Town of Indian Trail
Engineering Department

Memo

TO: Mayor and Town Council

FROM: Scott J. Kaufhold, P.E., Town Engineer

DATE: April 5, 2011

COUNCIL DATE: April 12, 2011

SUBJECT: Waxhaw Indian Trail Road Sidewalk Contract

General Information:

Staff held a bid opening for the construction of Waxhaw Indian Trail Road Sidewalk on Thursday, March 17, 2011. This project includes the construction of a 5' wide concrete sidewalk along Waxhaw Indian Trail Road from Colton Ridge Drive to Old Monroe Road and a 6' wide concrete sidewalk with adjacent 2'-6" curb and gutter from the Food Lion Shopping Center entrance to Coventry Drive.

The twelve bids ranged from $148,324.00 to $249,650.50. Following legal counsel, one bid was rejected due to numerous procedural and math errors. Staff recommends W. M. Warr and Son, Inc. with a bid of $148,324.00 as the lowest responsive, responsible bidder.

Required Actions:

Council Award of Contract

Attachments:

1. Waxhaw Indian Trail Road Sidewalk Contract
2. Bid Results

PO Box 2430 . 130 Blythe Drive . Indian Trail . North Carolina . 28079 . (704) 821-1314 . Fax (704) 821-1381

PROJECT MANUAL FOR

WAXHAW-INDIAN TRAIL ROAD SIDEWALK

PROJECT NUMBER:

505-2010-003

TOWN OF INDIAN TRAIL, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL SEAL 024973 ENGINEER SCOTT J. KAUFHOLD

2/24/11

Scott J. Kaufhold, P.E.
Town Engineer
Registered, North Carolina 024973

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I. ADVERTISEMENT FOR BIDS

Waxhaw-Indian Trail Road Sidewalk

Sealed bids will be received until Thursday, March 17, 2011 at 1:00 pm in the Engineering Conference Room, for **Waxhaw-Indian Trail Road Sidewalk, 505-2010-003**, at which time all placed bids will be opened and read aloud.

This project includes the construction of a five (5) foot wide concrete sidewalk along Waxhaw-Indian Trail Road from Colton Ridge Drive to Old Monroe Road, and a six (6) foot wide concrete sidewalk with adjacent 2' - 6" curb & gutter from the Food Lion Shopping Center entrance to Coventry Drive.

Project Length is approximately 3400'.

Contract Documents can be obtained from:

Town of Indian Trail
Engineering Department
130 Blythe Drive
Indian Trail, NC, 28079

Phone: 704-821-1314

The Town of Indian Trail reserves the right to reject any and all proposals.

For more project information, call Adam McLamb at 704-821-1314 or ajm@engineering.indiantrail.org

II. INSTRUCTIONS TO BIDDERS

The Town of Indian Trail (hereafter, the "Town") will receive sealed bids for the following Project:

PROJECT NAME:

Waxhaw-Indian Trail Road Sidewalk

PROJECT NUMBER:

505-2010-003

SCOPE OF WORK:
This contract consists of constructing a five (5) foot wide concrete sidewalk along Waxhaw-Indian Trail Road from Colton Ridge Drive to Old Monroe Road, and a six (6) foot wide concrete sidewalk with adjacent 2' - 6" curb & gutter from the Food Lion shopping center entrance to Coventry Drive. Project Length is approximately 3400'.

CONTRACT DOCUMENTS:
The Contract Documents consist of the Project Manual (which contains the Advertisement, Instructions to Bidders, Bid Documents, Agreement, Supplementary General Conditions, Special Conditions and Specifications), the Plans & Drawings, and any addenda. Contract Documents are available at a charge of $25.00 (non-refundable) and can be obtained at the Town of Indian Trail, Engineering Department. Contract documents will be mailed upon request. There will be an additional charge for postage and handling for each set mailed to a prospective bidder. A current e-mail address must be provided at the time of contract purchase.

BID DEADLINE:
Bids must be received by the Town at 130 Blythe Drive, Indian Trail, NC 28079, no later than Thursday, March 17, 2011 at 1:00 pm, when the bids will be opened and publicly read after the Bid Deadline.

CONTENT OF BID:
Each Bid must contain the following fully-completed forms:
a) Acknowledgement of Addenda (page 11 of this Project Manual)
b) Itemized Bid Form (page 12 of this Project Manual)
c) Representative Projects Form (page 13 of this Project Manual)
d) Execution of Bid Form (page 14 of this Project Manual)
e) Bid Bond (page 15 of this Project Manual)

All Bids shall be placed in a sealed envelope with the following information printed on the outside of the envelope:

BID FOR:	_____ *Project Name & Number*
BIDDER'S NAME:	_____ *Contractor's Name*
DO NOT OPEN UNTIL:	_____ *Bid Opening Date & Time*

BID BOND:
Each Bid shall be accompanied by a bid bond or a cashier's check in the amount not less than 5% of the total amount of the Bid. When the bid security is in the form of a bid bond, that bid bond shall be executed by a corporate surety licensed in North Carolina to execute such bonds.

BIDS ARE FIRM OFFERS:
All Bids shall be firm offers to contract for 180 days from the Bid Deadline. Unless forfeited, Bid Bonds shall be returned to Bidders upon the earlier of Contract Award or 180 days from the Bid Deadline. All interest on cash bonds shall be retained by the Town.

BID PHASE CONTACT:
For questions regarding the Project or Instructions to Bidders, contact: Adam McLamb. The Town will attempt to answer all questions in writing by email. THE TOWN WILL NOT MAKE AND BIDDERS MAY NOT RELY ON ORAL REPRESENTATIONS.

ADDENDA:
Addenda will be filed in the Town Engineer's office and delivered by fax or email to all persons who have requested Contract Documents. The Bidder shall be responsible for inquiring if Addenda have been issued.

SELECTION CRITERIA:
The Town shall select as the contractor ("Selected Bidder") the lowest responsive and responsible Bidder, as required by North Carolina General Statutes. Consideration will be given only to Bids 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 that have been completed by them. The Town also reserves the right to reject any and all Bids and to waive informalities and technicalities as it may deem to be in its best interest.

ONLY ONE BID PER ENTITY:
No entity or person may submit or participate in the submission of more than one Bid.

CONTRACT AWARD:
The Town will inform the Selected Bidder of its selection and request that the Selected Bidder submit the executed Agreement plus insurance certificates and payment and performance bonds. The Selected Bidder shall submit the requested documents so that they are received by Town within 10 calendar days (or such other time as designated by Town) from the date of notice of selection. The Selected Bidder's failure to do so will result in forfeiture of its bid bond and this contract. The contract shall not be deemed awarded and this Agreement shall not be binding on the Town unless and until both the Selected Bidder and Town have both executed the Agreement.

III. BID DOCUMENTS

ACKNOWLEDGEMENT OF ADDENDA

PROJECT NAME: **Waxhaw-Indian Trail Road Sidewalk**

PROJECT NUMBER: **505-2010-003**

ACKNOWLEDGMENT OF ADDENDA

The Bidder hereby acknowledges receipt of any addenda

NUMBER:_____DATE:_____INITIAL:_____

NUMBER:_____DATE:_____INITIAL:_____

NUMBER:_____DATE:_____INITIAL:_____

NUMBER:_____DATE:_____INITIAL:_____

Contractor Name: _____

TOWN OF INDIAN TRAIL
WAXHAW-INDIAN TRAIL ROAD
SIDEWALK PROJECT

Sect. No.	Item Description	Quantity	Unit	Unit Price	Amount
SP1	Mobilization	1	LS		
SP2	Grading	1	LS		
610	Asphalt Concrete Surface Course, S 9.5 C, Up To 3" Thick	25	TN		
610	Asphalt Concrete Intermediate Course, I 19.0 C, Up To 4" Thick	25	TN		
610	Asphalt Concrete Base Course, B 25.0 C, Up To 3" Thick	50	TN		
SP3	4" Concrete Sidewalk (Five feet wide)	1500	SY		
SP3	4" Concrete Sidewalk (Six feet wide)	300	SY		
SP3	6" Concrete Wheelchair Ramps	14	EA		
SP3	6" Concrete Driveway	135	SY		
SP3	2' - 6" Concrete Curb and Gutter	450	LF		
SP4	Truncated Dome Mats and Installation	14	EA		
SP5	12" HDPE	10	LF		
SP5	15" HDPE	40	LF		
310	15" RCP, Class III	163	LF		
310	18" RCP, Class III	20	LF		
310	24" RCP, Class III	16	LF		
340	Pipe Removal	100	LF		
545	Incidental Stone Base	100	TN		
840	Masonary Drainage Structures	3	EA		
840	Convert STD. 840.32 to DI Slab Top (See Detail Sheet 2)	1	EA		
840	Frame and Cover (NCDOT STD. 840.16)	1	EA		
2000	Ring and Cover (City of Charlotte STD. 20.05B)	1	EA		
840	Masonary Drainage Structure Repair	1	EA		
876	Stone Outlet Protection with Fabric (NCDOT Std. 876.02)	1	EA		
2A	Temporary Wattles (See Detail Sheet 2A)	5	EA		
1060	Erosion Control Matting	300	SF		
SP6	Tree Protection Fence	400	LF		
SP7	Selective Tree Removal, 6" - 12" Diameter	2	EA		
SP7	Selective Tree Removal, 12" - 24" Diameter	3	EA		
SP7	Undergrowth Removal	100	SY		
SP8	Pre-Cast Modular Block Retaining Wall, Non-reinforced	100	SF		
SP9	Borrow Material	400	CY		
SP10	Traffic Control	1	LS		
SP11	Materials Testing Services	1	LS	$10,000.00	$10,000.00
		Subtotal			
		Contingency	10%		
		Total			

REPRESENTATIVE PROJECTS FORM

1. Project: _____

   Owner: _____

   Contract Price: _____

   Date Completed: _____

   Owner Contact: _____

2. Project: _____

   Owner: _____

   Contract Price: _____

   Date Completed: _____

   Owner Contact: _____

3. Project: _____

   Owner: _____

   Contract Price: _____

   Date Completed: _____

   Owner Contact: _____

Contractor Name:_____

EXECUTION OF BID FORM

PROJECT NAME: **Waxhaw-Indian Trail Road Sidewalk**

PROJECT NUMBER: **505-2010-003**

The person executing the Bid, on behalf of the Bidder, being first duly sworn, deposes and says that:

(1) It is the intent of the Bidder to enter into this Contract to furnish materials, labor, and equipment required to perform all work specified in accordance with the instructions, terms, conditions, provisions, specifications, plans and all other Contract Documents incorporated into this Invitation to Bid;
(2) He/she is fully informed regarding the preparation and contents of the attached Bid and of all pertinent circumstances regarding such Bid;
(3) Neither he/she, nor any official, agent or employee of the Bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is a restraint of free competitive bidding in connection with this Bid;
(4) He/she will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, disability, or veteran's status; and

Type of Bidder: ☐ **Sole Proprietor** ☐**Partnership** ☐ **Limited Liability Company** ☐ **Corporation** ☐ **Joint Venture**
(Check appropriate box)

BIDDER #1

Name _____

Address _____

_____

Phone _____

Fax _____

Printed Name _____

SIGNATURE _____

Title _____

NC General Contractor's License Number _____

Classification _____

Limits _____

Subscribed and sworn before me
this _____ day of _____, 201___

_____
Signature
My commission expires _____

BID BOND

(Attach Bond and Power of Attorney to this sheet)

IV. AGREEMENT

AGREEMENT FOR CONSTRUCTION

THIS AGREEMENT ("Agreement"), made and entered into on or about _____, 201__, by and between the Town of Indian Trail, North Carolina, hereinafter called "Owner" and _____, hereinafter called "Contractor" (collectively, "Parties"),

WITNESSETH

In consideration of the mutual promises set forth herein, the parties hereto mutually promise and agree as follows:

1. **PROJECT: Waxhaw-Indian Trail Road Sidewalk**

2. **COMPLETION OF WORK**: For the Contract Price, Contractor shall furnish all materials, labor, tools, equipment, and supervision for the construction of the Project and all expense, direct or indirect, connected with the proper execution of the same and of maintaining the same, until it is accepted by the Owner (the "Work"). All Work shall be performed and completed in an efficient and workmanlike manner, in accordance with the Contract Documents and in compliance with all applicable federal, local and state regulatory agencies.

