Remove protection after concrete has been placed on both sides of joint.

Fillers and Sealants: Comply with manufactures requirements for preparation of joints, materials installation, and performance. Place at all curb and gutter template joints.

CONCRETE FINISHING:

After striking-off and consolidating concrete, smooth surface by screeding and floating. Use hand methods only where mechanical floating is not possible. Adjust floating to compact surface and produce uniform texture.

After floating, test surface for trueness with a 10' straightedge. Distribute concrete as required to remove surface irregularities, and refloat repaired areas to provide a continuous smooth finish.

Work edges of slabs, gutters, back top edge of curb, and formed joints with an edging tool, and round to 1/2" radius, unless otherwise indicated. Eliminate tool marks on concrete surface.

After completion of floating and troweling when excess moisture or surface sheen has disappeared, complete surface finishing, as follows:

Broom finish, by drawing a fine-hair broom across concrete surface, perpendicular to line of traffic. Repeat operation if required to provide a fine line texture acceptable to Engineer.

Do not remove forms for twenty four (24) hours after concrete has been placed. After form removal, clean ends of joints and point-up any minor honeycombed areas. Remove and replace areas or sections with major defects, as directed by the Engineer.

CURING:

Protect and cure finished concrete paving, complying with applicable requirements of Division-3 sections. Use membrane-forming curing and sealing compound or approved moist-curing methods.

REPAIRS AND PROTECTIONS:

Repair or replace broken or defective concrete, as directed by Engineer.

Protect concrete from damage until acceptance of work. Exclude traffic from pavement for at least fourteen (14) days after placement. When construction traffic is permitted, maintain pavement as clean as possible by removing surface stains and spillage of materials as they occur.

Sweep concrete and wash free of stains, discolorations, dirt and other foreign material just prior to final inspection.

END OF SECTION 02514

COLD MILLING

SECTION 02576 - COLD MILLING

PART 1 GENERAL

1.1 UNIT PRICES

1.1.1 Measurement

The quantity of milled pavement will be the number of square yards completed and accepted as determined by the City. Determine the number of square yards of milled pavement by measuring the length and width of the milled surface within the specified work area. Measurement to determine the area shall be to the closest foot.

1.1.2 Payment

Payment will be to the nearest square yard. No payment will be made for milling outside the specified area of work.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM INTERNATIONAL (ASTM) - ASTM C 136 (2006) Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates

1.3 SYSTEM DESCRIPTION

Maintain in a satisfactory working condition equipment, tools, and machines used in the performance of the work.

1.3.1 Cold-Milling Machine

Provide a cold-milling machine which is self-propelled, capable of milling the pavement to a specified depth and smoothness and of establishing grade control; with means of controlling transverse slope and dust produced during the pavement milling operation. The machine shall have the ability to remove the millings from the pavement and load them into a truck. The milling machine shall not cause damage to any part of the pavement structure that is not to be removed.

1.3.2 Cleaning Equipment

Provide cleaning equipment suitable for removing and cleaning loose material from the pavement surface.

1.3.3 Straightedge

Furnish and maintain at the site, in good condition, one 12 foot straightedge or other suitable device for each milling machine, for testing the finished surface. Make straightedge available for Government use.

Straightedges shall be constructed of aluminum or other lightweight metal, with blades of box or box-girder cross section with flat bottom reinforced to insure rigidity and accuracy. Straightedges shall have handles to facilitate movement on the pavement.

1.4 QUALITY ASSURANCE

1.4.1 Grade

Conform the finished milled surfaces to the lines, grades, and cross sections indicated. The finished milled-pavement surfaces shall vary not more than 1/4 inch from the established plan grade line and elevation. Finished surfaces at a juncture with other pavements shall coincide with the finished surfaces of the abutting pavements. The deviations from the plan grade line and elevation will not be permitted in areas of pavements where closer conformance with planned grade and elevation is required for the proper functioning of appurtenant structures involved.

1.4.2 Surface Smoothness

Finished surfaces shall not deviate from the testing edge of a straightedge more than 6 mm 1/4 inch in the transverse or longitudinal direction.

1.4.3 Traffic Control

Provide all necessary traffic controls during milling operations.

1.5 ENVIRONMENTAL REQUIREMENTS

Milling shall not be performed when there is accumulation of snow or ice on the pavement surface.

PART 2 – PRODUCTS

2.01 EQUIPMENT

Milling Machine: Specially designed and built for milling of bituminous pavements without addition of heat, and ability to plane Portland cement concrete patches in bituminous pavements.

Cutting Drum: Minimum 60 inches (1.5 m) wide, and equipped with carbide-tipped butting teeth placed in variable lacing pattern to produce desired finish.

