

**COUNTY OF GREENVILLE
SUBDIVISION ROAD REPAIR PROJECTS
IFB #19-10/05/16**



**Greenville
County**

**DEPARTMENT OF GENERAL SERVICES
PROCUREMENT SERVICES DIVISION
GREENVILLE COUNTY SQUARE
301 UNIVERSITY RIDGE, SUITE 100
GREENVILLE, SOUTH CAROLINA 29601**

www.greenvillecounty.org

864-467-7200



GREENVILLE COUNTY
PROCUREMENT SERVICES DIVISION
GREENVILLE COUNTY SQUARE
301 UNIVERSITY RIDGE, SUITE 100
GREENVILLE, SOUTH CAROLINA 29601-3660

NOTICE

Date: September 16, 2016

Sealed bids for SUBDIVISION ROAD REPAIR PROJECTS, subject to the conditions and all provisions set forth herein and attached, will be received at this office until 3:00 P.M., EDT, OCTOBER 05, 2016, then publicly opened. The commodities and/or services must be furnished as described and specified to Greenville County. The prices on this bid will include all costs of transportation to the required destination.

SHOW THIS NUMBER ON ENVELOPE

IFB No. 19-10/05/16

PROCUREMENT SERVICES DIVISION

Director

COMMODITIES OR SERVICES

GREENVILLE COUNTY IS SEEKING SEALED BIDS FROM VENDORS FOR SERVICES FOR THE SUBDIVISION ROAD REPAIR PROJECTS, PER THE SPECIFICATIONS INCLUDED IN THIS DOCUMENT.

BIDS MUST BE SUBMITTED ON THE BID SHEET (PAGE 4) WITH THE TOTAL BEING LISTED AT THE BOTTOM. BID SHEET MUST BE SIGNED. ALL TAXES ON ANY ITEM THAT GREENVILLE COUNTY MAY BE REQUIRED TO PAY MUST BE SHOWN SEPARATELY, NOT INCLUDED IN THE PRICE BID.

PLEASE SUBMIT ONE (1) ORIGINAL AND THREE (3) COPIES OF YOUR BID.

A PRE-BID MEETING AND SITE VISIT WILL BE HELD AT 9:00 A.M., EDT, WEDNESDAY, SEPTEMBER 21, 2016, IN THE PROCUREMENT SERVICES DIVISION, 301 UNIVERSITY RIDGE, SUITE 100, GREENVILLE, SC, 29601.

QUESTIONS CONCERNING THE IFB ARE TO BE SUBMITTED IN WRITING TO CAL PILGRIM, BUYER, GREENVILLE COUNTY PROCUREMENT SERVICES DIVISION, SUITE 100, 301 UNIVERSITY RIDGE, GREENVILLE, SC 29601, BY FAX (864) 467-7304 OR EMAIL cpilgrim@greenvillecounty.org NO LATER THAN 5:00 P.M., EDT, SEPTEMBER 28, 2016.

PLEASE SIGN THE FOLLOWING PAGE. FAILURE TO SIGN WILL VOID YOUR BID. PLEASE MARK YOUR ENVELOPE TO READ:

IFB #19-10/05/16.

NOTICE TO BIDDERS: All taxes on any item that Greenville County may be required to pay must be shown separately, not included in the price bid.

4-11-17

INSTRUCTIONS TO RESPONDENTS
IFB #19-10/05/16 SUBDIVISION ROAD REPAIR PROJECTS

1. Unless otherwise required, submit only one (1) original and three (3) copies of each RFI/RFQ/IFB/Proposals.
2. RFI/RFQ/IFB/Proposals, amendments thereto or withdrawal requests received after the time advertised for opening will be void regardless of when they were mailed.
3. Quote prices on units specified with packing included.
4. Attach complete specifications for and permitted substitutions offered, or when amplification is desirable or necessary.
5. If specifications or descriptive papers are submitted with RFI/RFQ/IFB/Proposals, enter respondents name thereon.
6. If the article bid upon has a trade name or brand, show same in the RFI/RFQ/IFB/proposal.
7. When required, furnish samples, free of expense, prior to opening of RFI/RFQ/IFB/Proposals. Label each sample with respondents name and the item number. Should you wish samples returned, at your expense, when not destroyed in tests, make request for return within 10 days following bid/proposal opening.
8. Show delivery time required after order is received (see below).
9. Address and mark bids/proposals as indicated in the notice.

CONDITIONS

1. The County Agency or Institution submitting this notice reserves the right to reject any and all RFI/RFQ/IFB/Proposals, and to waive all technicalities.
2. Unit prices will govern over extended prices, unless otherwise stated in notice.
3. Time in connection with discount offered will be computed from date of delivery of commodities to carrier, when inspecting and acceptance is at point of origin; or date of delivery at destination; or if laboratory inspection is made part of bid, from date of laboratory report.
4. In case of default of contractor, Greenville County reserves the right to purchase any or all items in default on open market, charging contractor with any excessive costs.
5. All materials and products offered must be guaranteed to meet the requirements of the specifications indicated, given or referred to.
6. Prices bid must be based upon payment in thirty (30) days. Discounts for payment in less than thirty (30) days will not be considered in making award.
7. The right is reserved, in case of tie bids, to make award considered to be most advantageous to Greenville County.
8. The right is reserved to reject any RFI/RFQ/IFB/Proposal in which the delivery time indicated is considered sufficient to delay the operation for which the commodity is intended.
9. Unless otherwise indicated by County Agency or Institution submitting this notice, prices must be firm.

RFI/RFQ/IFB/PROPOSAL

(DATE) _____

In compliance with invitation, and subject to all conditions, thereof, the undersigned offers and agrees, if this RFI/RFQ/IFB/Proposal is accepted within _____ days from date of opening, furnish any or all items quoted on at prices as set forth after the item and unless otherwise specified, within _____ days after receipt of order, delivered, all transportation costs included,

Discount will be allowed as follows: 30 calendar days _____ %.

FIRM NAME _____ ADDRESS _____

BY _____
(RFI/RFQ/IFB/PROPOSAL MUST BE SIGNED IN WRITING)

PRINT NAME _____

TITLE _____

PHONE _____ FAX _____



SUBDIVISION ROAD REPAIR PROJECTS

IFB #19-10/05/16

SCHEDULE

September 21, 2016

A Pre-Bid meeting and site visit will be held at 9:00 A.M., EDT, in the Procurement Services Division office located at 301 University Ridge, Suite 100, Greenville, SC 29601.

September 28, 2016

All questions must be submitted in writing to Cal Pilgrim, Buyer, Procurement Services Division, 301 University Ridge, Suite 100, Greenville, SC 29601, by Fax (864)467-7304, or by email cpilgrim@greenvillecounty.org, by 5:00 P.M., EDT

October 5, 2016

Bids must be delivered to the Procurement Services Division, 301 University Ridge, Suite 100, Greenville, SC 29601 no later than 3:00 P.M. EDT

October 5 – October 12, 2016

Review of Bids

October 12, 2016

Tentative Date of Award

October 12 – October 26, 2016

Contract Negotiations

October 26, 2016

Issue Notice to Proceed



SUBDIVISION ROAD REPAIR PROJECTS

IFB #19-10/05/16

ITEMIZED BID SHEET

		QTY	Unit	Unit \$	Total \$
Willimon Estates					
1WE	Mobilization	1	LS	\$	\$
2WE	Asphalt Full Depth Repair	526	SY	\$	\$
3WE	1.5" Hot Mix Asphalt Surface Course Type C	7000	SY	\$	\$
		Sub-Total		\$	\$
Victoria Park					
1VP	Mobilization	1	LS	\$	\$
2VP	Asphalt Full Depth Repair	675	SY	\$	\$
3VP	1.5" Hot Mix Asphalt Surface Course Type C	12,250	SY	\$	\$
		Sub-Total		\$	\$
Hunters Landing					
1HL	Mobilization	1	LS	\$	\$
2HL	Asphalt Full Depth Repair	535	SY	\$	\$
3HL	1.5" Hot Mix Asphalt Surface Course Type C	7100	SY	\$	\$
		Sub-Total		\$	\$
Hunters Ridge					
1HR	Mobilization	1	LS	\$	\$
2HR	Asphalt Full Depth Repair	360	SY	\$	\$
3HR	1.5" Hot Mix Asphalt Surface Course Type C	8425	SY	\$	\$
		Sub-Total		\$	\$
		TAX		\$	\$
		GRAND TOTAL		\$	\$

Authorized Signature

Date

Company



SUBDIVISION ROAD REPAIR PROJECTS

IFB #19-10/05/16

I. Introduction

Greenville County is seeking sealed bids from vendors for services to bring the roads in the following subdivisions to Greenville County Land Development Regulation Standards.

- Willimon Estates, off Willimon Drive, off Old Grove Road in Piedmont.
- Victoria Park, off Neely Ferry Road in Simpsonville.
- Hunters Landing, off Mays Bridge Road.
- Hunters Ridge, off McElhaney Road, off Foot Hills Road.

II. Scope of Work

The main purpose of the project is to bring the subdivisions to County standards or private road standards and to be accepted into the county road inventory or turned over to the private HOA of record. The Contractor shall coordinate with utility companies and property owners prior to the start of construction. The work varies, however, overall the required work consists of Full Depth Repair, and installing asphalt surface to bring the subdivisions into the county standards. The Contractor will be required to prep the roads for FDR and/or asphalt surface, clean behind the curb (cut grass), stabilize washout areas and seed & straw all bare areas. All construction shall conform to Greenville County Land Development Regulations, SCDOT specifications and match any existing work. This project is a unit price job and quantities are estimated. Contractors are required to visit the site to ensure a complete understanding of the scope of work. The Contractor shall be required to adjust any utility valves and/or manhole lids as needed. The Contractor shall remove section(s) of the damaged road (as marked by county) and complete full depth repairs to pavement. The Contractor shall limit the disturbed area and will be responsible for restoring disturbed areas to its original condition or better. The project includes the following:

- Contractor shall perform full depth repairs on roadway as marked by engineer.
- Place asphalt surface.
- Once work is completed restore all disturbed areas to their original condition.
- The Contractor is responsible for permanent grassing/stabilization of all disturbed areas and removal of all sediment controls and

-
- accumulated sediment after permanent grassing is established.
Additional items included in the project may or may not be shown on the project design plans.