3. **CONTRACT DOCUMENTS**

   a. Advertisement
   b. Instructions to Bidders
   c. Bid Documents (Acknowledgment of Addenda, Itemized Bid Form, Representative Projects, Execution of Bid Form and Bid Bond)
   d. This Agreement
   e. Supplementary General Conditions
   f. Specifications
   g. Project Special Provisions
   h. Appendix
   i. Addenda

   The Contract Documents listed above are all essential parts of the contractual requirements. The terms "Contract Documents" and "Contract" shall have the same meaning. A requirement occurring in one Contract Document is as binding as though occurring in all. They are intended to be complementary. In case of discrepancy, detailed provisions shall have precedence over general conditions. Should any addenda, change orders or supplemental agreements be issued at a later date, they will become part of the Contract Documents, and their terms shall take precedence over conflicting terms in earlier Contract Documents.

   The Contractor shall not take advantage of any apparent error or omission in the Contract Documents. In the event the Contractor discovers an error or discrepancy, it shall immediately inform the Owner.

4. **CONTRACT PRICE:** This is a unit price contract. The Contract Price shall be the unit price for each pay item multiplied by the actual units of each pay item certified by Contractor on a pay request as described below and approved by the Owner as satisfactorily completed in accordance with the Contract. The pay items and their unit prices are set forth in the Itemized Bid Form. Change orders must be approved in writing prior to commencing work by both the Owner and the Contractor. The final Contract Price shall not be determined until the completion and acceptance by the Owner of the Work and shall be the sum of the approved amounts of all pay items.

5. **CONTRACT TIME**: The Contractor shall achieve Substantial Completion of the Work no later than **60 calendar days** from the date of commencement stated in the written Notice to Proceed. "Substantial Completion" shall mean all Work has been completed, inspection has occurred and a final punch list has been agreed upon.

   No work will take place on Town designated holidays.

6. **LIQUIDATED DAMAGES**: Contractor has obligated itself to complete the Work within the Contract Time. Contractor acknowledges that Owner will be damaged should Contractor not complete the Work within the Contract Time. In lieu of proceedings to ascertain the amount of such damages, Contractor and Owner agree that such damages shall be equal to and Contractor shall be obligated to Owner in the amount of **$500.00 (five hundred dollars) for each calendar day** the Work is not completed after the Contract Time.

7. **PAYMENTS**: Partial payments will be made upon receipt of Contractor invoice at least once each month as the Work progresses. Said payments will be based upon estimates, prepared by the Contractor and approved by Owner, of the value of the Work performed and materials complete in place in accordance with the Contract Documents.

   No partial payment will be made when the amount due the Contractor since the last estimate amounts to less than ten thousand dollars ($10,000.00).

   No partial payment shall bind the Owner to the acceptance of any materials or work in place as to quality or quantity. All partial payments are subject to correction at the time of final payment as provided in the subsection titled ACCEPTANCE AND FINAL PAYMENT of this section.

8. **INDIAN TRAIL PRIVILEGE LICENSE**: An Indian Trail privilege license must be maintained throughout the life of the contract.

9. **GUARANTEE**: The Contractor shall guarantee all materials and workmanship for a period of twelve (12) months from the date of acceptance by the Town and shall replace any portions that fail because of faulty materials or workmanship at no additional cost to the Town. This guarantee shall include any grass that needs to be mowed that was seeded and mulched during construction. A six (6) month and eleven (11) month inspection 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 from the date of repair of the item.

   The performance bond will be held as the guarantee for the twelve (12) month period.

10. **BONDS AND INSURANCE:** Owner's obligations under this Agreement are subject to the condition precedent that the Contractor provides a Performance Bond, Maintenance Bond and Certificate of Insurance as required by the Contract Documents.

    The successful bidder at the preconstruction meeting shall provide the Town with a contract payment bond in an amount equal to 100 percent of the amount of the contract and a contract performance bond in an amount equal to 100 percent of the amount of the contract. All bonds shall be in conformance with G.S. 44A-33. The corporate surety furnishing the bonds shall be authorized to do business in the State.

    The successful bidder's failure to file acceptable bonds at the preconstruction meeting 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 lowest responsible bidder or the work may be re-advertised and constructed under contract or otherwise, as the Town may decide.

SIGNATURE SHEET

CONTRACTOR FIRM NAME: _____

By: _____

Printed Name: _____

Title: _____

Date: _____

ADDRESS: _____

_____

_____

FEDERAL TAX ID NUMBER: _____

TOWN OF INDIAN TRAIL

By: _____ _____
Town Manager Date

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

By: _____ _____
Finance Officer Date

SURETY COMPANY CONTACTS

PAYMENT BOND NO.: _____

Surety Name: _____

Address: _____

_____

Contact Person: _____

Title: _____

Phone No.: _____

PERFORMANCE BOND NO.: _____

Surety Name: _____

Address: _____

_____

Contact Person: _____

Title: _____

Phone No.: _____

SURETY AGENCY/AGENT: _____

Agency Name: _____

Address: _____

_____

Contact Person: _____

Title: _____

Phone No.: _____

Attach Performance Bond to this sheet.

Attach Payment Bond to this sheet.

Attach Certificate of Insurance to this sheet.

V. SUPPLEMENTARY GENERAL CONDITIONS

1. SCOPE OF WORK

1.1 ALTERATION OF WORK AND QUANTITIES

The Owner reserves and shall have the right to make such alterations in the Work as may be necessary or desirable to complete the Work in the manner acceptable to Owner. Unless otherwise specified herein, the Owner may make such alterations in the Work as may increase or decrease the originally awarded Contract quantities, and the Contractor agrees to value the increase or decrease in quantities using the unit prices set forth in the Itemized Bid Form, or if there are none, as agreed to by the parties. These alterations shall be covered by written Change Orders signed by Owner and Contractor. Change Orders for altered Work may include extensions of Contract Time if, in the Owner's opinion, such extensions are warranted by the amount and difficulty of added work.

1.2 MAINTENANCE OF TRAFFIC

When the Contract requires the maintenance of vehicular traffic on an existing road, street, or highway during the Contractor's performance of Work that is otherwise provided for in the Contract Documents, the Contractor shall keep such road, street, or highway open to all traffic and shall provide such maintenance as may be required to accommodate traffic. The Contractor shall furnish, erect, and maintain barricades, warning signs, flagmen, and other traffic control devices in reasonable conformity with the Manual of Uniform Traffic Control Devices for Streets and Highways (published by the United States Government Printing Office), unless otherwise specified herein.

The Contractor shall also construct and maintain in a safe condition any temporary connections necessary for ingress to and egress from abutting property or intersecting roads, streets or highways. Unless otherwise specified herein, the Contractor will not be required to furnish snow removal for such existing road, street, or highway.

The Contractor must contact NCDOT before any work is performed along their streets.

1.3 FINAL CLEANING UP

Upon completion of the Work and before acceptance and final payment will be made, the Contractor shall remove from the site all machinery, equipment, surplus and discarded materials, rubbish, temporary structures, and stumps or portions of trees on all ground occupied during the project. The contractor shall leave the site in a neat and presentable condition. Material cleared from the site and deposited on adjacent property will not be considered as having been disposed of satisfactorily, unless the Contractor has obtained the written permission of such property owner.

1.4 ACCESS TO THE WORK

The Contractor shall identify access routes with suitable signs, barricades and similar equipment. The entire access route and construction site shall be kept free and clean of all debris at all times and maintained in good repair by the Contractor. All damage to the access route caused by the actions of the Contractor or his agents shall be immediately repaired to the satisfaction of the Owner.

1.5 MAINTENANCE DURING CONSTRUCTION

The Contractor shall maintain the Work during construction and until the Work is accepted. This maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and forces so that the Work is maintained in satisfactory condition at all times. In the case of a contract for the placing of a course upon a course or subgrade previously constructed, the Contractor shall maintain the previous course or subgrade during all construction operations. All costs of maintenance work during construction and before the project is accepted shall be included in the unit prices bid on the various contract items and the Contractor will not be paid an additional amount for such work.

END OF SCOPE OF WORK

2. CONTROL OF WORK

2.1 CONFORMITY WITH PLANS AND SPECIFICATIONS

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

All Work and all materials furnished shall be within the specified tolerances of the lines, grades, grading sections, cross sections, dimensions, material requirements, and testing requirements that are specified in the contract, plans and specifications.

If the Owner finds the materials furnished, Work performed, or the finished product not within the specified tolerances of the plans and specifications but that the portion of the Work affected will, in its opinion, result in a finished product having a level of safety, economy, durability, and workmanship acceptable to the Owner, that the affected Work be accepted and remain in place. In this event, the Owner determines an adjustment in the Contract Price for the affected portion of the Work.

If the Owner finds the materials furnished, Work performed, or the finished product are not within the specified tolerances of the plans and specifications and have resulted in an unacceptable finished product, the affected Work or materials shall be removed and replaced or otherwise corrected by and at the expense of the Contractor in accordance with the Owner's written orders.

For the purpose of this subsection, the term "reasonably close conformity" shall not be construed as waiving the Contractor's responsibility to complete the Work in accordance with the Contract Documents. The term shall not be construed as waiving the Owner's right to insist on strict compliance with the requirements of the Contract Documents.

2.2 COOPERATION OF CONTRACTOR

The Contractor will be supplied with two (2) copies each of the plans and specifications. He shall have available on the Site at all times one copy each of the plans and specifications. Additional copies of plans and specifications may be obtained by the Contractor for the cost of reproduction.

The Contractor shall give constant attention to the Work to facilitate the progress thereof, and he shall cooperate with the Owner and his/her inspectors, the Engineer and with other contractors in every way possible. The Contractor shall have a competent superintendent on the Work at all times who is fully authorized as his/her agent on the Work. The superintendent shall be capable of reading and thoroughly understanding the plans and specifications and shall receive and fulfill instructions from the Owner or his/her authorized representative.

2.3 COOPERATION BETWEEN CONTRACTORS

The Owner reserves the right to contract for and perform other or additional work on or near the Work covered by this contract.

When separate contracts are let within the limits of any one project, each contractor shall conduct his/her Work so as not to interfere with or hinder the progress of completion of the Work being performed by other contractors. Contractors working on the same project shall cooperate with each other as directed.

Each contractor involved shall assume all liability, financial or otherwise, in connection with his/her contract and shall protect and save harmless the Owner from any and all damages or claims that may arise because of inconvenience, delays, or loss experienced by him because of the presence and operations of other contractors working within the limits of the same project.

The Contractor shall arrange his/her work and shall place and dispose of the materials being used so as not to interfere with the operations of the other contractors within the limits of the same project. He shall join his/her work with that of the others in an acceptable manner and shall perform it in proper sequence to that of the others.

2.4 AUTHORITY AND DUTIES OF INSPECTORS

Inspectors employed by the Owner shall be authorized to inspect all work done and all material furnished. Such inspection may extend to all or any part of the Work and to the preparation, fabrication, or manufacture of the materials to be used. Inspectors are not authorized to revoke, alter, or waive any provision of the contract. Inspectors are not authorized to issue instructions contrary to the plans and specifications or to act as foreman for the Contractor.

2.5 INSPECTION OF THE WORK

All materials and each part or detail of the Work shall be subject to inspection by the Owner or Owner's inspectors. The Owner and Owner's inspectors shall be allowed access to all parts of the Work and shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection.

Upon prior written approval between the owner and the contractor, if the Owner or Owner's inspector requests it, the Contractor, at any time before acceptance of the Work, shall remove or uncover such portions of the finished Work as may be directed. After examination, the Contractor shall restore said portions of the Work to the standard required by the specifications. Should the Work thus exposed or examined prove acceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be paid for as Extra Work; but should the Work so exposed or examined prove unacceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be at the Contractor's expense.

Any Work done or materials used without supervision or inspection by the Owner may be ordered removed and replaced at the Contractor's expense unless the Owner failed to inspect after having been given reasonable notice in writing that the Work was to be performed.