Capable of being operated at speeds from 0 to 40 feet (0 to 12 m) per minute, self-propelled, and capable of spraying water at cutting drum to minimize dust while maintaining enclosed cutting area.

Capable of removing material next to gutter of pavement being reconditioned, and designed to enable operator at all times to observe milling operation without leaving controls.

Adjustable for slope and depth, capable of accurately controlling profile grades and cross slopes within tolerance of plus or minus one inch (25 mm). Equipment shall control profile grades by using either

independent grade control or minimum 40 foot (12 m) external reference, and shall also have cross slope elevation controls.

Provide smaller machine if required to trim areas inaccessible to larger machine at manholes, gate valve covers, curb returns, and intersections.

Cutting Drum: Minimum 12-inch (305 mm) width, mounted on chassis, and ability to be positioned without interrupting traffic or pedestrian flow.

Additional equipment may be necessary to remove pavement if areas listed above are inaccessible with 12-inch (305 mm) cutting drum.

Milling equipment shall be equipped with means to effectively limit amount of dust escaping from milling operation.

PART 3 EXECUTION

3.1 PREPARATION OF SURFACE

Clean the pavement surface of excessive dirt, clay, or other foreign material immediately prior to milling the pavement.

Traffic Signal Loop Detectors: Before cold milling pavement within 300 feet (90 m) of traffic signal, notify Sandia Delegated Representative (SDR) at least three (3) working days prior to commencing Work within area.

Upon notification, SDR will coordinate marking location of existing loop detectors.

Do not cold mill within 12 inches (305 mm) of loop detector conductors.

Damage to existing loop caused by milling operation will require replacement of loops in their entirety at Contractor's expense.

3.2 MILLING OPERATION

A minimum of seven (7) days' notice is required, prior to start work, for the Contracting Officer to coordinate the milling operation with other activities at the site. Make sufficient passes so that the designated area is milled to the grades and cross sections indicated. The milling shall proceed with care and in depth increments that will not damage the pavement below the designated finished grade. Repair or replace, as directed, items damaged during milling such as manholes, valve boxes, utility lines, pavement that is torn, cracked, gouged, broken, or undercut. The milled material shall be removed from the pavement and loaded into trucks.

3.2.1 PROCEDURE

General: Cold mill existing pavement surface to depth, width, and grade as indicated in Contract documents, or as directed by SDR. Surface of pavement after milling shall be uniformly rough grooved or ridged as directed by SDR.

Cold Milling of Pavement surfaces: Thickness of pavement removal shall be described as nominal thickness, with ranges as follows:

Nominal 3/4-inch (19.1 mm) Cut: 3/4 inch (19.1 mm) average of cuts ranging from 0 to 1-1/2 inches (0 to 38.1 mm).

Nominal 1-inch (25 mm) Cut: 1 inch (25 mm) average of cuts ranging from 0 to 2 inches (0 to 51 mm).

Nominal 1-1/2-inch (38.1 mm) Cut: 1-1/2 inch (38.1 mm) average of cuts ranging from 0 to 3 inches (0 to 76 mm)

Nominal 2-inch (51 mm) Cut: 2 inch (51 mm) average of cuts ranging from 0 to 4 inches (0 to 102 mm).

Loosened Material: During milling operation, sweep street with mechanical equipment and remove loosened material from site until completion of removal work.

Follow no closer than 50 feet (15 m) behind milling machine, unless otherwise directed by SDR, to remove millings or sweep loosened material.

Pavement Transitions: In areas where cold milling is done, but will not be paved within 1 week, overlay with 2-foot (610-mm) minimum width of asphalt concrete pavement transition adjacent to gutters, cross gutters, and structures, and at existing transverse joint lines.

Pavement transition may be omitted when vertical offset between milled surface and adjacent riding asphalt surface is less than 3/8 inch (9.5 mm).

Tolerances: When 10 foot (3 m) straight edge is laid on finished surface parallel to centerline of roadway, surface shall not vary from edge of straightedge more than 3/8 inch (9.5 mm), except at intersections or any changes of grade.

1. Adjust to established depth in increments of 1 inch (25 mm) or less.
2. Excessive grooving by cold milling will not be permitted.

3.3 GRADE AND SURFACE-SMOOTHNESS TESTING

3.3.1 Grade-Conformance Tests

Test the finished milled surface of the pavement for conformance with the plan-grade requirements and for acceptance by the Contracting Officer by running lines of levels at intervals of 25 feet longitudinally and 25 feet transversely to determine the elevation of the completed pavement. Correct variations from the designated grade line and elevation in excess of the plan-grade requirements as directed. Skin patching for correcting low areas will not be permitted. Remove and replace the deficient low area. Remove sufficient material to allow at least 1 inch of asphalt concrete to be placed.