III. Construction Specifications

A. Paving

The roadway cuts will be repaired by saw cutting and patching with a minimum of 4" asphalt binder, if unsuitable material is encountered, otherwise undercut and replace with stone (CR14). The Contractor is to place 1.5" asphalt surface.

B. Grassing

Contractor is to coordinate with each property owner about the grassing schedule and type.

C. Project Duration

The contractor shall be given 60 calendar days, excluding work on Sundays, for completion of all subdivisions in this project.

IV. Pre-bid Meeting

A pre-bid meeting and site visit will be held at **9:00 A.M., EDT, on Wednesday, September 21, 2016** at the Greenville County Procurement Services office located at 301 University Ridge, Suite 100, Greenville, SC 29601. Bidders are encouraged to visit all subdivisions before submitting a bid.

V. Pricing

Pricing shall be submitted using the Bid Sheet (page 4). The Bid Sheet must be signed by an authorized representative. Failure to sign will void the bid.

VI. Bonding

See Terms and Conditions (page 13) for Bid Bonds and Performance/Payment Bonds required for this project.

VII. Submission Procedures, Requirements

All submissions must be received by **3:00 P.M., EDT, Wednesday, October 5, 2016** and delivered to 301 University Ridge, Suite 100, Greenville, South Carolina 29601. If the submission is late, the bid will be rejected. There will be no exceptions. Responders submitting bids shall be responsible for all cost of preparing such bids.

Responders to this Invitation for Bids shall closely examine the specific requirements noted herein and the attached **Terms and Conditions** and submit one (1) original and three (3) bound copies of their bid to the address listed below. To ensure acceptance of the bid, the Invitation for Bid number (**IFB #19-10/05/16**) should be clearly shown on the lower left corner of the return envelope. Facsimile transmittals or offers communicated by telephone will not be accepted or considered.

County of Greenville
Department of General Services
Procurement Services Division, Attn: Procurement Director
301 University Ridge, Suite 100
Greenville, South Carolina 29601-3665
IFB #19-10/05/16

VIII. Statement of Qualifications

Vendors shall include a statement of qualifications that includes the following:

1. Overview of company background.
2. Vendor contact information with names, addresses, telephone numbers.
3. List of at least three (3) references including names, addresses, and telephone numbers. Vendor should include any government entity reference.
4. List of previous projects of similar size and scope.

IX. Inquiries and Addenda

A. Questions

All questions concerning this IFB are to be submitted in writing via fax, electronic mail, or regular mail to Cal Pilgrim, Buyer, Procurement Services Division, to the address listed below, **no later than 5:00 P.M., EDT, September 28, 2016**. Please refer all questions about this Request for Bid and project to:

County of Greenville
Cal Pilgrim, Buyer
Procurement Services Division
301 University Ridge, Suite 100
Greenville, South Carolina 29601-3665
Phone: (864) 467-7204
Fax: (864) 467-7304
E-mail: cpilgrim@greenvillecounty.org

All inquiries and responses will be distributed to all vendors known to have received the IFB document. The County will not be responsible for or bound

by any oral instructions made by any employee(s) of the County in regard to this IFB.

B. Addenda

This IFB represents the most definite statement Greenville County will make concerning information upon which bids are to be based. Any changes to this IFB will be in the form of a written addendum, which will be furnished to all vendors who are listed with the County as having received an IFB document.

No addenda will be issued later than five (5) working days prior to the date for receipt for bids except an addendum which, if necessary, postpones the date for receipt of bids or cancels this IFB. Venders shall acknowledge receipt of all addenda and Questions and Answers with their Bid.

X. **General Information**

A. Proprietary Information

Responders are advised that the County, to the extent permitted by law, will protect the confidentiality of their bids. Responders are advised to consider the implications of the South Carolina Freedom of Information Act, particularly after the bid process has ceased and the contract has been awarded.

B. Errors and Omissions

The Responder will not be allowed to take advantage of any errors or omissions in the Invitation for Bids. Where errors or omissions appear in the IFB, the Responder shall promptly notify the County of Greenville in writing of such error or omission it discovers. Any significant error, omission and/or inconsistency in the specifications are to be reported as soon as possible but no later than five (5) days before such time the response is to be submitted.

C. Withdrawal of Bid

An official representative of a Responder may withdraw a Responder's response at any time prior to the bid submission deadline. Acceptable proof establishing that he/she is the representative of the Responder must be provided.

D. Non-Endorsement

If the County awards contract, the successful Responder shall not issue any news release or other statement relating to the award or servicing of the agreement which state or imply the County of Greenville's endorsement of the successful Responder's services.

XI. Insurance:

The Contractor is responsible for and must have all required insurance listed below and shall not commence work under the associated contract until it has obtained all insurance required, and the County has approved such insurance in writing, nor shall the Contractor allow any subcontractor to commence work on its subcontract until all similar insurance required of the subcontractor has been obtained. All insurance policies shall be maintained for the life of the contract.

- A. **THE COUNTY SHALL BE NAMED AS “ADDITIONAL INSURED” FOR ITS INTEREST** on all policies of insurance, except Workers’ Compensation, Automobile Liability and Professional Errors and Omissions regarding ongoing operations, products and completed operations and this shall be noted on the face of the Certificate of Insurance. As a part of the certificate of insurance requirement the Contractor shall also include acknowledgement and acceptance of the waiver of subrogation provision granted to the County of Greenville. This acknowledgement and acceptance should be included in the same section of the Certificate of Insurance that evidences the “Additional Insured” provision.
- B. Certificates of all such policies of insurance shall be provided by the Contractor’s insurance agent or broker to the County within ten (10) working days from the date of Notice of Award.
- C. All Certificates of Insurance submitted shall provide on the face of the Certificate reference to County’s **IFB #19-10/05/16.**
- D. Contractor will provide County a minimum of thirty (30) days advance notice in the event the insurance policies (or an insurance policy) is canceled. Subcontractors approved to perform work on this project are subject to all of the requirements in this section.
- E. Contractor agrees to maintain and keep in force during the life of this agreement, with a company or companies authorized to do business in South Carolina, the following policies:

Comprehensive General Liability

\$1,000,000 per occurrence-combined single limit
\$2,000,000 general aggregate
To include products and completed operations.

Automobile Liability

\$1,000,000 per occurrence combined single limit
Coverage shall include bodily and property damage,
and cover all vehicles including owned, non-owned, hired.

Workers' Compensation and Employer's Liability

Coverage A State of SC Statutory

Coverage B Employers Liability

\$1,000,000 each accident

\$1,000,000 disease, per employee

\$1,000,000 disease policy limit

Policies shall contain a waiver of subrogation in favor of and/or that applies to the County of Greenville, its departments, agencies, boards, employees, and commissions for losses from work performed by or on behalf of the contractor.

No deviation from this coverage will be accepted unless, in the County's sole discretion, it is more advantageous to the County, i.e. \$1,000,000 or \$2,000,000 or \$5,000,000 limit would be acceptable.

XII. Evaluation Criteria

The bids will be evaluated on the following criteria which are in no particular order. Greenville County reserves the right to interview responders to this IFB at its discretion. Greenville County will not be responsible for any costs associated with interviews of responders.

- Responsiveness to this IFB
- Previous experience on projects of similar scope and size.
- Cost
- References

XIII. Safety, Health and Security

Contractor shall be solely responsible for its activities, that of its employees on the site and activities of its consultants, contractors and/or subcontractors for maintaining a safe jobsite. Contractor's activities and activities of its consultants, contractors and/or subcontractors shall comply with all local, state, and federal safety regulations and their enforcement agencies. Contractor shall at all times conduct its operations under this Contract in a manner to avoid risk of endangerment to the health and safety of persons and property. The Contractor shall have sole responsibility for implementing its safety and health programs, taking all safety and health precautions necessary and continuously inspecting all equipment, materials and work to prevent, discover, determine and correct any conditions which might result in personal injury, equipment damage or damage to property or the public. Contractor's safety, health and security programs shall be in compliance with all regulatory requirements and shall furnish accident, incident, injury, and other records and reports required by the Occupational Safety and Health Administration, State and local laws, or by the County.

XIV. Illegal Immigration Reform Act Compliance

By submitting an offer, Contractor certifies that it will comply with the applicable requirements of Title 8, Chapter 14 of the South Carolina Code of Laws (originally enacted as Section 3 of The South Carolina Illegal Immigration Reform Act, 2008 S. C. Act No. 280) and agrees to provide upon request any documentation required to establish either: (a) the applicability of Title 8, Chapter 14 to Contractor and any subcontractors or sub-subcontractors; or (b) the compliance with Title 8, Chapter 14 by Contractor and any subcontractor or sub-subcontractor. Pursuant to Section 8-14-60, "A person who knowingly makes or files any false, fictitious, or fraudulent document, statement, or report pursuant to this chapter is guilty of a felony, and upon conviction, must be fined within the discretion of the court or imprisoned for not more than five years, or both".

Contractor agrees to include in any contracts with its subcontractors language requiring the subcontractors to (a) comply with the applicable requirements of Title 8, Chapter 14, and (b) include in any contracts with the sub-subcontractors language requiring the sub-subcontractor to comply with the applicable requirements of Title 8, Chapter 14. In the event any contractor, subcontractor and/or sub-subcontractor is found not to be in compliance with the SC Immigration Reform Act [hereinafter "The Act"], the contractor agrees to fully indemnify the County for any loss suffered by the County as a result of such contractor, subcontractor or sub-subcontractor's failure to comply with the Act.