2.6 REMOVAL OF UNACCEPTABLE AND UNAUTHORIZED WORK

All Work which does not conform to the requirements of the Contract Documents will be considered unacceptable, unless otherwise determined acceptable as provided in the subsection titled CONFORMITY WITH PLANS AND SPECIFICATIONS.

Unacceptable Work, whether the result of poor workmanship, use of defective materials, damage through carelessness, or any other cause found to exist prior to the final acceptance of the Work, shall be removed immediately and replaced in an acceptable manner at the Contractor's expense.

Upon failure on the part of the Contractor to comply forthwith with any order of the Owner made under the provisions of this subsection, the Owner will have authority to cause unacceptable work to be remedied or removed and replaced and unauthorized work to be removed and to deduct the costs (incurred by the Owner) from any monies due or to become due the Contractor.

2.7 LOAD RESTRICTIONS

The Contractor shall comply with all legal load restrictions in the hauling of materials on public roads beyond the limits of the Work. A special permit will not relieve the Contractor of liability for damage which may result from the moving of material or equipment.

The operation of equipment of such weight or so loaded as to cause damage to structures or to any other type of construction will not be permitted. Hauling of materials over the base course or surface course under construction shall be limited as directed. No loads will be permitted on a concrete pavement, base, or structure before the expiration of the curing period.

The Contractor shall be responsible for all damage done by his/her hauling equipment and shall correct such damage at its own expense.

2.8 RETEST OF WORK

When as provided for in the Contract Documents, the Owner performs sampling and tests of the Work and if the tests show a failure to meet the requirements of the Contract Documents, the expense of retesting, after reworking or substitution by the Contractor will be at the expense of the Contractor and such costs will be deducted from the payments otherwise due to the Contractor.

2.9 CHARACTER OF WORKERS, METHODS AND EQUIPMENT

The Contractor shall, at all times, employ sufficient labor and equipment for prosecuting the Work to full completion in the manner and time required by the contract, plans, and specifications.

All workers shall have sufficient skill and experience to perform properly the work assigned to them. Workers engaged in special work or skilled work shall have sufficient experience in such work and in the operation of the equipment required to perform the work satisfactorily.

All equipment which is proposed to be used on the Work shall be of sufficient size and in such mechanical condition as to meet requirements of the Work and to produce a satisfactory quality of work. Equipment used on any portion of the Work shall be such that no injury to previously completed work, or adjacent property.

When the methods and equipment to be used by the Contractor in accomplishing the Work are not prescribed in the contract, the Contractor is free to use any methods or equipment that will accomplish the Work in conformity with the requirements of the contract, plans, and specifications.

Any person employed by the Contractor or by a subcontractor who, in the opinion of the Owner does not perform its work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the Owner, be removed forthwith by the Contractor or subcontractor employing such person, and shall not be employed again in any portion of the Work without the approval of the Engineer.

Should the Contractor fail to remove such person or persons or fail to furnish suitable and sufficient personnel for the proper prosecution of the Work, the Owner may suspend the Work by written notice until compliance with such orders.

The failure to provide adequate labor and equipment may be considered cause for terminating the Contract.

2.10 FIRE PREVENTION

Contractor shall conform to all Federal, State, and local laws and regulations pertaining to burning, fire prevention and control within or adjacent to the project. Necessary precautions to avoid and eliminate fire hazards shall be the responsibility of the Contractor. This includes keeping the Contract Work area clear of all trash at all times.

All tarpaulins used for any purpose during construction of any work shall be made of material resistant to fire, water and weather and shall bear UL labels. Lighting of any fires on premises is strictly forbidden.

Contractor shall provide portable fire extinguishers compatible with the hazard of each work area and shall instruct its personnel in their location and use. Wherever welding and burning are conducted, no inflammable materials shall be allowed, and welding activities shall be shielded. The Contractor shall post a Hot Work Permit whenever an open flame shall be utilized for work.

2.11 PUMPING AND DRAINAGE

Surface or sub-surface water or other fluid shall not be permitted to accumulate in excavations or under any structure. Should such conditions develop or be encountered, the water or other fluid shall be controlled and suitably disposed of by means of temporary pumps, piping, drainage lines and ditches, dams or other methods approved by the Owner and other public agencies having jurisdiction.

2.12 DUST CONTROL

The Contractor, for the duration of the Contract, shall maintain all excavations, embankments, haul roads, access roads, plant sites, waste disposal areas, borrow areas, and all other work areas free from dust. Industry accepted methods of dust control suitable for the area involved and approved by Owner will be permitted.

2.13 WATER POLLUTION

Contractor shall, at its expense, provide suitable facilities to prevent the introduction of any substances or materials into any stream, river, lake or other body of water, which may pollute the water or constitute substances or materials deleterious to fish and wild life.

2.14 ILLUMINATION

When any work is performed at night or where daylight is shut off or obscured, Contractor shall, at its expense, provide artificial light sufficient to permit work to be carried on efficiently, satisfactorily and safely, and to permit thorough inspection. During such time periods the access to the place of work shall also be clearly illuminated. All wiring for electric light and power shall be installed and maintained in compliance with local code, securely fastened in place at all points, and shall be kept as far as possible from telephone wires, signal wires, and wires used for firing blasts.

2.15 HAZARDOUS MATERIAL

The Contractor shall immediately notify Owner of any hazardous materials subsequently found on the site and shall not remove same without the permission of Owner.

If the contractor caused the hazardous material and subsequent contamination, Contractor shall remove said hazardous material and contaminated soils or materials from the site and shall dispose of same in accordance with all Federal, State or Local laws or regulations. Removal of such materials and contamination shall be monitored by a licensed hazardous materials laboratory, and said laboratory shall prepare a written report attesting to the complete removal of the contaminating material and resulting contamination, all to the satisfaction of, and at no cost to, the Owner.

2.16 EROSION CONTROL

Contractor shall also follow all erosion control measures on construction drawings and or plans and specifications. Contractor shall conform to all Federal, State, and local laws and regulations pertaining to erosion control within or adjacent to the project.

2.17 ADDITIONAL WORK

Additional work is that which results from a change or alteration in the contract and for which there are existing contract unit prices.

END OF CONTROL OF WORK

3. PROSECUTION AND PROGRESS

3.1 PRE-CONSTRUCTION MEETING

A pre-construction 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 that may be used to contact the Contractor or his authorized representative in the event of an emergency after normal business hours. The Contractor will provide a Request for Taxpayer Identification Number and Certification (W-9). Upon receipt of the required documentation, a Notice to Proceed will be issued by the Engineer.

Town will provide two (2) copies of the contract to the contractor at the pre-construction conference. Additional copies may be obtained subject to the cost of printing.

3.2 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.

3.3 PROSECUTION AND PROGRESS

Unless otherwise specified, the Contractor shall submit his/her progress schedule for the Owner's approval at the pre-construction meeting. The Contractor's progress schedule, when approved by the Owner, may be used to establish major construction operations and to check on the progress of the Work.

If the Contractor falls significantly behind the submitted schedule, the Contractor shall, upon the Owner's request, submit a revised schedule for completion of the Work within the Contract Time and modify his/her operations to provide such additional materials, equipment, and labor necessary to meet the revised schedule. Should the prosecution of the Work be discontinued for any reason, the Contractor shall notify the Owner in writing at least 24 hours in advance of resuming operations.

The Contractor shall not commence any actual construction prior to the date set forth in the Notice to Proceed.

3.4 TEMPORARY SUSPENSION OF THE WORK

The Owner shall have the authority by written notice to the Contractor, to suspend the Work wholly, or in part, for such period or periods as the Owner may deem necessary, or for such time as is necessary due to the failure on the part of the Contractor to carry out orders given or to perform any or all of the Contractor's other duties under this Contract.

A. If the Contractor is ordered by the Owner to suspend the Work under this Section due to an unforeseen cause not otherwise provided for in the other provisions of this Contract and over which the Contractor has no control, the Contractor may be reimbursed for actual money expended on the Work during the period of shutdown. No allowance will be made for anticipated profits. The period of shutdown shall be computed from the effective date of the Owner's order to suspend the Work to the effective date of the Owner's order to resume the Work. Claims for such compensation shall be filed with the Owner within the time period stated in the Owner's order to resume work. The Contractor shall submit with its claim information substantiating the amount shown on the claim.

B. If the Work is suspended under this Section for an indefinite period, the Contractor shall perform the following duties:

1. Suitably store all materials.

2. Implement measures to protect existing work from damage or deterioration.

3. Erect such temporary structures and barricades as necessary to provide for traffic on, to or from the Project.

4. Periodically inspect and maintain the Work and temporary measures during the suspension period, and repair any damage to the Work during the suspension period.

5. Maintain all insurance and bond coverage.

6. Perform such other work as required by the Contract Documents with respect to the Project.

7. Remobilize when ordered to resume the Work by the Engineer.

The Contractor shall notify the Owner in writing fourteen (14) calendar days prior to demobilizing. At the time that the written notice is given to the Owner, the Contractor shall submit a written estimate of any costs of remobilization except in those cases in which the Contractor will bear the costs of remobilization under Paragraph C hereof. Compliance by the Contractor with such notice requirement, and with the requirement for submitting such written estimate, shall be a prerequisite to the Contractor's right to recover any costs incurred by the Contractor to comply with this Paragraph B, to the extent the Contractor would otherwise have a claim for such costs hereunder.

C. If the Contractor requests a suspension of the Work in whole or in part, or if the Contractor is ordered by the Owner to suspend the Work under this Section due to inclement weather, due to the Contractor's failure to carry out orders given or due to the Contractor's failure to perform any of the Contractor's other duties under this Contract, then:

1. The Contractor shall not be entitled to any additional compensation for fulfilling the duties that the Contractor is required to perform by reason of such suspension, regardless of whether any additional compensation would otherwise be allowed hereunder, including, without limitation, any additional compensation for fulfilling any of the duties that are imposed upon the Contractor under Paragraph B hereof or for fulfilling the Contractor's duty to remobilize at the end of such suspension; and

2. The Contractor shall pay the Owner all of the costs that are incurred by the Owner by reason of such suspension, including, but not limited to, the Engineer's fees and the costs of any necessary inspections or testing during the period of such suspension.

3.5 ADJUSTMENT OF CONTRACT TIME

The Contract Time may be adjusted only by change order, when requested by the Contractor in writing and approved by the Owner, for reasons outside of the Contractor's control, as follows:

A. Natural disasters affecting the site; or

B. Excessive rainfall during the entire calendar month, defined as total monthly rainfall in excess of the normal rainfall for that calendar month <u>and</u> total number of days with more than 0.10 inches of rainfall in excess of the normal number of such days for that calendar month. Normal values shall be taken as published in "Climatography of the United States No. 20 for North Carolina"; or

C. Suspension of the Work as order by the Owner; or

D. Delays in critical work by others that is not part of this Contract; or

E. Significant additions to the scope of the Work.

The Contractor shall bear the burden of proof that a delay has been caused by factors outside his control, shall clearly demonstrate how the delay impacts the critical path of the Work as shown on his work schedule as last revised, and shall demonstrate that he has made reasonable and prudent efforts to overcome the impact of the delay on the critical path. With respect to item (b) above, a condition precedent to meeting its burden of proof will be the monthly submission to the owner of a statement of the number of days, if any, the Contractor was prevented from prosecuting the Work during the immediately preceding month due to excessive rainfall.

3.6 FAILURE TO COMPLETE PUNCH LIST ON TIME

The Contractor shall complete all punch list items determined by the Owner within thirty (30) calendar days. Should the Contractor fail or refuse to complete all punch list items to the satisfaction of the Owner within the said 30-day period, the Owner shall have the right to complete all said punch list items. In such event, Owner shall be entitled to recover from Contractor the Owner's actual costs incurred in completing such punch list items, plus any and all consequential damages and costs incurred by Owner as a result of Contractor's failure to complete such punch list items. Failure to complete all punch list items within sixty (60) calendar days, shall be considered Default of Contract and shall result in loss of any remaining retainage otherwise due to the Contractor.