3.3.2 Surface-Smoothness Tests

After completion of the final milling, the finished milled surface will be tested by the Government with a straightedge. Other approved devices may be used, provided that when satisfactorily and properly operated, such devices reveal all surface irregularities exceeding the tolerances specified. Correct surface irregularities that depart from the testing edge by more than 1/4 inch. Skin patching for correcting low areas will not be permitted. Remove and replace the deficient low area. Remove sufficient material to allow at least 1 inch of asphalt concrete to be placed.

3.4 REMOVAL OF MILLED MATERIAL

Material that is removed shall be stockpiled as specified in the Public Works yard and in such a manner to prevent segregation or contamination.

3.4.1 CLEANING

Keep premises free from accumulations of waste materials, rubbish, and other debris resulting from Work. Remove cold milled material from pavement surface, and transport to salvage or disposal areas provided by SDR.

Remove and transport demolished material to comply with requirements of Section 02222 "Selective Demolition."

Remove tools, construction equipment and machinery, and surplus materials.

Restore to their original condition portions of site not designated for alteration by Contract documents, unless completion of Work is directly affected.

END OF SECTION 02576

EROSION AND POLLUTION CONTROL

SECTION 02910 - EROSION AND POLLUTION CONTROL

PART 1 - GENERAL

RELATED DOCUMENTS:

The general provisions of the Contract, including the General and Special Conditions and Division-1 Specification sections apply to work of this section.

DESCRIPTION OF WORK:

The extent of the work required under this section is that required to minimize water, air, and noise pollution and soil erosion and siltation.

Temporary erosion control measures which may be necessary include, but are not limited to, temporary berms, dikes, dams, drainage ditches, silt basins, silt ditches, perimeter swales, slope drains, structures, vegetation, mulches, mats, netting, gravel or any other methods or devices that are necessary to control or restrict erosion. Temporary erosion control measures may include work outside the right-of-way or construction limits where such work is necessary as a result of construction such as borrow pit operations, haul roads, plant sites, equipment storage sites, and disposal of waste or debris. The Contractor shall be liable for all damages to public or private property caused by silting or slides originating in waste areas furnished by the Contractor.

Related Work Specified Elsewhere:

- Earthwork: Section 02200
- Fertilizing, Seeding and Mulching: Section 02920

QUALITY ASSURANCE:

Codes and Standards:

North Carolina Sedimentation Pollution Control Act of 1973 and the Rules and Regulations promulgated pursuant to the provisions of said act.

City of Greenville Soil Erosion and Sedimentation Control Ordinance.

"Standard Specifications for Roads and Structures", North Carolina Department of Transportation (DOT).

In the event of conflict between the regulations listed above and the requirements of these specifications, the more restrictive requirement shall apply.

SANCTIONS:

Failure of the Contractor to fulfill any of the requirements of this section may result in the Owner ordering the stopping of construction operations in accordance with SUBARTICLE 13.8 of the General Conditions until such failure has been corrected. Such suspension of operations will not justify an extension of contract time nor additional compensation.

Failure on the part of the Contractor to perform the necessary measures to control erosion, siltations, and pollution will result in the Engineer notifying the Contractor to take such measures. In the event that the Contractor fails to perform such measures within twenty four (24) hours after receipt of such notice, the Owner may suspend the work as provided above, or may proceed to have such measures performed with other forces and equipment, or both. The cost of such work performed by other forces will be deducted from monies due the Contractor on his contract.

PART 2 - PRODUCTS

SILT FENCES:

Posts: Steel posts shall be 5' in height and be of the self-fastener angle steel type.

Posts shall be spaced at 10' max. when silt fence is backed with wire mesh, and 7' when no wire mesh is used or as required by the Engineer.

Woven Wire: Woven wire fencing shall conform to ASTM A116 for Class 3 galvanizing. Fabric shall be a minimum of 32" in width and shall have a minimum of 6 line wires with 12" stay spacing. The top and bottom wires shall be 10 gauge while the intermediate wires shall be 12-1/2 gauge. Wire fabric shall be fastened to wood posts with not less than #9 wire staples 1-1/2" long.

Fabric: Provide woven synthetic fiber designed specifically for silt fence conforming to NCDOT specifications.

DRAINAGE STONE:

Class I material NCDOT No. 57.

RIP RAP:

Class B in accordance with NCDOT specifications.