XV. Contract

A sample contract is provided.



**COUNTY OF GREENVILLE
PROCUREMENT SERVICES DIVISION
SUBDIVISION ROAD REPAIR PROJECTS
IFB #19-10/05/16**

INSTRUCTIONS/TERMS AND CONDITIONS:

1. **IFB Opening and Award:** Bids will be examined promptly after opening and each bid will be announced to all participants. However, no decision will be made until Procurement and the user Division have had ample time to review each bid. However, award will be made at the earliest possible date. The County reserves the right to award in whole or in part, by item, group of items, geographic area or by section where such action serves the County's best interest. The contract will be awarded to the bid that meets the requirements and criteria set forth in the invitation for bid. No bid may be withdrawn for a period of sixty (60) days after bid opening date. Bids, whether mailed or hand delivered, must be received and time/date stamped in the Procurement Services Office by the closing time and date indicated on the bid. Bids received after the bid closing time/date will not be accepted. By submission of a bid, you are guaranteeing that all goods and services meet the requirement of the solicitation during the contract period.
2. **Rights Reserved by Greenville County:** Greenville County reserves the right to reject any and all bids, any portion thereof, and waive any technicalities. Accordingly, the right is reserved to make awards in the best interest of the County. Integrity, reputation, experience and past performance will be heavily weighed in bid evaluation. This solicitation does not commit the County of Greenville to award a contract, to pay any costs incurred in the preparation of the bid, or to procure or contract for goods or services listed herein.
3. **Responders Qualification:** Responders must, upon request of the County, furnish satisfactory evidence of their ability to furnish products or services in accordance with the terms and conditions of these specifications. The County reserves the right to make the final determination as to the bidder's ability to provide the products or services requested herein.
4. **Responders Responsibility:** Each bidder shall be fully acquainted with the conditions relating to the scope and restrictions attending the execution of the work under the conditions of this bid. It is expected that this will sometimes require on-site observation. The failure or omission of a bidder to be acquainted with existing conditions shall in no way relieve the bidder of any obligations with respect to this bid or to any contract as a result of this bid.
5. **References:** The County requires bidders to list at least three (3) references, names, addresses and telephone numbers of contact persons for companies with whom the bidder has performed or provided similar work, service or product.
6. **Waiver:** The County reserves the right to waive any Instructions to Bidders, General or Special Terms and Conditions, specifications, or technicalities when it is deemed to be in the best interest of the County to do so.

7. **Rejection:** Greenville County reserves the right to reject any bid that contains prices for individual items or services that are inconsistent or unrealistic when compared to pricing of like bids; or ambiguous bids which are uncertain as to terms, delivery, quantity, or compliance with specifications may be rejected or otherwise disregarded if such action is in the best interest of the County.
8. **Bid form:** Each bidder must submit a bid on the form provided. The bidder shall sign his bid correctly or the bid may be rejected. If the bid shows any omissions, alteration of form, unauthorized additions, a conditional bid or any irregularities of any kind, bid may be rejected. Bid may not be accepted on any other form than the bid form provided.
9. **Questions:** Questions shall be submitted in writing to Cal Pilgrim, Buyer, Procurement Services Division, County of Greenville, 301 University Ridge, Suite 100 by Fax (864) 467-7304 or by E-Mail to cpilgrim@greenvillecounty.org, by **5:00 P.M., EDT, September 28, 2016.**
10. **Bid Bond:** Bidders shall submit with their bid a bid bond in the amount of 5% of the bid price. This bond may be in the form of Certified Check, Cashier's or Bank Money Order of any national or state bank and shall be made payable to Greenville County. Bids submitted without being accompanied by any of the foregoing as required, shall be considered informal and will be rejected. Any bid accompanied by a bid bond not properly executed in the opinion of the County Attorney, may be rejected. The bond will be forfeited to the County by the successful bidder as liquidated damages in case a bid award is made to that bidder and the contract and bond are not promptly and properly executed.
11. **Return of Bid Bond:** When bids are awarded, the Procurement Services Division will return immediately all checks, except that of the successful bidder. The check of the successful bidder will be returned upon compliance with the performance and payment bond requirements.
12. **Performance and Payment Bond:** The successful bidder, within fifteen (15) working days after acceptance of the bidder's offer by the County, shall furnish a satisfactory performance and payment bond in the amount of the total bid price. The performance and payment bond must be received by the county prior to issuance of an executed contract and Notice to Proceed. The fifteen (15) working days may be extended upon written approval by the Purchasing Manager. A copy of the written approval shall be transmitted to the successful bidder stating the terms of any extension. In the event that the bidder fails to deliver to the County Purchasing and Contracts Division the performance and payment bond in said period of fifteen (15) working days after acceptance of the bidder's offer by the County, then the bid bond of the bidder shall be retained by the County in its entirety and the award will be withdrawn from the bidder. The Bond must have approval by the County Attorney's Office before it is made effective. The successful bidder shall have as surety a corporate surety authorized to act as surety in South Carolina. The Performance and Payment Bond will insure that the successful bidder will promptly make payments to all persons supplying labor or materials to the bidder; and shall guarantee to indemnify and save the County, its officers, divisions, and employees harmless

from all costs, damages, and expenses growing out of or by reason of the successful bidder's failure to comply and perform the work and complete the contract in accordance with the specifications in the matter of making, furnishing and/or delivering said work or supplies. The Performance and Payment Bond will be in effect for one year after completion of the contract.

13. **Availability of Bonding Agency**: In addition, the bonding company must have an agent available to meet with County officials to clarify and explain the County's responsibility in maintaining the integrity of the bond.
14. **Specification Changes, Additions and Deletions**: All changes in specifications shall be in writing in the form of an addendum and furnished to all bidders. The County of Greenville shall not be responsible for any verbal information given by any employees of the County of Greenville in regard to this bid.
15. **Number of Bid Copies**: Please submit **One (1) Original and Three (3) Copies** of your bid.
16. **Bid Changes**: Bids, amendments thereto or withdrawal requests received after the advertised time for bid opening, shall be void regardless of when they were mailed.
17. **Bid Price**: The bid price presented as a result of these specifications shall be for the contract period. The bid shall be acceptable for sixty (60) days from the date of opening. All prices and notations shall be printed in ink or typewritten. Errors should be crossed out, corrections entered and initialed by the person signing the bid. Erasures or use of typewriter correction fluids may be cause for rejection. No bid shall be altered or amended after specified time for opening.
18. **Federal, State and Local Laws**: The contractor assumes full responsibility and liability for compliance with any and all local, state and federal laws and regulations applicable to the contractor and his employees including, but not limited to, compliance with the EEO guidelines, the Occupational Safety and Health Act of 1970, and minimum wage guidelines.
19. **Tie Bids**: In the case of tie bids, the County reserves the right to make the award based on the factors outlined in Section 3-202 of the Procurement Ordinance, or in what it considers to be in the best interest of the County.
20. **Deduction and Holdbacks**: In addition to the County's right of termination, the County shall be entitled to full reimbursement for any costs incurred by the County by reason of the contractor's failure to perform or to satisfactorily perform its responsibilities and duties. Such costs may include, but are not limited to, the cost of using the County's employees or employees of any other entity to perform the obligations of the contract. The County may obtain any such reimbursement by deduction from payments otherwise due to the contractor or by any other proper and lawful means. All deductions from any money due the contractor are to be as liquidated damages and not as a penalty. It is the County's intent to give the contractor a reasonable opportunity whenever practicable, to correct any such failure to perform or satisfactorily perform its responsibilities and duties. In

no circumstances shall any uncorrected situation extend for more than five (5) days. The County will make the following deductions from the contract sum in the event that the contractor fails to perform any of the required work within the required time limits in the event the County carries out the work using its forces or another contractor.

- A. For use of County's forces – actual cost involved.
- B. For use of another contractor – the amount charged by said contractor.

The County reserves the right to hold back and/or withhold part of complete payments for unsatisfactory work, deficiencies, etc. until said defects are satisfactorily corrected or cleared.

21. **Evaluation Criteria:** The bids will be evaluated on the following criteria which are in no particular order. Greenville County reserves the right to interview responders to this IFB at its discretion. Greenville County will not be responsible for any costs associated with interviews of responders.

- Responsiveness to this IFB
- Previous experience on projects of similar scope and size.
- Cost
- References

22. **Quality:** Unless otherwise indicated in this bid it is understood and agreed that any items offered or shipped on this bid shall be new and in first class condition unless otherwise indicated herein.

23. **MBE/WBE Participation – Affirmative Action:**

- A. MBE/WBE – Vendors submitting bids are encouraged to solicit MBE/WBE participation in fulfilling their contract. Indicate in your response any MBE/WBE areas of involvement for monitoring purposes.
- B. The successful bidder will take affirmative action in complying with all Federal and State requirements concerning fair employment and treatment of all employees, without regard or discrimination by reason of race, color, religion, age, sex, national origin or physical handicap.

24. **Default:** In case of default by vendor the County may procure the item or services from other sources and may recover the loss occasioned thereby from any unpaid balance due the vendor or by proceeding against the vendor's performance bond, if any, and/or by suit against vendor.

25. **Termination:** This contract is subject to termination for failure to comply with the specifications, terms and conditions by the County or the contractor upon written notice by registered mail. Such termination will be effective not less than ten (10) days nor more than sixty (60) days after receipt of such notice from the County nor less than thirty (30) days nor more than sixty (60) days after receipt by the

County from the contractor. Receipt of notice by one party to terminate the contract will nullify any subsequent reciprocal notice by the receiving party prior to the announced termination date. In the event of termination the County shall be responsible to pay the contractor only for work satisfactorily completed upon the effective date of termination and shall not be responsible for any other charges.