3.7 DEFAULT AND TERMINATION OF CONTRACT

The Contractor shall be considered in default and such default will be considered as cause for the Owner to terminate the Contract for any of the following reasons if the Contractor:

A. Fails to begin the Work under the Contract within ten (10) calendar days of the date of commencement specified in the "Notice to Proceed"; or

B. Fails to perform the Work or fails to provide sufficient workers, equipment or materials to assure completion of the Work in accordance with the terms of the Contract; or

C. Performs the Work unsuitably or neglects or refuses to remove materials or to perform anew such Work as may be rejected as unacceptable and unsuitable; or

D. Discontinues the prosecution of the Work; or

E. Fails to resume Work which has been suspended within a reasonable time after notice to do so; or

F. Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency; or

G. Allows any final judgment related to the Project to stand against him unsatisfied for a period of 10 days; or

H. Makes an assignment for the benefit of creditors; or

I. Fails to perform any covenant of this Contract, or

J. For any other cause whatsoever, fails to carry on the Work in an acceptable manner.

Should the Owner consider the Contractor in default of the Contract for any reason hereinbefore, the Owner shall immediately give written notice to the Contractor and the Contractor's surety as to the reasons for considering the Contractor in default and the Owner's intentions to terminate the contract.

If Contractor or Surety shall fail to cure such default within 10 calendar days after such written notice from the Owner of the existence of such default or, if such default cannot with reasonable diligence be cured within a period of 10 calendar days,

then upon the failure of the Contractor to commence to cure such default within said 10-day period and to proceed with due diligence to complete the remedying of said default; then the Owner will, have full power and authority, without violating the Contract, to terminate the Contract and/or to take control of the Work.

All costs and charges incurred by the Owner, together with the cost of completing the Work, will be deducted from any monies due or which may become due the Contractor. If such expense exceeds the sum which would have been payable under the contract, then the Contractor and the surety shall be liable and shall pay to the Owner the amount of such excess.

3.8 TERMINATION FOR CONVENIENCE

At any time after the acceptance of this Contract, the Owner shall have the absolute right to terminate the entire Contract or any part thereof for any reason whatsoever.

3.9 ACTIONS UPON TERMINATION OR TERMINATION FOR CONVENIENCE

Upon receipt of such notice of termination, the Contractor shall:

A. Stop the performance of the Work.

B. Take any other action toward termination of the Work which the Owner directs, including but not limited to:

1. Stabilization of the unfinished site to meet the conditions of the erosion and sediment control permit and at the direction of the Department of Environment and Natural Resources.

2. Maintain the necessary traffic control devices until all potential hazards due to unfinished construction activities have been removed and/or to the satisfaction of the Owner. Traffic control devices that are determined by the Owner to remain shall become the property of the Owner.

3. Complete any pay item as directed by the Owner that if left uncompleted may result in a safety hazard.

4. Deliver all paid stored materials stored off site and material stored on site to a location directed by the Owner.

5. Remove all temporary facilities.

6. Provide any necessary items of Work to secure the Site from public access as directed by the Engineer.

3.10 PAYMENT UPON TERMINATION

When the Contract, or any portion thereof, is terminated before completion of all pay items, payment will be made for the actual number of units or items of Work completed at the Contract price or as mutually agreed for items of Work partially completed.

Reimbursement for organization of the Work, and other overhead expenses, (when not otherwise included in the contract) and moving equipment and materials to and from the job will be considered, the intent being that an equitable settlement will be made with the Contractor.

Acceptable materials, obtained or ordered by the Contractor for the Work and that are not incorporated in the Work shall, at the option of the Owner, be purchased from the Contractor at actual cost as shown by receipted bills and actual cost records at such points of delivery as may be designated by the Owner.

If the sum of all previous payment and credits made by the Owner exceeds the sum payable due to the Contractor, such excess shall be refunded by the Contractor to the Owner immediately upon the determination of such excess by the owner.

If the Contract is terminated for convenience, the Contractor shall be paid a sum as profit determined taking the amount of profit the Contractor would have received upon completing this Contract, multiplied by a fraction, the numerator of which is the value of the Work completed as of the date of receipt of the notice of termination and the denominator of which is the Contract Price.

Termination of the Contract or a portion thereof shall neither relieve the Contractor of his/her responsibilities for the completed Work nor shall it relieve his/her surety of its obligation for and concerning any just claim arising out of the Work performed.

The Owner shall be given full access to all books, cost records, correspondence and papers of the Contractor relating to the Contract in order to determine amounts to be paid the Contractor due to any termination of the Contract.

3.11 PARTIAL ACCEPTANCE

If at any time during the prosecution of the Work the Contractor substantially completes a usable unit or portion of the Work, the occupancy of which will benefit the Owner, he may request the Owner to make final inspection of that unit. If the Owner finds upon inspection that the unit has been satisfactorily completed in compliance with the Contract, he may accept it as being completed, and the Contractor may be relieved of further responsibility for that unit. Such partial acceptance and beneficial occupancy by the Owner shall not void or alter any provision of the Contract.

3.12 FINAL ACCEPTANCE

Upon due notice from the Contractor of presumptive completion of the entire Work, the Owner will make an inspection. If all construction provided for and contemplated by the Contract is found to be completed in accordance with the Contract Documents, such inspection shall constitute the final inspection. The Owner shall notify the Contractor in writing of final acceptance as of the date of the final inspection.

If, however, the inspection discloses any Work, in whole or in part, as being unsatisfactory, the Owner will give the Contractor the necessary instructions for correction of same and the Contractor shall immediately comply with and execute such instructions. Upon correction of the Work, another inspection will be made which shall constitute the final inspection, provided the Work has been satisfactorily completed. In such event, the Owner will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of final inspection.

END OF PROSECUTION AND PROGRESS

4. MEASUREMENT AND PAYMENT

4.1 MEASUREMENT OF QUANTITIES

All Work completed under the Contract will be measured by the Owner, or his/her authorized representatives, using United States Customary Units of Measurement.

The method of measurement and computations to be used in determination of quantities of material furnished and of Work performed under the Contract will be those methods generally recognized as conforming to good engineering practice.

Unless otherwise specified, longitudinal measurements for area computations will be made horizontally, and no deductions will be made for individual fixtures (or leave-outs) having an area of 9 square feet or less. Unless otherwise specified, transverse measurements for area computations will be the neat dimensions shown on the plans or ordered in writing by the Engineer.

Structures will be measured according to neat lines shown on the plans or as altered to fit field conditions.

Unless otherwise specified, all pay items which are measured by the linear foot such as electrical ducts, conduits, pipe culverts, underdrains, and similar items shall be measured parallel to the base or foundation upon which such items are placed.

In computing volumes of excavation the average end area method or other acceptable methods will be used.

The thickness of plates and galvanized sheet used in the manufacture of corrugated metal pipe, metal plate pipe culverts and arches, and metal cribbing will be specified and measured in decimal fraction of inches.

The term "ton" will mean the short ton consisting of 2,000 pounds avoirdupois. All materials which are measured or proportioned by weights shall be weighed on accurate, approved scales by competent, qualified personnel at locations designated by the Engineer. If material is shipped by rail, the car weight may be accepted provided that only the actual weight of material be paid for. However, car weights will not be acceptable for material to be passed through mixing plants. Trucks used to haul material being paid for by weight shall be weighed empty daily at such times as the Engineer directs, and each truck shall bear a plainly legible identification mark.

Materials to be measured by volume in the hauling vehicle shall be hauled in approved vehicles and measured therein at the point of delivery. Vehicles for this purpose may be of any size or type acceptable to the Engineer, provided that the body is of such shape that the actual contents may be readily and accurately determined. All vehicles shall be loaded to at least their water level capacity, and all loads shall be leveled when the vehicles arrive at the point of delivery.

When requested by the Contractor and approved by the Engineer in writing, material specified to be measured by the cubic yard may be weighed, and such weights will be converted to cubic yards for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the Engineer and shall be agreed to by the Contractor before such method of measurement of pay quantities is used.

Bituminous materials will be measured by the gallon or ton. When measured by volume, such volumes will be measured at 60°F or will be corrected to the volume at 60°F using ASTM D 4311 for asphalts or ASTM D 633 for tars.

Net certified scale weights or weights based on certified volumes in the case of rail shipments will be used as a basis of measurement, subject to correction when bituminous material has been lost from the car or the distributor, wasted, or otherwise not incorporated in the work.

When bituminous materials are shipped by truck or transport, net certified weights by volume, subject to correction for loss or foaming, may be used for computing quantities.

Cement will be measured by the ton or hundredweight.

Unless otherwise specified, timber will be measured by the thousand feet board measure (M.F.B.M.) actually incorporated in the structure. Measurement will be based on nominal widths and thicknesses and the extreme length of each piece.

The term "lump sum" when used as an item of payment will mean complete payment for the Work described in the contract.

When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories.

Rental of equipment will be measured by time in hours of actual working time and necessary traveling time of the equipment within the limits of the work. Special equipment ordered by the Engineer in connection with force account work will be measured as agreed in the change order or supplemental agreement authorizing such force account Work as provided in the subsection titled PAYMENT FOR EXTRA AND FORCE ACCOUNT WORK of this section.

When standard manufactured items are specified such as fence, wire, plates, rolled shapes, pipe conduit, etc., and these items are identified by gage, unit weight, section dimensions, etc., such identification will be considered to be nominal weights or dimensions. Unless more stringently controlled by tolerances in cited specifications, manufacturing tolerances established by the industries involved will be accepted.

Scales for weighing materials which are required to be proportioned or measured and paid for by weight shall be furnished, erected, and maintained by the Contractor, or be certified permanently installed commercial scales.

Scales shall be accurate within one-half percent of the correct weight throughout the range of use. The Contractor shall have the scales checked under the observation of the inspector before beginning work and at such other times as requested. The intervals shall be uniform in spacing throughout the graduated or marked length of the beam or dial and shall not exceed one-tenth of 1 percent of the nominal rated capacity of the scale, but not less than 1 pound. The use of spring balances will not be permitted.

Beams, dials, platforms, and other scale equipment shall be so arranged that the operator and the inspector can safely and conveniently view them.

Scale installations shall have available ten standard 50-pound weights for testing the weighing equipment or suitable weights and devices for other approved equipment.

Scales must be tested for accuracy and serviced before use at a new site. Platform scales shall be installed and maintained with the platform level and rigid bulkheads at each end.

Scales "over weighing" (indicating more than correct weight) will not be permitted to operate, and all materials received subsequent to the last previous correct weighing accuracy test will be reduced by the percentage of error in excess of one-half of 1 percent.

In the event inspection reveals the scales have been "under weighing" (indicating less than correct weight), they shall be adjusted, and no additional payment to the Contractor will be allowed for materials previously weighed and recorded.

All costs in connection with furnishing, installing, certifying, testing, and maintaining scales; for furnishing check weights and scale house; and for all other items specified in this subsection, for the weighing of materials for proportioning or payment, shall be included in the unit Contract prices for the various items of the project.

When the estimated quantities for a specific portion of the Work are designated as the pay quantities in the contract, they shall be the final quantities for which payment for such specific portion of the Work will be made, unless the dimensions of said portions of the Work shown on the plans are revised by the Engineer. If revised dimensions result in an increase or decrease in the quantities of such work, the final quantities for payment will be revised in the amount represented by the authorized changes in the dimensions.

4.2 COMPENSATION FOR ACTUAL QUANTITIES

When the actual quantities of work vary from the estimated quantities, the Contractor shall accept as payment in full, so far as pay items are concerned, payment at the unit price for the quantities of work actually completed and accepted. No allowance will be made for any increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor which results directly or indirectly from its unbalanced allocation of overhead and profit among the pay items, or from any other cause.

4.3 PARTIAL PAYMENT/RETAINAGE

Partial payments will be made at least once each month as the Work progresses. Upon receipt of Contractor invoice, said payments will be based upon estimates, prepared by the Contractor and approved by Owner, of the value of the Work performed and materials complete in place in accordance with the Contract Documents.

No partial payment will be made when the amount due the Contractor since the last estimate amounts to less than ten thousand dollars ($10,000.00).

No partial payment shall bind the Owner to the acceptance of any materials or work in place as to quality or quantity. All partial payments are subject to correction at the time of final payment as provided in the subsection titled ACCEPTANCE AND FINAL PAYMENT of this section.

Retainage will not be held for this Contract.