FILTER CLOTH:

For use under rip rap provide woven synthetic fiber with burst strength of 500 psi, permeability of 0.01 cm/sec and apparent sieve size of approximately 70 as manufactured by MIRAFI EXXON or approved equal.

MATTING FOR EROSION CONTROL:

Matting for erosion control shall be jute matting or excelsior matting. Other acceptable material manufactured especially for erosion control may be used when approved by the Engineer in writing before being used. Matting for erosion control shall not be dyed, bleached, or otherwise treated in a manner that will result in toxicity to vegetation.

TEMPORARY SEEDING:

Temporary seeding, when required, shall be performed in accordance with the recommendations contained in "Guide for Sediment Control on Construction Sites in North Carolina", published by the Soil Conservation Service and Section 02920 of these specifications.

PART 3 – EXECUTION

GENERAL:

The Contractor shall take whatever measures are necessary to minimize soil erosion and siltation, and water, air, and noise pollution caused by his operations. The Contractor shall also comply with the applicable regulations of all legally constituted authorities relating to pollution prevention and control. The Contractor shall keep himself fully informed of all such regulations which in any way affect the conduct of the work, and shall at all times observe and comply with all such regulations. In the event of conflict between such regulations and the requirements of the specifications, the more restrictive requirements shall apply.

EROSION AND SILTATION CONTROL:

The Contractor shall exercise every reasonable precaution throughout the life of the project to prevent the eroding of soil and the silting of rivers, streams, lakes, reservoirs, other water impoundments, ground surfaces, or other property.

Prior to suspension of operations on the project or any portion thereof, the Contractor shall take all necessary measures to protect the construction area, including but not limited to borrow sources, soil type base course sources, and waste areas, from erosion during the period of suspension.

Provide diversion ditches and berms as necessary to prevent concentrated flow of water across disturbed areas.

Stockpile excavated material on the opposite side of the utility trenches from the watercourses to the extent that is possible.

In the event that stockpiles are placed on the watercourse side of the trench, provide silt fence or silt

berms with stone filter outlets along the entire length of the stockpile that is on the watercourse side of the trench. Upon the completion of backfilling, the measures shall be removed and the site graded to its natural grade or as shown on plans.

Maintain natural buffer zones along all watercourses sufficient to retain all visible siltation within the first 25 percent (25%) of the buffer width.

Provide a settling basin with a gravel filter outlet for all water pumped from trenches or dewatering equipment. Pumping of that water directly into any stream, pond, or watercourse is prohibited.

Tamp, fertilize, seed and mulch the disturbed areas as soon as practicable after line is installed and, in all cases, no later than thirty (30) days after completion of the line segment or work at a particular site.

When construction operations are suspended for more than thirty (30) days, provide temporary seeding and mulching of all disturbed areas including those areas in which further construction is necessary.

Erosion control measures installed by the Contractor shall be acceptably maintained by the Contractor.

Silt fences shall be provided where shown on the drawings and/or as necessary to prevent erosion.

Catch basins and Drop Inlets shall be protected from silt by placing rock inlet sediment traps around the openings until vegetative cover is established.

Temporary rock check dams shall be constructed where shown on the drawings.

Seeding for erosion control shall be performed in accordance with Section 02920.

Stream Or Ditch Crossings shall be performed in accordance with details shown on plans. Complete crossing in one working day. Carefully stabilize disturbed slopes by tamping with equipment buckets and mechanical or hand tamping. Distribute topsoil evenly on slopes and tamp.

Where rip rap is required, carefully place at least one foot thick over filter cloth.

Fertilize, seed, and mulch each crossing's slopes as soon as practicable after completing the crossing and in no case more than two (2) weeks after disturbance of the slopes.

WATER AND AIR POLLUTION:

The Contractor shall exercise every reasonable precaution throughout the life of the project to prevent pollution of rivers, streams, and water impoundments. Pollutants such as chemicals, fuels, lubricants, bitumens, raw sewage, and other harmful waste shall not be discharged into or alongside of rivers, streams, or impoundments, or into natural or manmade channels leading thereto.

The Contractor shall comply with all State or local air pollution regulations throughout the life of the project.

DUST CONTROL:

The Contractor shall control dust throughout the life of the project within the project area and at all other areas affected by the construction of the project, including, but not specifically limited to, unpaved secondary roads, haul roads, access roads, disposal sites, borrow and material sources, and production sites. Dust control shall not be considered effective where the amount of dust creates a potential or actual unsafe condition, public nuisance, or condition endangering the value, utility, or appearance of any property.

NOISE CONTROL:

The Contractor shall exercise every reasonable precaution throughout the life of the project to prevent excessive and unnecessary noise. The Contractor shall choose his methods so as to minimize the disturbance of area residents.