26. **Termination for Convenience:** Greenville County may terminate for convenience any contract resulting from this solicitation by providing sixty (60) calendar days advance written notice to the vendor.
27. **Non-Appropriation:** Any contract entered into by the County, resulting from this invitation shall be subject to cancellation without damages or further obligation when funds are not appropriated or otherwise made available to support continuation of performance in a subsequent fiscal period or appropriated year.
28. **Incorporation of Bid into Contract:** The terms, conditions, and specifications of this bid and the selected firm's response are to be incorporated into the contract.
29. **S.C. Law Clause:** Upon award of contract under this bid, the person, partnership, association or corporation to whom the award is made must comply with the laws of South Carolina which require such person or entity to be authorized and/or licensed to do business with this State. Notwithstanding the fact that applicable statutes may exempt or exclude the successful bidder from requirements that it be authorized and/or licensed to do business in this State, by submission of this signed bid, the bidder understands and agrees to be bound to the jurisdiction and process of the courts of the State of South Carolina, as to all matters and conflicts or future conflicts under the contract and the performance thereof, including any questions as to the liability for taxes, licenses, or fees levied by the State.
30. **Assignment Clause:** Successful bidder will be required to give the County ninety (90) days notice in the event of a change in the ownership of this contract. The County is under no obligation to continue this contract with an assignee. No contract or its provisions may be assigned, sublet, or transferred without the written consent of the County.
31. **Indemnification:** The contractor agrees to indemnify and save harmless the County of Greenville and all County officers, agents and employees from any and all claims, suits, actions, legal proceedings, damages, costs, expenses & attorney fees of every name and description, arising out of or resulting from the use of any materials furnished by the contractor, or any work done in the performance of the contract arising out of a willful or negligent act or omission of the provider, its officers, agents and employees; provided that such liability is not attributable to a willful or negligent act or omission on the part of the County, its officers, agents and employees.
32. **Deviations from Specifications:** Any deviation from specifications indicated herein must be clearly pointed out; otherwise, it will be considered that items offered are in strict compliance with these specifications, and successful bidder

will be held responsible therefore. Deviations must be explained in detail on separate attached sheets(s). The listing of deviations, if any, is required but will not be construed as waiving any requirements of the specifications. Deviations found in the evaluation of the bid and not listed may be cause for rejection. Bidders offering substitute or equal items must provide information sufficient enough to determine acceptability of item offered.

33. **Minor Deviations:** The County reserves the right to negotiate minor deviations from the prescribed terms, conditions and requirements with the selected vendor.
34. **Contractor License Requirement:** The contractor shall procure all permits and licenses, and pay all charges and fees necessary and incidental to the lawful conduct of his business. He shall keep himself fully informed of existing and future Federal, State, and Local Laws, ordinances and regulations, which in any manner affect the fulfillment of his contract and shall comply with the same.
35. **Conflict of Interest Statement:** The contractor may become involved in situations where a conflict of interest could occur due to individual or organizational activities within the County. The vendor, by submitting a bid, is in essence assuring the County that his company, and/or subcontractors, is in compliance with all federal, state, and local conflict of interest laws, statutes, and regulations.
36. **Insurance:**

The Contractor is responsible for and must have all required insurance listed below and shall not commence work under the associated contract until it has obtained all insurance required, and the County has approved such insurance in writing, nor shall the Contractor allow any subcontractor to commence work on its subcontract until all similar insurance required of the subcontractor has been obtained. All insurance policies shall be maintained for the life of the contract.

- A. **THE COUNTY SHALL BE NAMED AS "ADDITIONAL INSURED" FOR ITS INTEREST** on all policies of insurance except Worker's Compensation, Automobile Liability and Professional Errors and Omissions regarding ongoing operations, products and completed operations, and this shall be noted on the face of the Certificate of Insurance. As a part of the certificate of insurance requirement the contractor shall also include acknowledgement and acceptance of the waiver of subrogation provision granted to the County of Greenville. This acknowledgement and acceptance should be included in the same section of the Certificate of Insurance that evidences the "Additional Insured" provision.
- B. Certificates for all such policies of insurance shall be provided by the contractor's insurance agent or broker to the County within 10 working days from the date of Notice of Award.
- C. All Certificates of Insurance submitted shall provide on the face of the certificate reference to County's **IFB #19-10/05/16**.

- D. Contractor will provide County a minimum of 30 days advance notice in the event the insurance policies (or an insurance policy) are canceled. Subcontractors approved to perform work on this project are subject to all of the requirements in this Section.
- E. Contractor agrees to maintain and keep in force during the life of this Agreement, with a company or companies authorized to do business in South Carolina, the following insurance policies:

Comprehensive General Liability:

\$1,000,000 per occurrence - combined single limit / \$2,000,000 general aggregate, to include products and completed operations.

Automobile Liability:

\$1,000,000 per occurrence - combined single limit (Coverage shall include bodily injury and property damage and cover all vehicles including owned, non-owned and hired)

Worker's Compensation and Employer's Liability:

Coverage A - State of SC

Coverage B - Employers liability

\$1,000,000 Each Accident

\$1,000,000 Disease, Per Employee

\$1,000,000 Disease, Policy Limit

Policies shall contain a waiver of subrogation in favor of and/or that applies to the County of Greenville, its departments, agencies, boards, employees, and commissions for losses from work performed by or on behalf of the contractor.

No deviation from these coverages will be accepted unless, in the County's sole discretion, it is more advantageous to the County, i.e., \$1,000,000 - a \$2,000,000 or \$5,000,000 limit would be acceptable.

- 37. **Contracts:** The County reserves the option to prepare and negotiate its own contract with the vendor, giving due consideration to the stipulations of the vendor's contracts and associated legal documents. Vendors should include with their submittal a copy of any proposed standard contract.
- 38. **Contractor Liability:** The contractor assumes full responsibility for all injuries to, or death of any person and for all damage to property, including property and employees of the County and for all claims, losses or expense which may in any way arise out of the performance of the work, whether caused by negligence or otherwise; and the contractor shall indemnify and save the County harmless from all claims, losses, expense, or suits for any such injuries, death or damages to property, and from all liens, losses, expenses, claims or causes of action of any sort which may arise out of the performance of the work, and shall defend, on behalf of the County and suit brought against the County for attorney's fees and for all other expenses incurred by the County in connection with or as a result of any such suit, claims, or loss. Under no circumstances and with no exception will Greenville County act as arbitrator between the contractor and any

subcontractor. The contractor will be solely responsible for compliance with building code requirements, all dimensions, and all conditions relating to his work under this contract. Workmanship shall be first quality in every respect. All measures necessary to ensure a first class job shall be taken.

39. **Sub-Contracting**: The contractor shall not subcontract any portion of this contract without proper written approval from the County.
40. **Non-Collusion**: The contractor expressly warrants and certifies that neither the Contractor nor its employees or associates has directly or indirectly entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in conjunction with this bid.
41. **Prohibition of Gratuities**: Neither the contractor nor any person, firm or corporation employed by the contractor in the performance of the contract shall offer or give, directly or indirectly, to any employee or agent of the County, any gift, money, or anything of value, or promise any obligations, or contract for future reward or compensation at any time during the term of this contract.
42. **Publicity Releases**: Contractor agrees not to refer to the award of this contract in commercial advertising in such a manner as to state or imply that the products or services provided are endorsed or preferred by the user. The contractor shall not have the right to include the County's name in its published list of customers without prior approval of the County. With regard to news releases, only the name of the County, type and duration of contract may be used and then only with prior approval of the County. The contractor also agrees not to publish, or cite in any form, any comments or bids from the County Staff unless it is a direct bid from the Public Information Officer.
43. **Public Record**: All information submitted relating to this bid, except for proprietary information, shall become part of the public record to the extent required by the Freedom of Information Act. Vendors shall be responsible for clearly marking all information submitted that is proprietary based on the Freedom of Information Act. The County assumes no responsibility for the release of information not clearly and properly labeled as proprietary.
44. **Precedence**: In the event of conflict between the terms and conditions and the specifications, the more restrictive instruction shall take precedence unless stated otherwise in the specifications.
45. **Illegal Immigration Reform Act Compliance**: By submitting an offer, Contractor certifies that it will comply with the applicable requirements of Title 8, Chapter 14 of the South Carolina Code of Laws (originally enacted as Section 3 of The South Carolina Illegal Immigration Reform Act , 2008 S.C. Act No. 280) and agrees to provide upon request any documentation required to establish either: (a) the applicability of Title 8, Chapter 14 to Contractor and any subcontractors or sub-subcontractors; or (b) the compliance with Title 8, Chapter 14 by Contractor and any subcontractor or sub-subcontractor. Pursuant to Section 8-14-60, "A person who knowingly makes or files any false, fictitious, or fraudulent document, statement, or report pursuant to this chapter is guilty of a felony, and upon conviction, must be fined within the discretion of the court or imprisoned for not

more than five years, or both." Contractor agrees to include in any contracts with its subcontractors language requiring the subcontractors to (a) comply with the applicable requirements of Title 8, Chapter 14, and (b) include in any contracts with the sub-subcontractors language requiring the sub- subcontractor to comply with the applicable requirements of Title 8, Chapter 14. In the event any contractor, subcontractor and/or sub-subcontractor is found not to be in compliance with the SC Immigration Reform Act [hereinafter "The Act"], the contractor agrees to fully indemnify the County for any loss suffered by the County as a result of such contractor, subcontractor or sub-subcontractor's failure to comply with the Act.