4.4 ACCEPTANCE AND FINAL PAYMENT

When the Work has been accepted in accordance with the requirements of the subsection titled FINAL ACCEPTANCE, the Owner shall determine the actual quantities of the items of work actually performed. The Contractor shall approve the Owner's statement of actual quantities or advice the Owner of his/her objections which are based on disputes in measurements or computations of the final quantities. The Contractor and the Owner shall resolve all disputes (if any) in the measurement and computation of final quantities to be paid within 30 calendar days of the Contractor's receipt of the Owner's final statement of actual quantities. If, after such 30-day period, a dispute still exists, the Contractor may approve the Owner's statement of actual quantities under protest of the quantities in dispute, and such disputed quantities shall be considered by the Owner as a claim in accordance with the subsection titled CLAIMS FOR ADJUSTMENT AND DISPUTES.

After the Contractor has approved, or approved under protest, the Owner's statement of actual quantities, final payment will be processed based on the entire sum, or the undisputed sum in case of approval under protest, determined to be due the Contractor less all previous payments and all amounts to be deducted under the provisions of the contract. All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

4.5 LIENS

The final payment shall become due when the Contractor delivers to the Owner: (a) an affidavit stating, if that be in fact, that all subcontractors and suppliers have been paid in full, or if the fact be otherwise, showing the name of each subcontractor and supplier who has not been paid in full and the amount due or to become due each for labor, service or material furnished; (b) Consent of Surety, if any, to final payment; and (c) if required by Owner, other data establishing payment for satisfaction of all obligations, such as receipt, releases, and waivers of lien arising out of the Contract to the extent and in such form as designated by the Owner.

4.6 CLAIMS FOR ADJUSTMENT AND DISPUTES

If for any reason the Contractor deems that additional compensation is due him for work or materials not clearly provided for in the Contract Documents or previously authorized as Extra Work, he shall notify the Owner in writing of his/her intention

to claim such additional compensation before he begins the work on which he bases the claim. If such notification is not given or the Owner is not afforded proper opportunity by the Contractor for keeping strict account of actual cost as required, then the Contractor hereby agrees to waive any claim for such additional compensation. Such notice by the Contractor and the fact that the Owner has kept account of the cost of the work shall not in any way be construed as proving or substantiating the validity of the claim. When the work on which the claim for additional compensation is based has been completed, the Contractor shall, within 10 calendar days, submit his/her written claim to the Owner and the Engineer. Failure to do so within the time specified will constitute a waiver by Contractor of the claim.

Nothing in this subsection shall be construed as a waiver of the Contractor's right to dispute final payment based on differences in measurements or computations.

The following documentation and information must be presented in order to properly evaluate such claim:

A. Definition of the basis of the claim, including a detailed identification of which materials and what work is considered to represent a change to the original contract, an explanation of why the work or material is different than what was called for by the original Contract, and an identification of the contract provisions and anything else which the Contract relied upon;

B. An explanation of how and why the work which is considered a change will result in any additional cost or performance time for the Contractor;

C. An identification of the categories of additional costs which may be incurred, an estimate of the dollar magnitude of each, and a statement of the impact this work will have on the construction schedule, including the contract completion dates;

D. An indication of how the additional costs which is believed that may be incurred can be, and are to be, quantified;

E. Documentation of any actual additional costs and any actual impact to the construction schedule due to this work;

F. Documentation of the cost of performing all similar "unchanged" work, to provide the Engineer a basis for comparison;

G. All backup and other documentation which are believed to support or relate to the claim;

H. Documentation quantifying the amount of work which is believed to constitute this "changed" Work, and the time period and the areas where such work was or is to be performed.

4.7 CORRECTION OF WORK AFTER FINAL PAYMENT

Neither the final certificate nor payment, nor any provision in the Contract Documents shall relieve the Contractor of responsibility for faulty materials or workmanship and, unless otherwise specified, he shall remedy any defect due thereto and pay for any damage to other Work resulting therefrom, which shall appear within a period of one year from date of final acceptance. Wherever the word "acceptance" occurs, it shall be understood to mean final acceptance.

The Owner shall give notice of observed defects with reasonable promptness. If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after the receipt of notice, the Owner shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense. With respect to all warranties, expressed or implied, from subcontractors, manufacturer, or suppliers for Work performed and materials furnished under this Contract, the Contractor shall:

A. Obtain all warranties that would be given in normal commercial practice.

B. Require all warranties to be executed, in writing, for the benefit of the Owner.

4.8 SUBSURFACE INVESTIGATION

The Contractor shall make his own subsurface investigations. Any information obtained by the Town 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 from making his own investigations. The Contractor shall obtain all necessary permits prior to making any pavement cuts on existing streets.

4.9 EXISTING UNDERGROUND UTILITIES/FACILITIES

The location of all existing underground utilities will be illustrated on the approved construction drawings for information purposes only. The Town will not be held liable for the accuracy of the utility locations, sizes, depths, or for completeness of utility information. Utility owners have been notified of the project. 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 could include but not be limited to:

AT&T
Duke Energy
North Carolina Department of Transportation
PSNC Energy
Piedmont Natural Gas Company
Time Warner Cable
Union County Public Works
Union Power Cooperative
Utilities, Inc. /Carolina Water Service
Windstream

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 **811**.

Contact Union County Public Works (704-296-4210) for water and sewer line and service locates.

For locates of utilities not members of NC One-Call contact the designated project manager.

Prior to construction, the Contractor shall notify all utility owners whose facilities will be affected to determine utility locations

The Contractor shall include the cost of any coordination and cooperation of utilities in his bid.

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.

The Town will not assume nor accept any responsibility for charges assessed by private or public utility companies or from the NC Department of Transportation for damages sustained to their property by virtue of action on the part of the

Contractor, nor for such charges as may be imposed by the utility or Department of Transportation for personnel to furnish field location of the facility. All such costs are to be borne by the Contractor within the unit prices and/or lump sum prices stated in the Bid.

4.10 MATERIALS TICKETS

All quantity tickets for items not measurable in place shall be submitted to the Project Inspector within seventy-two (72) hours after receipt of the material on the job. Each ticket shall indicate the date, contractor, job location and name, type of material, quantity of material, truck number and signature of the contractor or his authorized representative.

No tickets will be accepted after seventy-two (72) hours have elapsed between the time of delivery and submittal of tickets to the Project Inspector.

END OF MEASUREMENTAND PAYMENT

5. MISCELLANEOUS

5.1 VENUE

This Contract has been executed by, delivered to and accepted by the Owner in North Carolina, and the provisions hereof shall be governed by the laws of North Carolina. Any disputes arising out of or related to this Contract shall be resolved in accordance with said laws.

The parties agree that any action or legal proceeding arising out of or related to this Contract shall be brought in the state courts of Union County, NC or in the U.S. District Court for the Western District of North Carolina; and the parties hereby consent to and waive any objection to jurisdiction or venue in said courts.

5.2 INDEPENDENT CONTRACTOR

Contractor represents that it is fully experienced and properly qualified to perform the class of work provided for herein, and that it is properly licensed, equipped, organized and financed to perform such work. Contractor shall act as an independent contractor and not as the agent of Owner in performing the Contract, maintaining complete control over its employees and all of its suppliers and subcontractors. Nothing contained in this Contract or any subcontract awarded by Contractor shall create any contractual relationship between any such supplier or subcontractor and Owner.

5.3 LAWS AND REGULATIONS

Contractor and its employees and representatives shall at all times comply with all applicable laws, ordinances, statutes, rules or regulations in effect at the time Work is performed under this Contract.

5.4 INDEMNITY

Contractor agrees to defend, indemnify and hold harmless the Owner, its officers, employees and agents from any and all claims, suits, actions, damages, expenses, costs (including attorneys' fees if applicable) or fines, arising from Contractor's performance of this Contract; provided that Contractor shall not be liable for any injury, damage or loss occasioned by the sole negligence of Owner, its officers, employees or agents. Contractor shall purchase insurance, as described in this Section, which insurance shall provide coverage for this contractual liability. In any case in which Contractor provides a defense to the Owner, its officers, employees or agents, pursuant to his indemnity, the defense will be provided by attorneys reasonably acceptable to the Owner. The provisions of this Section shall survive the expiration or early termination of this Agreement.

5.5 INSURANCE

A. Commercial General Liability Insurance. Contractor shall maintain in force during the term of this Contract commercial general liability insurance, in an amount acceptable to Owner but no less than One Million Dollars ($1,000,000) per occurrence. This insurance shall include coverage for products/completed operations, bodily injury, personal injury, property damage and the contractual liability assumed under the indemnity provision of the Contract. The policy shall be occurrence-based and name the Owner as an additional insured.

B. Vehicle Liability Insurance. Contractor shall maintain in force during the term of this Contract liability insurance covering the operations of Contractors' owned, non-owned and hired automobiles and other ground vehicles, for limits satisfactory to Owner but not less than One Million Dollars ($1,000,000) bodily injury and property damage each occurrence. The policy shall be occurrence-based and name the Owner as an additional insured.

C. Worker's Compensation and Employer's Liability Insurance. Contractor shall maintain worker's compensation and employer's liability insurance in the amounts and form required by the laws of the State of North Carolina.

D. A certificate evidencing all insurance coverage required of Contractor shall be filed with the Owner at the execution of this Contract, and such certificate shall provide that such insurance coverage will not be canceled or reduced without at least thirty (30) day's prior written notice to the Owner. At least ten (10) days prior to the expiration of any such policy, a certificate showing that such coverage has been renewed shall be filed with the Owner. If such insurance coverage is canceled or reduced, the Contractor shall within fifteen (15) days after receipt of written notice from the Owner of such cancellation or reduction in coverage, file with the Owner a certificate showing the required insurance has been reinstated or provided through another insurance company or companies. The company or companies furnishing insurance shall be qualified to issue insurance effective in the State of North Carolina.

E. Payment and Performance Bonds. Contemporaneously with Contractor's execution of the Contract Documents, Contractor shall supply the Owner with a Performance Bond and a Payment Bond, each in an amount equal to the estimated Contract Price.

5.6 CONTRACT MEETINGS

The Contractor shall, as requested by Owner, attend any and all meetings called by Owner to discuss the Work. Such meetings shall be conducted and recorded by the Contractor with minutes of each meeting distributed to Owner and Contractor.

5.7 SUCCESSORS, ASSIGNEES AND ASSIGNMENT

Contractor shall not assign, transfer, convey or otherwise dispose of the Contract or its right, title or interest in or to the same or any part thereof, without previous written consent of the Owner and concurred to by the sureties.

5.8 AUDIT RIGHTS

The Owner shall have the right to inspect, examine and make copies of any and all books, accounts, records, and other writings of contractors relating to the performance of the Work under the Contract, including change orders. Such audit rights shall be extended to any duly authorized representatives designated by the Owner. Audits shall take place at times and locations mutually agreed upon by both parties, but not later than one week following the date of a request for an audit.

5.9 OSHA REQUIREMENTS

The Contractor shall comply with OSHA and all other applicable regulations.

5.10 TAX STATEMENT SUBMITTAL

A. All tax statement bodies and all signatures must be original. Photocopies of blank forms may be used, provided the document containing the information is original.

B. All tax statements must be signed by the Contractor/Subcontractor's company officer submitting the statement and certified by a Notary Public. All tax statements must list in detail taxes paid by individual invoice. No lump sum, running total, or copies of previously reported statements will be accepted. Tax statements shall show North Carolina tax and County tax paid.

C. A tax statement showing detailed amounts with "amounts previously reported" noted on the face will be accepted if they are original. This is the equivalent of a statement indicating "no taxes paid this period." All subcontractors for whom tax statements are included must be certified as such on the face of the Contractor's tax statement.

D. Tax statements (the State/County Sales/Use Tax Statement form) must always accompany a payment request for the related project. All final construction payment requests must have a final tax statement regardless of whether any taxes have been paid during the period in question. If no taxes have been paid, the detail page should simply state "0", "None", or "No taxes paid this period."