END OF SECTION 02910

FERTILIZING, SEEDING AND MULCHING

SECTION 02920 - FERTILIZING, SEEDING AND MULCHING

PART 1 - GENERAL

RELATED DOCUMENTS:

The general provisions of the Contract, including the General and Special Conditions and Division-1 Specification sections apply to work of this section.

DESCRIPTION OF WORK:

Permanent Seeding: Permanent seeding is required for all areas disturbed by construction, except for areas covered by structures, pavements, etc.

Temporary Seeding: Temporary seeding of disturbed areas shall be performed whenever one or more of the following conditions exist.

The ENGINEER determines temporary seeding is necessary to prevent or stop erosion of disturbed areas.

Work is suspended or delayed on any portion of the project for 30 days and the potential for erosion exists.

Whenever permanent seeding is delayed beyond that required by the Contract Documents.

QUALITY ASSURANCE:

Codes and Standards: In general, follow procedures and guides published by the Soil Conservation Service, United States Department of Agriculture.

PART 2 - PRODUCTS

FERTILIZER:

Provide commercial fertilizer conforming to statutory requirements and all rules and regulations adopted by the North Carolina Board of Agriculture.

LIMESTONE:

Provide dolematic or hydrated limestone conforming to all statutory requirements and all rules and regulations adopted by the North Carolina Board of Agriculture.

SEED:

Provide seed conforming to all statutory requirements and all rules and regulations adopted by the North Carolina Board of Agriculture.

Provide seed in accordance with requirements shown below. Deliver to site in original containers, labeled to show that the requirements of the N.C. Seed Law are met.

Quality of seed shall conform to the following:

Common Name Grasses	Seeding Rate	Planting Date	Max. Total Weed Seed %
Centipede	15 lbs. per Acre	March 15 – August 15	1.00
Rye Grass (No Rye or Fescue between May 15 through August 15)	100 lbs. per Acre	March 15 – May 15	1.00
Centipede Fescue (KY-31) 50 lbs. per Acre	15 lbs. per Acre	August 15 – March 15	1.00

Apply 10-20-20 Fertilizer within City Right of Way at a rate of 500 pounds per acre. Apply straw mulch securing with tack coat or crimping.

Seeding containing prohibited noxious weed seed shall not be accepted. Seed shall be in conformance with state seed law restrictions for restricted noxious weeds.

If seed of the accepted quality cannot be bought, secure prior approval before making changes or exceptions.

MULCH:

Mulch for erosion control shall consist of grain straw or other acceptable material, and shall have been approved by the ENGINEER before being used. All mulch shall be reasonably free from mature seedbearing stalks, roots, or bulblets of Johnson Grass, Nutgrass, Sandbur, Wild Garlic, Wild Onion, Bermuda Grass, Crotalaria and Witchweed, and free of excessive amount of restricted noxious weeds as defined by the North Carolina Board of Agriculture at the time of use of the mulch. Also there shall be compliance with all applicable State and Federal domestic plant quarantines. Straw mulch that is matted or lumpy shall be loosened and separated before being used.

Material for holding mulch in place shall be asphalt or other approved binding material applied in accordance with this section.

MATTING:

Use matting on seeded areas where slope is steeper than 2 horizontal to one vertical (2:1 slope). Matting shall comply with NCDOT SPECIFICATIONS SECTION 1631, DITCH LINER AND EROSION CONTROL BLANKETS.

PART 3 - EXECUTION

GENERAL:

Follow procedures set forth in the publication "Guide for Sediment Control on Construction Sites in North Carolina" by the United States Department of Agriculture, Soil Conservation Service, and as specified herein.

Scarify soil to a depth of three (3) inches and work into a satisfactory seedbed by discing, use of cultipackers, harrows, drags and other approved means.

Preparation outlined above shall not be done when the soil is frozen, wet or otherwise in an unfavorable condition.

Begin and complete seeding operations as outlined below as soon as possible after final grading is completed, but in no event later than thirty (30) days after completion of final grading.

Distribute lime and fertilizer uniformly over seedbed and harrow, rake or otherwise work it into seedbed.

Distribute seed uniformly over seedbed. Cover seed lightly after seeding.

No lime, fertilizer or seed shall be applied during a strong wind, when soil is wet or otherwise unworkable.

Should rain follow seeding before rolling is begun, the bed shall not be rolled.