46. **Safety, Health, and Security:** Contractor shall be solely responsible for its activities, that of its employees on the site and activities of its consultants, contractors and/or subcontractors for maintaining a safe job site. Contractor's activities and activities of its consultants, contractors and/or subcontractors shall comply with all local, state, and federal safety regulations and their enforcement agencies. Contractor shall at all times conduct its operations under this Contract in a manner to avoid risk of endangerment to the health and safety of persons and property. The Contractor shall have sole responsibility for implementing its safety and health programs, taking all safety and health precautions necessary and continuously inspecting all equipment, materials and work to prevent, discover, determine and correct any conditions which might result in personal injury, equipment damage or damage to property or the public. Contractor's safety, health and security programs shall be in compliance with all regulatory requirements and shall furnish accident, incident, injury, and other records and reports required by the Occupational Safety and Health Administration, State and Local laws, or by the County.

STATE OF SOUTH CAROLINA)
COUNTY OF GREENVILLE)

CONSTRUCTION AGREEMENT

THIS AGREEMENT is made and entered into on this ____ day of _____, 2016, by and between the **COUNTY OF GREENVILLE**, a political subdivision of the State of South Carolina, having its principle place of business at 301 University Ridge, Greenville, S.C. 29601 ("**COUNTY**"), and _____, located at _____ ("**CONTRACTOR**").

IN CONSIDERATION of the covenants hereinafter set forth, the parties mutually agree as follows:

1. **CONTRACT PERIOD**

This Agreement shall begin on the date the NOTICE TO PROCEED is issued by **COUNTY**. All work phases specified herein must be completed no later than sixty (60) calendar days from the effective date of the Notice to Proceed. If the **Contractor** fails to satisfactorily complete the work within the specified time, liquidated damages of \$250.00 per calendar day shall be assessed up to value of the contract (total bid). The penalty may be drawn from any payment due, or the performance bond, at the discretion of the **County**.

2. **PROJECT SCOPE**

COUNTY has employed **CONTRACTOR** to provide services to bring the road in the following subdivisions to Greenville County Land Development Regulation Standards: Willimon Estates, Victoria Park, Hunters Landing, and Hunters Ridge. The services to be provided by **CONTRACTOR** are more particularly described in **COUNTY'S** IFB #19-10/05/16 and in **CONTRACTOR'S** response to IFB #19-10/05/16 received _____, which are both attached hereto and incorporated herein by reference. **CONTRACTOR** acknowledges that it is an independent contractor and that it will at all times act as such. Nothing in this Agreement shall be deemed to constitute **CONTRACTOR** or any of its employees as the agent, representative or employee of **COUNTY**, or create a joint venture between the parties.

3. **PAYMENT TERMS**

3.1 **COUNTY** agrees to pay **CONTRACTOR** for the services described in the Project Scope an amount not to exceed _____.

3.2 **CONTRACTOR** will submit monthly invoices to the **COUNTY**. Such invoices shall include a detailed listing of charges. **COUNTY** shall notify **CONTRACTOR** within ten (10) days of receipt of invoice of any dispute with the invoice and **CONTRACTOR**, upon such notice, shall provide back-up data to **COUNTY**. **COUNTY** and **CONTRACTOR** will, thereafter, promptly resolve any disputed items. Payment on undisputed invoice amounts is due upon receipt of invoice by **COUNTY** and is past due thirty (30) days from the date the invoice is received. If payment on undisputed invoice amounts remains past due sixty (60) days from the date the invoice is

received by **COUNTY**, then **CONTRACTOR** shall have the right to either suspend all work under this Agreement, without prejudice, or terminate this Agreement in accordance with the provisions of Section 13.2. **COUNTY** shall, prior to making payment on any invoice, withhold ten (10%) percent from any payment due. The amounts so withheld shall be released to **CONTRACTOR** upon satisfactory completion of the Project.

- 3.3 Approval and/or payment of such invoices shall not in any way relieve **CONTRACTOR** of its liability to **COUNTY** for deficiencies in the performance of its services. **COUNTY'S** approval or acceptance of, or payment for any of the services shall not operate as a waiver of any rights to which **COUNTY** may be entitled.
- 3.4 **NO INTEREST OR OTHER LATE PENALTIES SHALL ACCRUE ON LATE PAYMENTS.**
- 3.5 **IT IS UNDERSTOOD AND AGREED BY THE PARTIES THAT IN THE EVENT FUNDS ARE NOT APPROPRIATED IN THE CURRENT FISCAL YEAR OR ANY SUBSEQUENT FISCAL YEAR, THIS CONTRACT WILL BECOME NULL AND VOID AND THE COUNTY WILL ONLY BE REQUIRED TO PAY FOR SERVICES COMPLETED TO THE SATISFACTION OF THE COUNTY.**

4. CHANGES

- 4.1 **COUNTY** may, at any time, in writing, and within the general scope of this Agreement, make "Request for Changes" in the services or work to be performed. In the event **CONTRACTOR** is requested to perform additional services or work not contemplated by this Agreement, **CONTRACTOR** will promptly notify **COUNTY** if such change causes an increase in **CONTRACTOR'S** cost of, or time required for, performance of any services under this Agreement, an equitable adjustment shall be made and this Agreement shall be modified in writing accordingly. In the event **CONTRACTOR** is requested to reduce the performance of services or scope of work such request must be in writing. In the event **CONTRACTOR** is requested to reduce the performance of services or scope of work **COUNTY** shall be entitled to a decrease in the amount of compensation to be paid to **CONTRACTOR** accordingly.
- 4.2 All change orders must be in writing to be valid, and no services for which any additional compensation will be charged by **CONTRACTOR** shall be furnished without the written authorization of **COUNTY**.
- 4.3 **COUNTY** may add to or reduce the scope of work by generating mutually agreed upon contract exhibits to this basic agreement.

5. WARRANTIES

In addition to any express and/or implied warranties provided to **COUNTY** by law, **CONTRACTOR** warrants to **COUNTY** that the performance of the services covered by this

Agreement will be competent to perform the tasks undertaken, that the product of such paving services will yield only first-class results, that materials and equipment furnished will be of good quality and new unless otherwise permitted by this Agreement, and that the work will be of good quality, free from faults and defects and in strict conformance with this Agreement. All work not conforming to these requirements may be considered defective. In the event any of the work is found to be defective or not in accordance with this Agreement within one (1) year after completion of the contract services, **CONTRACTOR** will promptly correct the work without additional compensation from **COUNTY**, upon written notice from **COUNTY**. All corrective work shall be completed within thirty (30) days of receipt of written notice from **COUNTY**. Establishment of the one year time period in this section relates only to the duty of **CONTRACTOR** to specifically correct the work.

6. **WITHHOLDING PAYMENT**

COUNTY has the right, but not the obligation, to withhold funds to the extent and only to the extent necessary to protect **COUNTY** from loss because of:

- a) Defective work not remedied by **CONTRACTOR** within a reasonable time or for which **CONTRACTOR** has failed to initiate a remedy within a reasonable time;
- b) Claims of third parties against **COUNTY** or **COUNTY'S** property for which **CONTRACTOR** is liable;
- c) Failure by **CONTRACTOR** to pay subcontractors or others in a prompt and proper fashion the amounts due and owing to such subcontractor or others relating to the Project.
- d) Evidence that the balance of the work cannot be completed in accordance with this Agreement for the unpaid balance of the Contract Price;
- e) Evidence that the work will not be completed in the time required for final completion;
- f) Persistent failure to carry out the work in accordance with this Agreement, or
- g) Damage to the **COUNTY** or a third party to whom the **COUNTY** is, or may be, liable and for which **CONTRACTOR** is liable pursuant to the terms of this Agreement.

7. **RIGHT TO STOP WORK**

In the event **CONTRACTOR** fails to perform the work in accordance with this Agreement, **COUNTY** may order **CONTRACTOR** to stop the work and **COUNTY** may then perform the work in accordance with Section 8, below, or terminate this Agreement in accordance with Section 13.1.2. In such event, **CONTRACTOR** shall immediately obey such stop work order.

8. **COUNTY'S RIGHT TO PERFORM WORK**

In the event **CONTRACTOR'S** work is stopped pursuant to Section 7, above, entitled "Right to Stop Work", and **CONTRACTOR** fails to provide adequate assurance to **COUNTY**, within seven (7) days of such stoppage, that the cause of such stoppage will be eliminated or corrected, then **COUNTY** may proceed to carry out the subject work or terminate this Agreement. In such a situation, an appropriate Change Order shall be issued deducting from the Contract Price the documented and agreed to cost of correcting the deficiencies, including

any professional services and expenses necessitated thereby. If the unpaid portion of the Contract Price is insufficient to cover the amount due COUNTY, CONTRACTOR shall pay the difference to COUNTY; provided, however if COUNTY stops the work, takes over a portion of or all of the work and performs the work, then CONTRACTOR'S WARRANTY OBLIGATIONS relating to such work performed by COUNTY shall be null and void.

9. **INDEMNIFICATION.**

CONTRACTOR agrees to assume responsibility for any damage, loss, or injury, including death, of any kind or nature whatever to person or property, including employees and property of COUNTY, caused by or resulting from any negligent act or omission of CONTRACTOR or its subcontractors or any of their officers, agents, servants, or employees, arising from the performance of the work under this Agreement. CONTRACTOR shall defend, indemnify, and hold harmless COUNTY and all of its officers, agents, servants, or employees from and against any and all claims, loss, damage, charge, or expense to which they or any of them may be put or subjected by reason of any such damage, loss, or injury. CONTRACTOR expressly agrees to defend against any claims brought or filed against COUNTY, where such claim or action involves, in whole or in part, the subject of the indemnity contained herein, whether such claims or actions are rightfully or wrongfully brought or filed.

10. **INSURANCE.**

The contractor is responsible for and must have all required insurance listed below and shall not commence work under the associated contract until it has obtained all insurance required, and the County has approved such insurance in writing, nor shall the Contractor allow any subcontractor to commence work on its subcontract until all similar insurance required of the subcontractor has been obtained. All insurance policies shall be maintained for the life of the contract.