5.11 PROJECT CLOSEOUT SUBMITTALS

The Contractor shall submit two (2) copies (except as noted) of the following documents. Each document shall be an original, signed, and notarized where requested. Final payment will not be made until all documents are submitted:

A. Final Application and Certificate for Payment with Sales and Use Tax Certification Statement.

B. Contractor's Affidavit Release and Waiver of Claim.

C. Consent of Surety to Final Payment (contracts equal to or exceeding $100,000) (AIA Document G707).

D. Guarantees, Warranties, and Test Results required by the Contract Documents.

E. Operation and Maintenance Manuals and spare parts or materials (as required).

END OF MISCELLANEOUS

CONTRACTOR'S AFFIDAVIT RELEASE AND WAIVER OF CLAIM

STATE OF _____ COUNTY OF _____

_____, _____, of
(Name) (Title)

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

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

This Affidavit, Release and Waiver of Claim is made concerning the construction of the following:

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 claim or lien exists 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 Town of Indian Trail, or property of the Town of Indian Trail, is subject to any claim or lien that arises in any manner from the failure of the Contractor to pay any liability described above, the Contractor will indemnify and hold the Town of Indian Trial harmless for any amount that the Town of Indian Trail is required to pay to discharge such lien or settle such claim and, further, will pay the Town of Indian Trail'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 Town of Indian Trail, its officers, employees, and agents have been settled;

The Contractor releases and waives any and all claims of every type and description that the Contractor may have against the Town of Indian Trail arising in any manner from the construction of the above-described project.

By: _____ Date: _____

Title: _____

Sworn to and subscribed before me this _____ day of

_____, 201_

_____
Notary Public

My commission expires _____

STATE/COUNTY SALES/USE TAX STATEMENT

PROJECT: _____

CONTRACTOR/SUBCONTRACTOR: _____

PERIOD COVERED: _____

Invoice No.	Invoice Date	Vendor's Name	Amount Before Taxes	5.50% NC Tax	_____% County Tax	Total Invoice Amount	County Paid

I certify that the above-listed vendors were paid sales tax upon purchases of building material during the period covered by the construction estimate, and the property upon which such taxes were paid were, or will be, used in the performance of this Contract. The list above does not include any taxes paid on purchases of tangible personal property that does not annex to, affix to, or in some manner become a part of the project, building, structure or repairs.

By: _____

Title: _____

Date: _____

Subscribed to and sworn before me the _____day of

_____, 201_

Notary Public: _____

My Commission Expires: _____

VI. SPECIFICATIONS

6.1 ASPHALT

All asphalt used in the construction of this project shall consist of all elements covered by Section 610 of the Standard Specifications.

All cost associated in raising utilities (sewer manholes, water valve boxes, etc.) during asphalt paving operations shall be included in the unit price bid for Asphalt.

All work associated in the adjustment of these utilities shall be in accordance with Section 858 of the Standard Specifications.

6.2 CONCRETE

A. Compressive Strength

All concrete used in the construction of this project shall be 3600 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.

Concrete cylinders shall be prepared by the Town's designated materials testing firm. It shall be the responsibility of the Contractor to protect the cylinders until such time as they are taken to the designated materials testing laboratory. 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 Section 1000 of the Standard Specifications. The Contractor's designated testing firm shall provide all equipment necessary 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 Section 1000 of the Standard Specifications. The Contractor's designated testing firm shall provide all equipment 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

All tests shall be performed by the Contractor's designated testing firm using qualified personnel fully trained in the procedures of the above testing standards.

E. Concrete Finishes

The type of finish will 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 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.

It is the intent of these specifications to provide an equitable means of accepting materials that may vary slightly from the specification range stated in the Standards Specifications in lieu of total rejection, removal, repair or non-payment. The Engineer will determine acceptability of materials in accordance with the applicable sections of these specifications. When materials are not within specification limits, an adjusted payment may be allowed as delineated in these specifications, except where the level and variability of test results indicate a degree of noncompliance with requirements so great as to make the material unacceptable. Unacceptable material shall be either re-worked or replaced at no additional cost to the Town. The Engineer reserves the right to reject questionable material at any time in lieu of making reduced payment.

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 prepare test cylinders in accordance with ASTM C31 and to adequately protect the cylinders until such time as they are taken by the Contractor to the Town's approved Materials Laboratory for curing and testing. If the average strength of concrete cylinder test results fail to attain the specified minimum compressive strength at twenty-eight (28) days but meets or exceeds 70% of the minimum compressive strength, the Engineer will have the option of instructing the Contractor to replace all concrete represented by those cylinders with concrete meeting specifications or of allowing the concrete to remain in place at a reduced contract price. The contract unit price for such concrete left in place shall be reduced by the following formula:

$$\text{Reduced Unit Price} = \text{Contract Unit Price X } \frac{\text{Avg. Strength of Test Cylinders at 28 Days}}{\text{Specified min. Compressive Strength}}$$

In the event that concrete cylinder tests fail to meet minimum compressive strengths at twenty-eight (28) days, the Contractor will have the option of taking cores from the concrete in question at the Contractor's expense. Cores must be taken and tested in accordance with ASTM C42. The average compressive strength of cores which are correctly tested shall then be used as the basis for acceptance of concrete in lieu of concrete test cylinder results discussed above. The above criteria for acceptance of concrete with respect to compressive strength shall then be applied to core test results. Cores must be taken thirty-one (31) days after placement of concrete.
Cores must be taken and tested by a qualified independent testing laboratory approved by the Engineer. A minimum of three (3) cores shall be taken from questionable concrete, unless otherwise specified by the Engineer. Cores shall be taken from locations selected by the Engineer.

If the average strength of the concrete test results (cylinders and cores) fail 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 Town, shall remove the rejected concrete and replace it with concrete meeting specifications.

6.3 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 Town for any penalties imposed against the Town 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 Town or local or state agency. If the Contractor fails to correct the deficiencies within 24 hours after notification, the Town will have such corrections performed and assess the cost of these corrections plus a 100% surcharge against the Contractor.
Before any work that involves asphalt surface treatments or the rehabilitation of the existing subgrades; the Contractor will install silt bags in all catch basins that are located in the construction area. These devices will be monitored on a per week basis.

The Contractor shall include the cost of installing and maintaining erosion and sedimentation control devices in the price bid for Grading unless otherwise specified.

If any borrow or waste areas are to be utilized, it shall 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 Town 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 of the borrow or waste site utilized for the Project.

6.4 FULL DEPTH STREET REPAIRS

Unless otherwise stated by the Engineer in the field, all full depth street repairs will consist of digging out a four-inch depth specified area and replacing it with intermediate base course (I 19.0 B) or an approved equal. If the repaired area is not sealed off with an appropriate layer of asphalt surface mix in a suitable time frame, the area in question will be inspected again and if found to be unsuitable the Contractor will replace the area at no cost to the Town.

6.5 SAWING EXISTING PAVEMENT

Where asphalt or concrete (curb, sidewalk, roadway, driveways, parking lots, etc.) is to be removed, the Contractor shall provide a neat edge along the pavement being retained by sawing the pavement a minimum of 2" deep and 1' wide before breaking and removing adjacent pavement.
When the Contractor proposes to saw pavement more than one foot from the proposed pavement (curb, sidewalk, structure, etc.), the Contractor shall obtain approval from the Engineer prior to saw cutting and removing pavement.
The cost of sawing asphalt or concrete shall be considered incidental to the removal operation and shall be included in the unit price bid for Asphalt.

6.6 SEEDING AND MULCHING

The work covered by this 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 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.

All work covered in this special provision shall be in accordance with, and all materials shall conform to, the requirements of the Charlotte Mecklenburg City's "Landscape Construction Standards", Landscape Planting and Seeding, Section 0400.
There will be no separate measurement or payment for seeding and mulching. The costs associated with seeding and mulching the Project shall be included in the unit price for Grading.

VII. PROJECT SPECIAL PROVISIONS

7.1 SP1 - MOBILIZATION

Description: Work covered by this special provision consists of preparatory work and operations which must be preformed or for costs incurred prior to beginning work on the Contract.

Payment: Payment for the entire lump sum price for the item of "Mobilization" will be made with the first pay request paid on the Contract. The bid price shall not exceed 3% of the total amount bid for the various items in this Contract.

Payment will be made under:

MOBILIZATION.....LS

7.2 SP2 – GRADING

Description: Work covered by this special provision consists of but not limited to the overall grading of the proposed sidewalk path and removal of grass stripping. This will also include any incidental work that will need to be provided in order to construct the proper alignment and grade of the proposed sidewalk path.

All disturbed areas shall be reestablished with fertilizer, limestone, and seed sown with straw or coconut matting used to cover the entire repaired area. Any existing plantings in the immediate area of the work shall be mulched with a minimum of four (4) loosely placed inches of new, clean, pine straw. All seeding and planting shall conform to the requirements set forth in the City of Charlotte's Landscape Construction Standards.

Prior to beginning any construction on **1111 Waxhaw Indian Trail Rd, parcel 07114022,** the Contractor must have a NC licensed Professional Surveyor clearly stake out the NCDOT Right-of-Way and two (2) property corners closest to the proposed sidewalk installation. Tree Protection Fence must be installed along the NCDOT Right-Of-Way. All work on this parcel must remain within the NCDOT Right-of-Way. No work is authorized outside the Right-of-Way on this parcel since an easement was not granted by the property owner. The Contractor must submit the Surveyor's property research information to the Owner within five (5) business days.

Payment will be made under:

GRADING.....LS

7.3 SP3 – 4" CONCRETE SIDEWALK, 6" CONCRETE WHEELCHAIR RAMPS, 6" CONCRETE DRIVEWAYS, AND 2' – 6" CONCRETE CURB and GUTTER

Description: The work covered by this special provision consists of all elements of work covered by Section 848 "Concrete Sidewalk, Driveways, and Wheelchair Ramps" of the Standard Specifications. **This item includes sawcutting, excavation, fill, backfill, removal and disposal of existing concrete and the installation of new 4" Concrete Sidewalk, 6" Concrete Driveway, 6" Concrete Wheelchair Ramps, and 2' – 6" Concrete Curb and Gutter.** Indian Trail Land Development Standards 1.12A, 1.12B, 1.17, 1.20A and NCDOT Std. 848.05 shall be followed in the installation, construction and materials used for concrete work.

Work areas shall be clearly marked with construction barrels or caution tape at all times. All debris shall be removed from the work area daily. Installation of the new concrete must occur within 24 hours of the excavation and removal of the existing concrete; otherwise the Contractor must secure the work area with temporary methods at the Contractor's expense. Temporary methods of securing the work area must meet the approval of the Engineer. Backfilling along with seeding and mulching shall occur no later than 3 days following the pouring of the concrete.

Methods and Materials: All sidewalk construction covered in this special provision shall be in accordance with Section 840 of the standard specifications, with the exception that the concrete mix design shall conform to the requirements of the Concrete section of these Project Special Provisions.

The Contractor shall incorporate existing castings encountered within the limits of the project to match the adjacent finished work. No direct payment will be made for this work. Any costs anticipated should be included in other contract quantities bid price.

Measurement: The quantity of 4" Concrete Sidewalk to be paid for will be the actual number of square yards of 4" Concrete Sidewalk measured along the surface of work which has been completed and accepted. The quantity of 6" Concrete Driveway to be paid for will be the actual number of square yards of 6" Concrete Driveway measured along the surface of work which has been completed and accepted. The quantity of 6" Concrete Wheelchair Ramps to be paid for will be the actual number of 6" Concrete Wheelchair Ramps installed and has been completed and accepted The quantity of 2' – 6" Concrete Curb and Gutter to be paid for will be the actual number of lineal feet of 1' – 6" Concrete Curb and Gutter measured along the surface of work which has been completed and accepted.

Payment: Payment for 4" Concrete Sidewalk will be the number of square yards (SY) of 4" sidewalk measured in place. Payment for 4" Concrete Sidewalk will be the number of square yards (SY) of 4" sidewalk measured in place. Payment for 6" Concrete Wheelchair Ramps will be each (EA) for the number installed and accepted. Payment for 2'-6" Concrete Curb and Gutter will be the number of linear feet (LF) measured in place of curb and gutter installed and accepted.

Payment will be made under:

4" CONCRETE SIDEWALK ..... SY
6" CONCRETE DRIVEWAYS ..... SY
6" CONCRETE WHEELCHAIR RAMPS ..... EA
2' – 6" CONCRETE CURB AND GUTTER ..... LF

7.4 SP4 – TRUNCATED DOME MATS

Description: The work covered by this special provision consists of the attaching of black truncated dome mats to existing or new concrete wheelchair ramps in accordance with ADA compliance.