APPLICATION OF MULCH:

Apply mulch immediately after permanent seeding at a uniform rate sufficient to achieve approximately eighty percent (80%) coverage of ground surface. Care must be taken to prevent the mulch from being applied too thickly and smothering the seedlings. Mulch for temporary seeding should be applied based upon the recommendations of the Soil Conservation Service for the particular type of seed to be used.

Mulch Anchoring:

On ground slopes less than four percent (4%), anchor mulch with a straight blade disk or anchoring tool.

Press mulch into soil about three inches. Operate equipment across slopes.

On ground slopes greater than four percent (4%), apply asphalt with suitable applicator at a rate of not less than 150 gallons per ton of mulch.

Peg and twine anchoring may be used on steep slopes. Drive 8" wood stakes every 3 to 4 feet in all directions. Stretch in a crisscross and square in all directions. Secure twine around pegs and drive pegs flush with surface.

REPAIR AND MAINTENANCE:

Maintain the grass on the area for a period of ninety (90) days after the grass growth appears. Reseed bare areas and repair all eroded areas during that period.

Repairs: Inspect all seeded areas and make necessary repairs or reseedings within the planting season, if possible. If stand should be over sixty percent (60%) damaged, re-establish following original lime, fertilizer and seeding recommendations.

All areas, which do not exhibit satisfactory ground cover within forty five (45) days of seed application, shall be replanted.

END OF SECTION 02920

STANDARD SPECIAL PROVISIONS

SECTION 03305 - CONCRETE

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division - 1 Specification Sections apply to work of this section.

DESCRIPTION OF WORK:

Concrete work includes, but is not specifically limited to, concrete piers, pipe encasement, concrete curbs and gutters, concrete drives, walks and other concrete items required in the project.

RELATED ITEMS SPECIFIED ELSEWHERE:

Storm Drainage: Section 02630

Portland Cement Concrete Curb and Gutter & Sidewalk: Section 02514

Grout: Section 03600

QUALITY ASSURANCE:

Codes and Standards: ACI 301 "Specifications for Structural Concrete for Buildings"; ACI 347 "Recommended Practice for Concrete Formwork", ACI 304 "Recommended Practice for Measuring, Mixing, Transporting, and Placing Concrete"; comply with applicable provisions except as otherwise indicated.

Workmanship: The Contractor is responsible for correction of concrete work which does not conform to the specified requirements, including strength, tolerances and finishes. Correct deficient concrete as directed by the Engineer.

Concrete Testing Service: Employ a testing laboratory acceptable to the Engineer to perform material evaluation tests and to design concrete mixes at Contractor's expense.

Certificates of material properties and compliance with specified requirements may be submitted in lieu of testing. Certificates of compliance must be signed by the materials produced and the Contractor.

PART 2 - PRODUCTS

CONCRETE MATERIALS:

Portland Cement: ASTM C150, Type 1, unless otherwise acceptable to the Engineer.

Aggregates: ASTM C33, except local aggregates of proven durability may be used when acceptable to the Engineer.

Water: Clean, potable.

Design strength: 3000 psi for sidewalks curb and gutter, drives, etc.; 3,000 PSI with 3/8" aggregate for masonry fill; 2500 psi for pipe blocking and encasement.

No admixtures containing calcium chloride may be used. Use Pozzoloth by Master Builders, Plastiment or Plasticrete by Silka and Chemstrong A, R, or W by Castle Chemical Company or approved equal. Retarders and accelerators shall be used only as directed by the Engineer.

Air-Entraining Admixture: ASTM C260. Only use admixtures having neutralized vensol resins. Use MB-VR by Master Builders, SIK A AER by Sika Chemical Company, or CASTLE VR by Castle Chemical Company, or approved equal.

Use air-entraining admixture in all concrete, providing not less than 4% nor more than 6% entrained air.

Water-Reducing Admixture: ASTM C494, Type A, D, and E. Only use admixtures which have been tested and accepted in mix designs, unless otherwise acceptable.

FORM MATERIALS:

Provide form materials with sufficient stability to withstand pressure of placed concrete without bow or deflection.

Exposed Concrete Surfaces: Acceptable panel-type to provide continuous, straight, smooth, as-cast surfaces. Use largest practical sizes to minimize form joints.

Unexposed Concrete Surfaces: Suitable material to suit project conditions.

CURING COMPOUND:

Liquid membrane forming curing compound shall comply with ASTM C300, Type I Class A, minimum 22% solids.

JOINT MATERIALS:

Self-Expanding Cork Joint Filler: Provide resilient and non-extruding type premolded cork units complying with ASTM D1752, Type III.

PART 3 - EXECUTION

FORMING AND PLACING CONCRETE:

Ready-Mixed Concrete: ASTM C94. Furnish delivery tickets for each load showing amount of each material in the batch, time batched, date, and job.