- A. **THE COUNTY SHALL BE NAMED AS "ADDITIONAL INSURED" FOR ITS INTEREST** on all policies of insurance, except Worker's Compensation, Auto Liability and Professional Errors and Omissions, regarding ongoing operations, products and completed operations, and this shall be noted on the face of the Certificate of Insurance. As a part of the certificate of insurance requirement the contractor shall also include acknowledgement and acceptance of the wavier of subrogation provision granted to the County of Greenville. This acknowledgement and acceptance should be included in the same section of the Certificate of Insurance that evidences the "Additional Insured" provision.
- B. Certificates for all such policies of insurance shall be provided by the Contractor's insurance agent or broker to the County within 10 working days from the date of Notice of Award.
- C. All Certificates of Insurance submitted shall provide on the face of the certificate reference to County's IFB #19-10/05/16.

- D. **Contractor** will provide **County** a minimum of 30 days advance notice in the event the insurance policies (or an insurance policy) is canceled.
Subcontractors approved to perform work on this project are subject to all of the requirements in this Section.
- E. **Contractor** agrees to maintain and keep in force during the life of this Agreement, with a company or companies authorized to do business in South Carolina, the following insurance policies:

Comprehensive General Liability:

1,000,000 per occurrence - combined single limit / \$2,000,000 general aggregate, to include products and completed operations.

Automobile Liability:

\$1,000,000 per occurrence - combined single limit (Coverage shall include bodily injury and property damage and cover all vehicles including owned, non-owned and hired)

Statutory Worker's Compensation:

Coverage A - State of SC

Coverage B - Employers liability

\$1,000,000 Each Accident

\$1,000,000 Disease, Per Employee

\$1,000,000 Disease, Policy Limit

Policies shall contain a waiver of subrogation in favor of and/or that applies to the County of Greenville, its departments, agencies, boards, employees, and commissions for losses from work performed by or on behalf of the contractor.

No deviation from these coverages will be accepted unless, in the County's sole discretion, it is more advantageous to the County, i.e., \$1,000,000 - a \$2,000,000 or \$5,000,000 limit would be acceptable.

11. **PERFORMANCE AND PAYMENT BOND**

Contractor shall furnish a satisfactory Performance and Payment Bond in the amount of the total contract price no later than fifteen (15) business days after the date of the Notice of Award. The Bond must have approval by the County Attorney's Office before it is made effective. The **Contractor** shall have as surety a corporate surety authorized to act as surety in South Carolina. The Performance and Payment Bond shall remain in effect for one year after completion of the contract.

12. **ILLEGAL IMMIGRATION REFORM ACT COMPLIANCE**

By submitting an offer, **Contractor** certifies that it will comply with the applicable requirements of Title 8, Chapter 14 of the South Carolina Code of Laws (originally enacted as Section 3 of The South Carolina Illegal Immigration Reform Act, 2008 S.C. Act No. 280) and agrees to provide upon request any documentation required to establish either: (a) the applicability of Title 8, Chapter 14 to **Contractor** and any subcontractors or sub-subcontractors; or (b) the

compliance with Title 8, Chapter 14 by **Contractor** and any subcontractor or sub-subcontractor. Pursuant to Section 8-14-60, "A person who knowingly makes or files any false, fictitious, or fraudulent document, statement, or report pursuant to this chapter is guilty of a felony and upon conviction, must be fined within the discretion of the court or imprisoned for not more than five years, or both." **Contractor** agrees to include in any contracts with its subcontractors language requiring the subcontractors to (a) comply with the applicable requirements of Title 8, Chapter 14, and (b) include in any contracts with the sub-subcontractors language requiring the sub-subcontractor to comply with the applicable requirements of Title 8, Chapter 14. In the event any contractor, subcontractor and/or sub-subcontractor is found not to be in compliance with the SC Immigration Reform Act [hereinafter "The Act"], the contractor agrees to fully indemnify the County for any loss suffered by the County as a result of such contractor, subcontractor or sub-subcontractor's failure to comply with the Act.

13. TERMINATION

13.1 TERMINATION BY COUNTY

13.1.1 This Agreement may be terminated by **COUNTY** upon fifteen (15) days written notice at **COUNTY'S** election. In the event of termination at **COUNTY'S** election and not due to the fault of **CONTRACTOR**, **CONTRACTOR** will be paid only for the work actually completed to the satisfaction of the **County** as of the date of termination.

13.1.2 Should **CONTRACTOR** default or persistently fail or neglect to carry out the work in accordance with the terms of this Agreement, **COUNTY** may by written notice to **CONTRACTOR**, without prejudice to any other right or remedy under this Agreement, terminate the employment of **CONTRACTOR** and take possession of the site and all materials, equipment, tools and construction equipment and machinery thereon owned by **CONTRACTOR** as well as all drawings, plans and specifications and finish the work by whatever methods **COUNTY** may deem expedient; provided, however, prior to such termination, **CONTRACTOR** shall be given notice of the default and an opportunity to cure such default within seven (7) days. Such termination shall be deemed "for cause". Should this Agreement be terminated "for cause", **CONTRACTOR** shall not be entitled to any further payment. In the event the actual and documented cost of finishing the work, including compensation for professional services and expenses made necessary thereby, if any, exceed the unpaid balance, **CONTRACTOR** shall pay the difference to **COUNTY**. This obligation for payment shall survive the termination of this Agreement.

13.2 TERMINATION BY CONTRACTOR

Should **COUNTY** fail to make payment on any undisputed invoice amount within sixty (60) days of receipt of such invoice, **CONTRACTOR** may elect to either suspend the work or terminate this Agreement; provided, however, prior to termination, **COUNTY**

shall be given notice of the default and an opportunity to cure such default within seven (7) days. Should this Agreement be terminated by **CONTRACTOR**, **CONTRACTOR** shall be entitled to be paid only for the work actually completed to the satisfaction of the **County** as of the date of termination.

14. **CLEANING THE SITE AND SAFETY**

- 14.1 **CONTRACTOR** shall keep the site reasonably clean during performance of the work. **CONTRACTOR** shall dispose of all refuse at a South Carolina DHEC approved landfill.
- 14.2 **CONTRACTOR** shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury or loss to (1) employees on the job and other persons who may be affected thereby; (2) the work and materials and equipment to be incorporated herein; and (3) other property at or adjacent to the site.
- 14.3 **CONTRACTOR** shall give notices and comply with all laws, ordinances, rules, regulations and orders of public authorities bearing on the safety of persons and property and their protection from damage, injury or loss.

15. **ASSIGNMENT**

This Agreement shall not be assigned by either party without the prior written consent of the other party.

16. **SUBCONTRACTS**

- 16.1 **CONTRACTOR** shall promptly furnish to **COUNTY**, in writing, the bid list proposed by **CONTRACTOR** to act as subcontractors on the Project. **COUNTY** shall, within seven (7) days, reply to **CONTRACTOR**, in writing, stating any objections **COUNTY** may have to such proposed subcontractors. **CONTRACTOR** may enter into a subcontract with any subcontractor on the approved bid list. **CONTRACTOR** shall not be required to enter into a subcontract with any subcontractor to whom **CONTRACTOR** has objection.
- 16.2 All subcontractors shall provide performance and payment bonds in accordance with bonding requirements set forth in the Greenville County procurement policies and shall name **COUNTY** as an additional obligee on such bonds.
- 16.3 All subcontractors will be required to furnish Certificates of Insurance to the **County** in accordance with all of the requirements set forth in Section 10 of this Agreement.

17. **NOTICES**

All notices made pursuant to this Agreement shall be in writing and delivered personally or sent by registered or certified mail, return receipt requested, to the parties at their respective

addresses set forth below:

COUNTY

Nadine Chasteen, CPPO, CPPB
Director
County of Greenville
Procurement Services Division
301 University Ridge, Suite 100
Greenville, SC 29601

CONTRACTOR

Any party may change the person to whom notices are to be sent by giving ten (10) days written notice of such change to the other party.

18. **APPLICABLE LAW AND VENUE**

18.1 The construction, interpretation and performance of this Agreement shall be governed by and construed in accordance with the laws of the State of South Carolina.

18.2 **CONTRACTOR** and **COUNTY** further agree that this Agreement shall be deemed to have been made and performed in Greenville County, South Carolina. For the purposes of venue, all suits or causes of action arising out of this Agreement shall be brought in the courts of Greenville County, South Carolina.

19. **COMPLIANCE WITH FEDERAL, STATE AND LOCAL LAWS**

CONTRACTOR shall comply with all federal, state and local statutes, ordinances and regulations, and shall obtain all permits that are applicable to this Agreement.

20. **SUCCESSORS AND ASSIGNS**

CONTRACTOR and **COUNTY** each binds itself and its partners, successors, executors, administrators and assigns to the other party of this Agreement and to the partners, successors, executors, administrators, and assigns of such other party, in respect to all covenants of this Agreement.

21. **SEVERABILITY**

Should any section, paragraph, clause, phrase, or provision of this Agreement be adjudged invalid or held unconstitutional by a court of competent jurisdiction, such declaration shall not affect the validity of this Agreement as a whole or any part or provision thereof, other than the part so decided to be invalid or unconstitutional.

22. **ENTIRE AGREEMENT**

This Agreement, along with the provisions contained in **COUNTY'S** IFB #19-10/05/16, and **CONTRACTOR'S** RESPONSE TO IFB #19-10/05/16, attached hereto, represents the entire agreement between the parties and supersedes any and all prior agreements, whether written or oral, that may exist between the parties regarding same. If there is a conflict between any

of the terms of these contract documents the order of precedence of these contract documents shall be:

- A. Any Change Order or Amendment signed and executed by the parties;
- B. This Agreement;
- C. **CONTRACTOR'S RESPONSE TO IFB #19-10/05/16**
- D. Addenda to **COUNTY'S IFB# 19-10/05/16**
- E. **COUNTY'S IFB #19-10/05/16.**

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date hereinabove written.