Methods and Materials: All truncated domes must be installed in accordance with ADA methods and materials.

Measurement: The quantity of truncated dome mats will be counted as each. Each truncated dome mat will be indicated by paint marks in the field, or as directed by the Engineer.

Payment: Payment for truncated dome mat will be each. Truncated dome mats will be counted in the field and paid by the number of truncated dome mats installed.

Payment will be made under:

TRUNCATED DOME MATS ..... EA

7.5 SP5 – POLYETHYLENE PIPE

Description: The work covered by this special provision includes all elements of work covered by Section 300 , "Pipe Installation" ; Section 310,"Pipe Culverts"; with the following exception pertaining to Minimum Cover.

References:
AASHTO M294: Specification for Corrugated Polyethylene Pipe, 12- to 48- Inch Diameter
ASTM F477: Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe

Materials: The product used shall be corrugated exterior/smooth interior pipe (Type S), conforming to the requirements of AASHTO Specification M294 (latest edition) for Corrugated Polyethylene Pipe. All HDPE pipe shall be third party certified and shall bear the Plastic Pipe Institute's (PPI) certification sticker.

The prescribed sizes of pipes are inside diameters. Pipes shall be of the size and length shown on the drawings.

Bell and Spigot Joints: Bell and spigot joints shall be required on all pipe. Bells shall cover at least two (2) full corrugations on each section of the pipe. The bell and spigot joint shall have an "O"-ring rubber gasket meeting ASTM F477 with the gasket factory installed, placed on the spigot end of the pipe. Pipe joints shall meet requirements of AASHTO M294.

Submittals: All pipe and fittings not covered by this specification shall be approved by the Engineer.

Installation: All HDPE pipe installed must be inspected and approved by the Town's inspector prior to any backfill being placed. The Town inspector must be present during the backfilling operation as well.

Backfill material used with shall be Select Material, Class II-IV, as defined by Section 1016-3 of the NCDOT Standard Specifications for Roads and Structures. Upon submittal of written certification of material suitability by a licensed geotechnical Engineer, NCDOT Class I Select Material may be used. All backfill shall be approved by the Town's inspector prior to placement of the material. #57 stone is not to be used.

The minimum length of pipe installed shall be four (4) feet. HDPE flared-end sections are not approved for use.

Minimum Cover: The minimum earth cover of twelve (12) inches is required. When placing under asphalt or concrete, a minimum earth cover of twelve (12) inches plus the specified thickness of asphalt or concrete is required.

Measurement: The quantity of pipe to be paid for will be the actual number of linear feet of pipe which has been incorporated into the completed and accepted work. Measurement will be made by counting the number of joints used and multiplying by the length of the joint. Where partial joints are used, measurement will be made along the longest length of the partial joint to the nearest 0.1 of a foot.

Payment: The quantities of pipe, measured as provided above will be paid for at the contract unit prices per linear foot for the various sizes of Polyethylene Pipe shown below.

Payment will be made under:

12" POLYETHYLENE PIPE ..... LF
15" POLYETHYLENE PIPE ..... LF

7.6 SP6 – TREE PROTECTION FENCE

Description: Work covered by this special provision consists of furnishing, erecting, maintaining, and removal of tree protection fence at locations shown on the plans and as directed by the Engineer.

Construction Methods: The tree protection fence shall be constructed in accordance with Indian Trail Landscape Development Standards Detail 4.04 "Tree Protection" and shall be maintained in its originally installed condition throughout the project duration. Payment will not be made for any tree protection fence which is not properly maintained.

Measurement: The quantity of tree protection fence to be paid for will be the actual number of linear feet of tree protection fence, measured along the fence, which has been erected and accepted.

Payment: The quantity of tree protection fence, measured as provided above, will be paid for at the contract unit price bid per linear foot for "Tree Protection Fence". Such payment will be full compensation for all work covered by this special provision, including but not limited to furnishing, erecting, maintaining, and removal of fence material, posts, and all incidentals.

Payment will be made under:

TREE PROTECTION FENCE..... LF

7.7 SP7 – SELECTIVE TREE/UNDERGROWTH REMOVAL

Description: Work covered by this special provision includes the removal and disposal of trees, bushes, stumps, and undergrowth as directed by the Engineer and in accordance with the provisions of these specifications.

This item includes all elements of work and equipment required to complete the project including but not limited to, climbing, tying-off, cutting and lowering limbs, grinding brush and stumps, and removing from site as directed by the Engineer. Trees with diameters larger than 36 inches will be paid using the time and materials method of payment.

Removal Methods:

(A) Trees, Bushes, and Stumps:

Tree and bush removal shall be accomplished by current industry standard methods. Stumps shall be removed to a minimum depth of 2 feet below the natural ground surface, unless otherwise directed by the Engineer. When only a stump is removed, it will be measured across the top and paid at 50% of the price for that size tree.

(B) Undergrowth:

All plants taller than 6 inches and less than 6 inches in diameter shall be classified as undergrowth. All undergrowth shall be removed from the construction area, except those plants which are designated by the Engineer to be preserved. Stumps of removed undergrowth shall be removed unless otherwise directed by the Engineer.

(C) Disposal:

All trees, bushes, stumps, and undergrowth removed shall be disposed of in accordance with the applicable requirements of Article 200-5 of the Standard Specifications.

Damage to Remaining Vegetation: The Contractor shall conduct his operations in such a manner to prevent injury to vegetation that is to remain growing, and also to prevent damage to adjacent property.

If any such injuries to vegetation occur, broken branches shall be removed and rough edges of scarred edges shall be shaped and made smooth in accordance with the "Landscape Construction Standards". Any vegetation that is damaged to such an extent as to destroy their value for landscape purposes shall be removed, disposed of, and shall be replaced by the contractor at no additional cost to the Town. Any grass or ground cover that is damaged shall be seeded and mulched by the Contractor at no additional cost to the Town.

Measurement: The quantity of selective tree removal to be paid for will be the actual number of trees which have been removed and disposed of. The diameter will be determined by measuring the circumference of the tree forty-two (42) inches above the above average ground level.

Payment: Selective Tree Removal- The quantity of selective removal, measured as provided above will be paid for at the contract unit price per each for "Selective Tree Removal, _____ inch to _____ inch diameter.

Payment will be made under:

SELECTIVE TREE REMOVAL, 6 INCH TO 12 INCH DIAMETER ..... EA
SELECTIVE TREE REMOVAL, 12 INCH TO 24 INCH DIAMETER ..... EA
SELECTIVE TREE REMOVAL, 24 INCH TO 36 INCH DIAMETER ..... EA

SELECTIVE UNDERGROWTH REMOVAL.....SY

7.8 SP8 – PRE-CAST MODULAR BLOCK RETAINING WALL

This special provision supersedes proposed timber retaining wall on sheet five (5) of nine (9) in the construction plans.

Description

A. Work includes furnishing and installing modular block retaining wall units to the lines and grades designated on the construction drawings, or approved by the Engineer, and/or as specified herein.

B. Work includes preparing foundation soil, furnishing and installing leveling pad, unit fill and backfill to the lines and grades designated on the construction drawings.

C. Work includes furnishing and installing all related materials required for construction of the retaining wall as shown on the construction drawings, or approved by the Engineer.

D. Work includes furnishing and installing engineering fabric reinforced earth system at locations either shown on the construction drawings, on the detailed drawings, or approved by the Engineer.

Related Work

A. Engineering fabric soil reinforcement where indicated on the drawings or as directed by the Engineer.

Reference Standards

A. ASTM C90 – 90 hollow load bearing masonry units.

B. ASTM C140 – 75 sampling and testing concrete masonry units

C. ASTM C145 – 85 solid load bearing concrete masonry units

D. UN-STD 1804

E. ASTM 2339 – 70

F. FHA UM – 60

G. ASTM D 4595 Test Method for the Tensile Properties of Geotextiles by the Wide-Width Strip Method

H. ASTM D 4491 Test Method for Water Permeability of Geotextiles by Permittivity

I. ASTM D 5262 Evaluation of Unconfined Tension Creep Behavior of Geosynthetics

J. GRI-GT6 Test Method for Geotextile Pullout

K. GRI-GT7 Determination of Long-Term Design Strength of Geotextiles

Delivery, Storage and Handling

A. Contractor shall check the materials upon delivery to assure that proper materials have been received.

themselves) from coming in contact with the materials.

C. Contractor shall protect the materials from damage. Damaged materials shall not be incorporated into the retaining wall structure.

Submittals

A. Samples of all products used in the work of this section.

B. Latest edition of manufacturer's specifications for proposed materials, method of installation and list of material proposed for use.

Quality Assurance

A. Soil testing and inspection service for quality control testing during earthwork operations will be required.

Modular Concrete Retaining Wall Units

A. Concrete wall units shall have a minimum of 28 days compressive strength of 3,000 psi. The concrete shall have maximum moisture absorption of 10pcf per ASTM C140.

B. Exterior dimensions may vary in accordance with ASTM C90-85.

C. Wall units shall provide a minimum of 75 psf of wall face area, without fill. Fill, which is contained within the dimensions of the units, may be considered as 80 percent effective weight.

D. Unit shall have angled sides capable of concave and convex curves. Cap units shall have straight sides.

E. Units shall be positively interlocked with anchor bars or pins, which positively locks into the two units.

F. The interlocking of the wall units will create an automatic setback of 1" per 8" course.

Construction Adhesive

Material conforms to UN-STD 1804, ASTM 2339-70 and FHA UM-60.

Base Leveling Pad Material

Material shall consist of compacted sand, gravel, crushed rock or unreinforced concrete as shown on the construction drawing. Pea gravel is not allowed.

Unit Fill

Fill for units shall be free draining crushed stone or course gravel No. 57 stone, with no more than 5 percent passing through the No. 200 sieve. Gradation of the fill shall be approved by the engineer.

Backfill

Backfill shall be free draining crushed stone or course gravel No. 57 stone, with no more than 5 percent passing through the No. 200 sieve. Gradation of the fill shall be approved by the engineer.

Engineering Fabric

Engineering Fabric products shall be high-density polyethylene expanded sheet or polyester woven fiber materials specially fabricated for use as soil reinforcement.

Constructing the Wall

Contractor shall excavate to the lines and grades approved by the Engineer. Contractor shall be careful not to disturb embankment materials behind lines shown.

Foundation Soil Preparation

A. Foundation soil shall be excavated as required for leveling pad dimension shown on the construction drawings, or as directed by the engineer.

B. Foundation soil shall be approved by the engineer to assure that the actual foundation soils conditions meet or exceed assumed design strength. Soils not meeting required strength shall be removed and replaced with acceptable material.

C. Over-excavated areas shall be filled with approved compacted backfill material.

D. Foundation soil shall be proof rolled prior to fill and engineering fabric placement.

Base Leveling Pad

A. Leveling pad materials shall be placed, upon approved foundation, to a minimum thickness of 6".

B. Material shall be compacted so as to provide a level surface on which to place the first course of units. Compaction shall be to 95 percent of Standard Proctor for sand or gravel type materials. For crushed rock, material shall be densely compacted.

C. Over-excavated areas shall be filled with approved compacted backfill material.

D. Leveling pad materials shall be to the depth and widths shown. Contractor may opt for using reduced depth of sand, gravel or crushed rock by using a concrete topping. Concrete shall be unreinforced and a maximum of 3" thick.

Unit Installation

A. First course of concrete wall units shall be placed on the base-leveling pad. The units shall be checked for level and alignment.

B. Ensure that units are in full contact with the base.

C. Units are placed side by side for full length of wall alignment. Alignment may be done by means of a string line or offset from the base line.

D. Sweep all excess material from the top of units and install the next course.

E. Install units according to block manufacturer's recommendations.

Cap Installation

A. Place cap units centered between the two units directly below. Pull forward to desired position.

B. Provide permanent attachment to the wall units by using construction adhesive. Apply adhesive to top

surface of unit below and place cap unit into position.

Engineering Fabric

A. The engineering fabric soil reinforcement shall be laid horizontally on compacted backfill and connected to the concrete wall units by placing engineering fabric between the concrete units. Place the next course of units, pull the engineering fabric taut and anchor before the next course on the engineering fabric.