Formwork: Construct so that concrete members and structures are of correct size, shape, alignment, elevation and position, complying with ACI 347. Provide 3/4" chamfer on all exposed corners.

Provide openings in formwork to accommodate work of other trades. Accurately place and securely support items built into forms.

Clean and adjust forms prior to concrete placement. Apply form release agents or wet forms, as required. Retighten forms during and after concrete placement if required to eliminate mortar leaks.

Joints: Provide construction, expansion, weakened-plane (contraction), isolation, and control joints as indicated or required. Locate construction joints so as to not impair the strength and appearance of the structure. Place isolation and control joints in slabs-on-ground to stabilize differential settlement and random cracking.

Provide expansion and weakened-plane (contraction) joints where shown or required. Construct weakened-plane joints for a depth equal to at least 1/4 concrete thickness, either tooled, or with inserts unless otherwise shown. Tool edges of joints where slabs, walks, drives, curbs and gutters, etc. are constructed or replaced.

Place construction joints at the end of pours and at locations where placement operations are stopped for more than 1/2 hour, except where such pours terminate at expansion joints. Construct joints as shown or, if not shown, use standard metal keyway sections.

Provide premolded joint filler for expansion joints abutting curbs, manholes, and other fixed objects. Locate at 20' o/c. for pavement lanes unless otherwise specified.

Concrete Placement: Comply with ACI 304, placing concrete in a continuous operation within planned joints or sections. Do not begin placement until work of other trades affecting concrete is completed.

Consolidate placed concrete using mechanical vibrating equipment with hand rodding and tamping, so that concrete is worked around reinforcement and other embedded items and into all parts of forms.

Protect concrete from physical damage or reduced strength due to weather extremes during mixing, placement and curing.

In cold weather comply with ACI 306.

In hot weather comply with ACI 305.

CONCRETE FINISHES:

Exposed-to-view Surfaces: Provide a smooth rubbed finish for exposed formed concrete surfaces and surfaces that are to be covered with a coating or covering material applied directly to concrete. Remove fins and projects, patch defective areas with cement grout, and rub smooth.

Slab Trowel Finish: Apply trowel finish to interior monolithic slab surfaces that are exposed-to-view or are to be covered with resilient covering, paint or other thinfilm coating. Consolidate concrete surface by finish troweling, free of trowel marks, uniform in texture and appearance.

Drives, Walks, Curbs and Gutter Finishing: After striking-off and consolidating, smooth the concrete surface by screeding and floating. Work edges of slabs, gutters, and other formed joints with an edging tool to a 1/2" radius.

After floating and when excess moisture or surface sheen has disappeared, complete surface finishing as follows:

Broom finish, by drawing a fine-hair broom perpendicular to line of traffic, as acceptable to the ENGINEER.

Curing: Begin initial curing as soon as free water has disappeared from exposed surfaces. Where possible, keep continuously moist for not less than 72 hours. Continue curing by use of moisture-retaining cover or membrane-forming curing compound. Apply curing compound according to manufacturer's instructions and Federal Specification TT-C-00800. Cure formed surfaces by moist curing until forms are removed. Provide protections as required to prevent damage to exposed concrete surfaces.

END OF SECTION 03305

ADDITIONAL REQUIREMENTS
CITY OF GREENVILLE
NORTH CAROLINA

800/900 BLOCK DOUGLAS AVENUE, 1500 BLOCK FLEMING STREET AND 900/800 BLOCK BANCROFT AVENUE

DAVIS-BACON PREVAILING WAGES

This sidewalk project is funded by the United States Department of Housing and Urban Development and is subject to the prevailing wages for Highway (NC103) as determined by the United States Department of Labor.

General Decision Number: NC150103 01/23/2015 NC103

Superseded General Decision Number: NC20140103

State: North Carolina

Construction Type: Highway

Counties: Brunswick, Cumberland, Currituck, Edgecombe, Franklin, Greene, Hoke, Johnston, Nash, New Hanover, Onslow, Pender, Pitt, Wake and Wayne Counties in North Carolina.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Executive Order (EO) 13658 establishes an hourly minimum wage of \$10.10 for 2015 that applies to all contracts subject to the Davis-Bacon Act for which the solicitation is issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.10 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/02/2015
1	01/23/2015