WITNESSES:

CONTRACTOR

By: _____

Its: _____

COUNTY

By: _____

Bob Taylor, Chairman
Greenville County Council

By: _____

Joseph M. Kernell
County Administrator

ATTEST:

Theresa B. Kizer, c.c.c.
Clerk to Council



SUBDIVISION ROAD REPAIR PROJECTS

IFB #19-10/05/16

ATTACHMENTS

Section 02110 – Site Clearing	1 Page
Section 02270 – Erosion Control	3 Pages
Section 02510 – Asphalt Paving	3 Pages
Section 02930 – Lawns and Grassing	4 Pages
Section 02931 – Landscaping	11 Pages

RELATED DOCUMENTS: Attention is directed to related sections of the Specifications, as they pertain to the guidelines, materials, and methods described in this section. Also, the General Provisions and Special Provisions of the Contract shall apply to all Sections of the Work.

1.0 SCOPE

- a. General: This section includes furnishing all labor, materials, equipment, and all services necessary for any clearing, and/or clearing and grubbing required within the areas of operation.
- b. Traffic Control: The Contractor shall be responsible for conducting all work in streets, roads and highways in accordance with any and all Regulatory Authorities current requirements. As a minimum, for any work in State Highways, the Contractor shall meet the requirements of Traffic Controls for Street and Highway Construction Part V of the South Carolina Manual on Uniform Traffic Control Devices for Streets and Highways - 1982, latest revision.

2.0 CLEARING AND GRUBBING

- a. Clearing - On all areas where grading, excavating and filling are to be done, and on all border areas, clearing shall consist of cutting, removal and disposal of all trees, brush, debris and other objectionable material resting on or protruding above ground within the limits of grading.
- b. Grubbing - Grubbing shall consist of the removal and disposal of stumps, roots, and other objectionable organic material within the limits of grading. Stumps shall be removed entirely. Roots and matted roots shall be grubbed out at least 18 inches below the existing surface.
- c. Disposal of Materials - All materials removed as a result of clearing and grubbing operations shall be removed from and disposed of off-site.
- d. Trees - Those trees that are indicated to be saved shall be carefully protected during grading operations. If the trees are damaged or destroyed due to the Contractor's negligence, they will be replaced at the fair market value determined by the County Engineer and paid for by the Contractor.

3.0 CERTIFICATION

The clearing and grubbing operations shall be certified by the County Engineer prior to rough grading, filling, or as required by Local Government Agencies.

END OF SECTION

RELATED DOCUMENTS: Attention is directed to related sections of the Specifications, as they pertain to the guidelines, materials, and methods described in this section. Also, the General Provisions and Special Provisions of the Contract shall apply to all Sections of the Work.

1.0 SCOPE

- a. General: The work includes the provision of temporary erosion control measures to prevent the pollution of air, water, and land. Installation of temporary erosion control features shall be coordinated with the construction of permanent erosion control features to assure effective and continuous control of erosion.

2.0 CONSTRUCTION

- a. Gravel Construction Entrance: Provide as indicated, a minimum of 6 inches thick, at points of vehicular entrance and exit on the construction site. Gravel shall be as specified in S.C. Highway Department, "Standard Specifications for Highway Construction", Section 305 for Composite Mixture Macadam Base Course.
- b. Dust Suppression: ASTM D-98 calcium chloride, magnesium chloride, or other standard manufacturer's products designed for dust suppression. Apply dust suppressors in accordance with manufacturer's instruction. Protect treated surfaces from traffic for a minimum of 2 hours after treatment. Repeat application of dust suppressors as required to control dust emissions.
- c. Sediment Fence: Install posts at the spacing indicated, and at an angle between 2 degrees and 20 degrees towards the potential silt load area. Do not attach filter fabric to existing trees. Secure filter fabric to the post and wire fabric using staples, wire, or hog rings. Imbed the filter fabric into the ground as indicated. Splice filter fabric into the ground as indicated. Splice filter fabric at the support pole using a 6 inch overlap and security seal. Top of the filter fabric shall have a 1 inch tuck or a reinforced top end section. Preassembled silt fences may be used as approved by the County Engineer.
1. Posts: 4 inch by 4 inch wood posts, minimum 3 inch diameter wood, or 1.33 pound per linear foot steel posts. Posts shall be minimum 5 feet long.
 2. Wire Fabric: ASTM A-185, 6 by 6, minimum 14 gage.
 3. Filter Fabric: A woven or nonwoven polypropylene, nylon, or polyester containing stabilizers and/or inhibitors to make the fabric resistant to deterioration from ultraviolet light. Filter cloth shall be of the type recommended by its manufacturer for the intended application.
 4. Straw Bales: Constructed from grain straw or hay with each bale bound together with binding wire or twine. Posts shall be ASTM A-615, 1-1/2 inch diameter wood posts or 1.0 pound per linear foot steel posts. Imbed the bottom row of bales in a 4 inch deep trench and place straw bales tightly abutting each other. Bales shall be placed so the bindings are horizontally oriented around the bales, wire adjoining bales together. Anchor each bale with two stakes, driving the first stake towards the previously laid bale. Wedge straw in gaps between bales. After the bales are staked, the excavated soil from the trench shall be backfilled against the straw bales to ground level on the downhill side and to 4 inches above ground level on the uphill side.
- d. Gravel Dam and Silt Trap: Provide as indicated, adjusting dimensions as directed by the County Engineer to fit grading and location.

1. Riprap: SCHD "Standard Specifications for Highway Construction", Section 804, Stone for Hand Placed Riprap and ranging in size from 3 inches to 6 inches.
 2. Filter Stone: #5 Washed Stone.
- e. Erosion Control Matting: Jute, excelsior, straw, or paper matting that has not been bleached or dyed. Provide matting in minimum 4 foot widths. Staples for anchoring the matting shall be minimum throat width of 1 inch minimum length of 6 inches after forming. Place matting in the direction of the flow of water. The up channel matting end shall be placed in a narrow trench a minimum of 5 inches deep. Where one roll of matting ends and a second roll begins, the end of the upper roll shall be brought over the buried end of the second roll to provide a 6 inch overlap. Where matting widths are laid side by side, the overlap between matting shall be 4 inches. Provide check slots every 50 feet longitudinally in the matting. Construct check slots by providing a narrow trench 5 inches deep and folding the matting down into the trench, across the bottom of the trench, and then back up the trench to the existing ground. Backfill and compact the trench using the excavated material from the trench. Staple matting ends, junctions, and check slots at 10 inches on center. Staple matting outer edges, overlaps and the center of each matting strip at 3 feet on center. Install excelsior matting with the woven fabric on top.
- f. Temporary Seeding: Within 48 hours after attaining the grading increment specified herein, provide seed, fertilizer, and mulch on graded areas when any of the following conditions occur:
1. Grading operations stop for an anticipated duration of 30 days or more.
 2. Provide on the slopes of cuts and fill slopes for every 5 foot increment of vertical height of the cut or fill.
 3. When it is impossible or impractical to bring an area to finish grade so that permanent seeding operations can be performed without serious disturbance from additional grading.
 4. When an immediate cover is required to minimize erosion, or when erosion has occurred.
 5. Provide on erosion control devices constructed using soil materials.
- g. Temporary Seeding Operations: Temporary seeding operations shall consist of the following:
1. Procedure: Loosen subgrade to a minimum depth of 4 inches. Uniformly apply the seed, fertilizer, and mulch at the specified rates. Roll the seeded area after applying seed and fertilizer. Do not seed or fertilize when the County Engineer determines conditions are unfavorable. Provide water to promote turf growth.
 2. Seed: Provide certified seed type and quantity (pounds per acre) as follows:

<u>SEED TYPE</u>	<u>MAY 1 - SEPT. 1</u>	<u>SEPT. 1 - MAY 1</u>
Annual Rye	100 lbs/Ac	150 lbs/Ac
Common Bermuda	50 lbs/Ac	---
 3. Fertilizer: Apply 10-10-10 fertilizer at the rate of 1000 pounds per acre.
 4. Mulch: Spread hay or straw mulch at the rate of 1.5 tons per acre and anchor by crimping mulch with a disc. Provide in an air dried condition for placement with commercial mulch blowing equipment.

5. Alternate Bid: Temporary seeding shall be bid as an alternate bid item to be provided only as required above.

- h. Maintenance and Inspection: Inspect erosion control devices after each rainfall and daily during prolonged rainfall. Remove sediment deposits after each rainfall or when sediment reaches approximately one-half the barrier height or storage capacity. Immediately repair damaged erosion control devices and damaged areas around and underneath the devices. Maintain erosion control devices to assure continued performance for their intended function. Modify the erosion control plan as required to control problem areas noticed after each inspection.
- i. Clean Up: At the completion of the job, or when directed by the County Engineer, erosion control devices shall be removed. Erosion control devices and areas immediately adjacent to the device shall be filled (where applicable), shaped to drain and to blend into the surrounding contours, and grassed or landscaped as specified.

END OF SECTION

RELATED DOCUMENTS: Attention is directed to related sections of the Specifications, as they pertain to the guidelines, materials, and methods described in this section. Also, the General Provisions and Special Provisions of the Contract shall apply to all Sections of the Work.