B. Slack in the engineering fabric shall be removed.

C. Engineering fabric shall be laid at the proper elevation and orientation as shown on the construction drawings or as directed by the engineer.

D. The contractor shall verify correct orientation (roll direction) of the engineering fabric.

E. The engineering fabric shall be cut to length as shown on the construction drawings using a razor knife, scissors, sharp knife, or equivalent.

F. Follow manufacturer's guidelines relative to overlap requirements. The engineering fabric may not be spliced in the primary strength direction through overlap, sewing or mechanical connection. Therefore the engineering fabric shall be installed in one continuous piece with the primary strength direction extending the full length of the reinforced area.

G. Pull engineering fabric taut to eliminate loose folds. Stake or secure back edge of engineering fabric prior to, and during backfill and compactions. Engineering fabric panels may be secured in-place with staples, pins, sand bags, or backfill as required by fill properties, fill placement procedures, or weather conditions, or as directed by the Engineer.

Fill Placement

A. Backfill material shall be placed in 8" lifts and compacted to 95 percent of Standard Proctor.

B. Backfill shall be placed, spread and compacted in such a manner that minimizes the development of slack or loss of pretension of the engineering fabric.

C. Only hand-operated compaction equipment shall be allowed with 3' of the back surface of the wall units.

D. Backfill shall be placed from the wall rearward toward the embankment to ensure that the engineering fabric remains taut.

E. Tracked construction equipment shall not be operated directly on the engineering fabric. A minimum backfill thickness of 6" is required prior to operation of tracked vehicles over the engineering fabric. Turning of tracked vehicles should be kept to a minimum to prevent tracks from displacing the fill and damaging the engineering fabric.

F. Rubber-tired equipment may pass over the engineering fabric reinforcement at slow speeds, less than 10-mph. Avoid sudden braking and sharp turning.

Measurement

The quantity of pre-cast modular block retaining walls to be paid for will be the actual square footage of wall face, measured along the front surface of the wall, which has been installed and accepted. There will be no measurement of leveling stone, or engineering fabric.

Payment

The quantity of pre-cast modular block retaining walls measured as provided above, will be paid for at the contract unit price per square foot for "Pre-Cast Modular Block Retaining Wall, Non-reinforced". Such payment will be full compensation for all work covered in this special provision, including all excavation, compaction of backfill, and furnishing, delivering, and installing modular block, engineering fabric, filter fabric, drain pipe, and all incidental materials necessary to construct the retaining wall. Stone Backfill will be furnished, installed, and paid for under its own pay item.

Payment will be made under:

PRE-CAST MODULAR BLOCK RETAINING WALL, NON-REINFORCED ..... SF

7.9 SP9 – BORROW MATERIAL

Description: The work covered by this special provision shall conform to the requirements set forth in Section 230 "Borrow Excavation" of the Standard Specifications.

The placement of the material shall conform to the contour elevations established on the approved plans. Any deviations shall have prior approval from the Engineer.

Payment: The quantity of approved borrow material to be paid for will be the actual number of cubic yards measured in trucks that have been excavated from the borrow source and incorporated into the completed and accepted work. Each truck will be measured and shall have a legible identification mark indicating its capacity. Load each truck to at least its measured capacity at the time it arrives at the point of delivery. The recorded capacity will be adjusted by making a 25 percent deduction to allow for shrinkage, and the adjusted capacity will be the quantity to be paid.

Payment will be made under:

BORROW MATERIAL ..... CY

7.10 SP10 - TRAFFIC CONTROL

Beginning Work and Street Closings: The Contractor is responsible for notifying the appropriate agency of any work where the number of travel lanes is reduced from normal conditions. The Contractor shall install advance warning signs and/or message boards for the Project. These signs shall be in place for one week before construction activity begins. The Contractor shall begin construction activity on a street on the scheduled date for the closing of the travel lane.

During daily construction work hours, the Contractor will maintain at least one lane of traffic. The Contractor shall not narrow or close any travel way during the peak hours of 7:00 am to 9:00 am and 4:00 pm to 6:00 pm Monday through Friday. During periods of construction inactivity, all lanes of traffic will be open unless otherwise shown on the plans or noted in the specifications.

Traffic Control Plan: Traffic control will be performed by the Contractor based upon the current NC Traffic Control In Work Zones Standards Provisions.

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 the 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 noted procedures and standards.

The Contractor shall use flagger control in accordance with the appropriate standard.

In areas of drop-offs and low shoulders, the Contractor shall backfill up to the edge and elevation of the existing pavement as directed by the engineer

The Contractor will be required to maintain ingress and egress to all businesses and dwellings, and easy access to fire hydrants.

The Contractor shall not work on both sides of the road simultaneously within the same area.

The Contractor shall provide adequate drainage under driveways and within the Project area for the duration of the Project.

The Contractor shall mark all hazards within the Project limits with well-maintained signs, barricades, warning and/or channelizing devices.

Traffic Control Devices: The Contractor shall furnish, install, operate, relocate, maintain and remove all temporary traffic control devices necessary for controlling traffic. All construction signs and barricades shall remain in place until the appropriate permanent signs and pavement markings are installed.

Pedestrian Considerations: The Contractor shall accommodate the needs of all pedestrians.

Equipment and Material Storage: During periods of construction inactivity, all construction materials and equipment shall be stored by the Contractor as directed by the Engineer.

Excavation and Trenches: Excavations and trenches that cannot be properly backfilled and patched prior to the end of the workday shall be secured as directed by the Engineer.

Measurement: There will be no separate measurement made for Traffic Control.

Payment: Traffic Control will be paid at the lump sum price for "Traffic Control". This payment will be full compensation for all elements of work required to complete the Project as specified.

Payment will be made under:

TRAFFIC CONTROL.....LS

7.11 SP11 – MATERIALS TESTING SERVICES

Description: The work covered by this special provision covers materials testing services. An ASTM certified testing laboratory will be selected by the Town to perform the required work which consists of but not limited to the following:

A. Determine soil optimum moisture content and maximum dry unit weight;
B. Determine soil shear strength;
C. Perform field density testing of backfill material compaction;
D. Provide proof-rolling observations and corrective recommendations/measures;
E. Determine concrete compressive strength, slump, and air content (see Subarticle 6.2 CONCRETE).

All work shall be performed in accordance with appropriate and applicable standards.

The Contractor shall notify the Town 24 hours prior to any materials sampling and or testing.

Payment: An allotted amount of funds will be shown on the Itemized Bid Form of this Contract. The Town will use this fund source to pay the materials testing services. The Contractor shall submit any invoices received by the testing firm with the monthly partial payment request. It will be the responsibility of the Contractor to pay all invoices submitted by the testing firm before acceptance and final payment can be issued as stated under Subarticle 4.4 "Acceptance and Final Payment", Section 4 "Measurement and Payment" of this Contract.

The Town will not bear any cost associated with testing results that indicate the work was not performed properly and/or did not meet the requirements of this Contract. All cost associated with the initial testing and any additional testing required to correct the work in question, will be paid for by the Contractor.

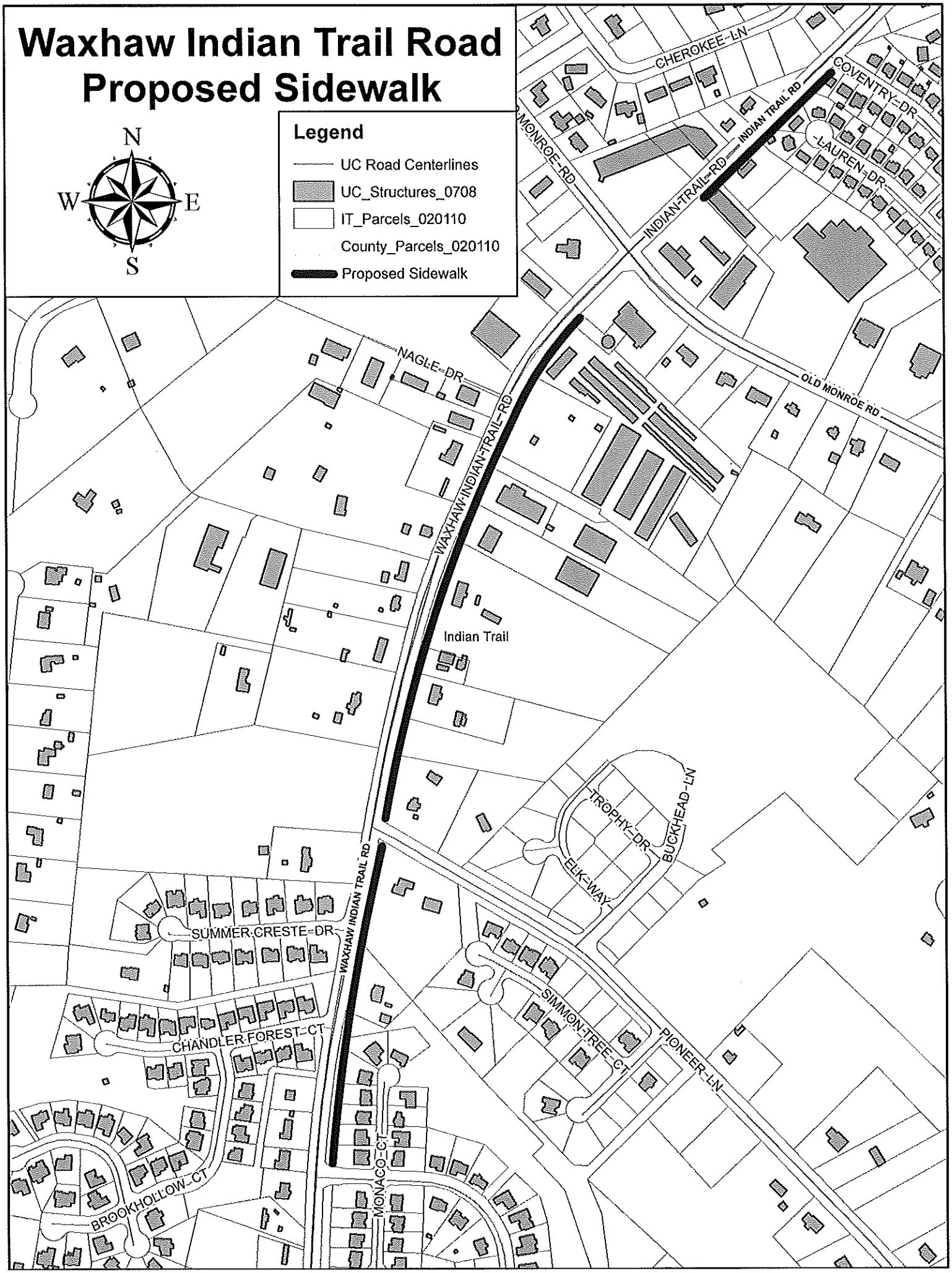
Payment will be made under:

MATERIALS TESTING SERVICES ..... LS

VIII. APPENDIX

APPENDIX A: MAP OF LOCATION

Waxhaw Indian Trail Road Proposed Sidewalk



APPENDIX B: CONSTRUCTION PLANS

(Separate sheets)

Town of Indian Trail Engineering Department

Project Title: Waxhaw Indian Trail Road Sidewalk **Opening Results: Thursday, March 17, 2011**

Project No.: 505-2010-003

	Bidder of Record	Total Amount Bid	Bid Bond
	W. P. Contractors	249,559.20	✓
	Red Clay Industries	197,930.33	✓
	Trull Contracting, LLC	161,002.16	✓
	On Time Construction, Inc.	187,485.10	✓
	Econ International Corp.	188,503.70	✓
	W. M. Ware and Son, Inc.	148,324.00	✓
	Armer Construction, LLC	249,650.50	✓
	Boggs Paving, Inc	238,997.00	✓
	Blythe Development Co.	173,153.20	✓
	Showalter Construction Co, Inc.	226,242.94	✓
	T.K. Brown Construction	242,689.43	✓
	8 Star Construction, Inc.	145,954.60	✓

Bid Opened by: Adam McLamb Adam McLamb

Recorded by: Vicky Watts Vicky Watts