* SUNC2014-005 11/17/2014

Rates Fringes

BLASTER	\$21.04
CARPENTER	\$13.72
CEMENT MASON/CONCRETE FINISHER	\$14.48
ELECTRICIAN	
Electrician	\$17.97
Telecommunications Technician	\$16.79
IRONWORKER	\$16.02
LABORER	
Asphalt Raker and Spreader	\$12.46
Asphalt Screed/Jackman	\$14.33
Carpenter Tender	\$12.88
Cement Mason/Concrete Finisher Tender	\$12.54
Common or General	\$10.20
Guardrail/Fence Installer	\$12.87
Pipelayer	\$12.17
Traffic Signal/Lighting Installer	\$14.89
PAINTER	
Bridge	\$24.50
POWER EQUIPMENT OPERATOR	
Asphalt Broom Tractor	\$11.85
Bulldozer Fine	\$17.04
Bulldozer Rough	\$14.34
Concrete Grinder/Groover	\$20.34
Crane Boom Trucks	\$20.54
Crane Other	\$20.08
Crane Rough/All Terrain	\$20.67
Drill Operator Rock	\$14.38
Drill Operator Structure.	\$21.14
Excavator Fine	\$16.60
Excavator Rough	\$14.00
Grader/Blade Fine	\$18.47
Grader/Blade Rough	\$14.62
Loader 2 Cubic Yards or Less	\$13.76
Loader Greater Than 2 Cubic Yards	\$14.14

Material Transfer Vehicle (Shuttle Buggy)	\$15.18
Mechanic	\$17.55
Milling Machine	\$15.36
Off-Road Hauler/Water Tanker	\$11.36
Oiler/Greaser	\$13.55
Pavement Marking Equipment	\$12.11
Paver Asphalt	\$15.59
Paver Concrete	\$18.20
Roller Asphalt Breakdown	\$12.45
Roller Asphalt Finish	\$13.85
Roller Other	\$11.36
Scraper Finish	\$12.71
Scraper Rough	\$11.35
Slip Form Machine	\$16.50
Tack Truck/Distributor Operator	\$14.52

TRUCK DRIVER

GVWR of 26,000 or Less	\$11.12
GVWR of 26,001 Lbs or Greater	\$12.37

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four (4) letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
 - * an existing published wage determination
 - * a survey underlying a wage determination
 - * a Wage and Hour Division letter setting forth a position on a wage determination matter
 - * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

- 2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

- 3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

- 4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

ADDITIONAL REQUIREMENTS

CITY OF GREENVILLE
NORTH CAROLINA

800/900 BLOCK DOUGLAS AVENUE, 1500 BLOCK FLEMING STREET AND 900/800 BLOCK BANCROFT AVENUE

SECTION 3 REQUIREMENT

- A. The work to be performed under this contract is subject to the requirements of section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.
- B. The parties to this contract agree to comply with HUD's regulations in 24 CFR part 135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.
- C. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
- D. The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.
- E. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24

CFR part 135.

- F. Noncompliance with HUD's regulations in 24 CFR part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

- G. With respect to work performed in connection with section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of section 3 and section 7(b) agree to comply with section 3 to the maximum extent feasible, but not in derogation of compliance with section 7(b).

ADDITIONAL REQUIREMENTS

CITY OF GREENVILLE
NORTH CAROLINA

800/900 BLOCK DOUGLAS AVENUE, 1500 BLOCK FLEMING STREET AND 900/800 BLOCK BANCROFT AVENUE

Minority and/or Women Business Enterprise WMBE REQUIREMENT

It is the policy of the City of Greenville to provide minorities and women equal opportunity for participating in all aspects of the City's contracting and procurement programs, including but not limited to, construction projects, supplies and materials purchases, and professional and personal service contracts. In accordance with this policy, the City has adopted a Minority and Women Business Enterprise (M/WBE) Plan and subsequent program, outlining verifiable goals.

The City has established a ten percent (10%) Minority Business Enterprise (MBE) and six percent (6%) Women Business Enterprise (WBE) goal for the participation of MWBE firms in supplying goods and services for the completion of this project. All firms submitting bids agree to utilize minority and women-owned firms whenever possible.

Questions regarding the City's MWBE Program should be directed to the MWBE Office at 252-329-4862.

Equal Employment Opportunity Clause

The City has adopted an Equal Employment Opportunity Clause, which is incorporated into all specifications, purchase orders, and contracts, whereby a vendor agrees not to discriminate against any employee or applicant for employment on the basis of race, color, religion, sex, national origin or ancestry. A copy of this clause may be obtained at the City Clerk's Office, City Hall, Greenville, NC. By submitting qualifications and/or proposals, the firm is attesting that they are an Equal Opportunity Employer.

Federal law (Rehabilitation Act and ADA) prohibits handicapped discrimination by all governmental units. By submitting a proposal, the vendor is attesting to its policy of nondiscrimination regarding the handicapped.