1.0 SCOPE

- a. General: Work consists of providing all materials, labor and equipment required for complete installation of asphaltic pavement including subgrade preparation, base and surface courses, extruded concrete curb or curb and gutter with backfill, all as indicated on the drawings and/or specified herein.
- b. Replacement of Existing Pavement: The Contractor shall furnish all labor, materials, equipment, services and duties to replace and restore all existing pavements in streets, highways, paved shoulders, driveways or parking areas that are removed, destroyed or damaged by construction. Pavement replacement includes base course replacement as shown on the standard details.
- c. Replacement of Existing Curbs, Gutters, and Sidewalks: The contractor shall furnish all labor, materials, equipment, services and duties to replace and restore all existing curbs, gutters, and sidewalks that are removed, damaged or destroyed by construction.
- d. Standards for Replacement: In addition to other requirements of the Contract Documents, all removal and replacement of pavements, sidewalks, curbs and gutters in state, city and county roads shall comply with all requirements and provisions of the South Carolina Highway Department or the Local City or County Engineer's Office, as applicable. All such work shall be subject to inspection and approval by the South Carolina Highway Department or the Local City or County Engineer's Office.
- e. Traffic Control Requirements: The Contractor shall be responsible for conducting all work in street, roads, and highways in accordance with any and all Regulatory Authorities' current requirements. As a minimum, for any work in State Highways, the Contractor shall meet the requirements of Traffic Controls for Street and Highway Construction and Maintenance Operations, Part V of the South Carolina Manual on Uniform Traffic control Devices for Streets and Highways - 1982, latest revision.

2.0 APPLICABLE PUBLICATIONS

The latest editions of the following publications apply to the specifications to the extent indicated by references thereto:

- a. South Carolina State Highway Department Standard Specification for Highway Construction (SCSHDSSHHC).

3.0 SUBGRADE PREPARATION

- a. Preparation: Prior to constructing the base course, the subgrade shall conform to the grades indicated on the drawings and any holes, ruts or depressions shall be filled with approved material and compacted to requirements of SCSHDSSHHC.
- b. Frame, Cover, & Box Adjustment: The adjustment of water valve boxes and manhole frames and covers to grade to conform to the finished street grade and cross section shall be as follows:

1. Water Lines: Utility Contractor shall be responsible for setting all valve boxes to the proper height (finished grade of pavement) one time after base course has been placed. Valve boxes shall be set on a firm brick foundation a maximum of 24 hours prior to placement of finished surface course of the pavement. Any resetting of boxes, thereafter, shall be performed by the Paving Contractor at the time he applies the finished surface course. Any damage to water lines, valves, blow-offs or fire hydrants after the final setting of valve boxes by the Utility Contractor, shall be repaired or replaced by the Utility Contractor. It shall be the responsibility of the Utility Contractor to determine what caused the damage and recover any repair costs from the responsible party. Repair costs shall not be paid by the Owner.
 2. Sanitary Sewer Lines: Manholes and/or appurtenance may be set to finished grade any time after base course has been placed and shall remain the responsibility of the Utility Contractor. should a manhole and/or appurtenance be damaged after being set, it shall be the Utility Contractor's responsibility to repair or replace the manhole and/or appurtenances to finished grade. It shall be the responsibility of the Utility Contractor to determine what caused the damage to the manhole and/or appurtenance and recover any repair costs from the responsible party. Repair costs shall not be paid by the Owner.
- c. Certification: The subgrade shall be certified as required, by the Engineer prior to constructing base course.

4.0 BASE COURSE

- a. Stabilized Aggregate Base Course (with Primer): The base course thickness shall be as indicated on the drawings of stabilized aggregate base course Type 2, with MC-30 prime, when indicated, conforming to the requirements of Section 306, of the SCSHDSSHC except the entire paragraphs 306.15, 306.16, and 306.17 shall not apply.
- b. Hot Laid Asphaltic Aggregate Base Course: The base course compacted thickness shall be as indicated on the drawings conforming to the requirement in Section 310 of the SCSHDSSHC except the entire paragraph 310.07 shall not apply. Minimum Marshall stability shall be 1,000 pounds.
- c. Tack Coat: A tack coat shall be applied prior to the surface course when the asphalt aggregate base course is used. The application of the tack coat shall be as specified in subsection 401.22 of the SCSHDSSHC.
- d. Certification: Regardless of the type base course used, the Engineer shall certify, as required, before and after all prime and sealer applications.

5.0 SURFACE COURSE

- a. Thickness: The surface course shall be 1-1/2" (with stabilized aggregate base course) or 1" (with asphaltic aggregate base course) compacted thickness of hot laid asphaltic concrete surface course, Type 2, conforming to the requirements of Section 403 of the SCSHDSSHC, except paragraph 403.07 shall not apply.
- b. Weather Conditions: The surface course shall be applied in strict accordance with weather restrictions as specified in Section 401, paragraph 401.14 of the same applicable specifications.
- c. Joints: where new pavement abuts existing flexible pavement, cut back the existing surface course along uniform lines approximately 12 inches from the edge. Make a vertical cut and

extend cut full depth of the surface course. Prior to placing the surface course, paint the exposed edge of cold joints with a thin layer of bituminous tack coat.

- d. Certification: During pavement application, the Engineer shall conduct necessary field observations and complete a "Construction Inspection Certification" and submit a copy to the Greenville County Engineering Department.

6.0 CONCRETE CURBS

- a. Concrete Curbs: Concrete curbs shall be constructed as shown on the drawings. The material and installation shall be in accordance with applicable paragraphs of Section 720 of the SCSHDSSHC, and Section 02520.
- b. Backfilling Curbs: It shall be the Contractor's responsibility to make sure that stockpiled topsoil is sufficient for backfilling curbs or to reflect any additional backfilling cost in the bid.
- c. Throat & Lid Adjustment: The Contractor shall form the concrete curb to the throat of the catch basin and adjust lids and throats of catch basins to provide a 6 inch drainage opening.

7.0 CLEAN UP

- a. General Requirements: In addition to other provisions of the Contract Documents, materials, debris, and surplus excavation shall be removed from rights-of-way and work areas. The rights-of-way and work areas shall be left neat, clean and serviceable.

8.0 PROJECT CLOSE OUT

- a. General Requirements: The Contractor is responsible for maintaining all sanitary sewer frames and covers and water main valve boxes. Any frames, covers, or valve boxes damaged, displaced, misplaced, lost or broken during the paving operation will be replaced at the Contractor's expense.

END OF SECTION

RELATED DOCUMENTS: Attention is directed to related sections of the Specifications, as they pertain to the guidelines, materials, and methods described in this section. Also, the General Provisions and Special Provisions of the Contract shall apply to all Sections of the Work.

1.0 SCOPE OF WORK:

- a. General Requirements: Provide seedbed preparation, topsoiling, liming, fertilizing, seeding, sodding, and mulching of all newly graded finish earth surfaces, unless indicated otherwise, and at all areas inside of outside the limits of construction that are disturbed by the Contractor's operations.

2.0 MATERIALS:

- a. Fertilizer and Lime: Deliver materials to the site in original, unopened containers bearing the manufacturer's chemical analysis, name, trade name, trademark, and indication of conformance to State and Federal laws.
- b. Fertilizer: Commercial grade, free flowing, uniform in composition granular fertilizer shall contain a minimum percentage by weight of 10 percent nitrogen, 10 percent available phosphoric acid, and 10 percent potash. Apply fertilizer at the rate of 1000 pounds per acre.
- c. Lime: Lime shall be commercial agricultural limestone containing a minimum of 94 percent of total carbonates, 80 percent calcium, and 14 percent magnesium. Agricultural limestone shall be incorporated into the soil at the rate of 2000 pounds per acre.
- d. Seed: Deliver seed to the site in original sealed packages bearing the producer's guaranteed analysis for percentages of mixture, purity, germination, weedseed content, and inert material. Label in conformance with USDA Federal Seed Act and applicable State seed laws. Wet moldy, or otherwise damaged seed will be rejected. Seed shall be State-certified seed and of the latest season's crop. Mix seed on site according to the following mixtures by weight:

<u>VARIETY</u>	<u>%GERMINATION</u>	<u>%PURITY</u>	<u>NOXIOUS WEEDS</u>
Kentucky 31 Fescue	90%	98%	0%
Annual Rye	90%	98%	0%
Bermuda (hulled), Spring	90%	98%	0%
Bermuda (unhulled), Fall	90%	98%	0%

<u>SEASON</u>	<u>VARIETY</u>	<u>RATE</u>
Summer (May1-Aug1)	Common Bermuda (hulled)	3 lbs/1000 SF (130 lbs/Ac)
	Common Bermuda (unhulled)	3 lbs/1000 SF (130 lbs/Ac)
Fall / Winter (Sep1-Feb1)	Kentucky 31 Fescue	7 lbs/1000 SF
	Annual Rye	2 lbs/1000 SF
	Common Bermuda (hulled)	3 lbs/1000 SF
Spring (Feb1-May1)	Kentucky 31 Fescue	5 lbs/1000 SF
	Annual Rye	5 lbs/1000 SF
	Common Bermuda (hulled)	3 lbs/1000 SF

- e. Mulch: Free from noxious weeds, mold, or other deleterious material. Provide wood cellulose fiber mulch when hydroseeding.

- f. Straw: Stalks from oats, wheat, rye, barley, or rice. Furnish in air-dry condition and of proper consistency for placing with commercial mulch blowing equipment or by hand.
- g. Wood Cellulose Fiber: Processed to contain no growth or germination-inhibiting factors and dyed an appropriate color to facilitate visual metering of material's application. Composition on air-dry weight basis: 9-15 percent moisture, pH range from 3.5 to 5.0.
- h. Emulsified Asphalt Adhesive: ASTM D-977, Grade RS-1. Use with straw mulch.
- i. Water: Suitable quality for irrigation.
- j. Erosion Control Matting: Provide as specified in Section 02270 - "Erosion Control".

3.0 SEEDING:

- a. Storage and Handling: Store lime, fertilizer, and seed in dry locations away from contaminants. Protect seed from drying out. Do not drop or dump materials from vehicles.
- b. Soil Preparation: At the completion of rough grading, spread topsoil over areas to be seeded or as indicated, to a minimum thickness of 4 inches. Topsoil shall be the material stripped from the site during the grading operations. Do not spread topsoil when frozen or excessively wet or dry. Areas not receiving topsoil shall be loosened to a minimum depth of 4 inches before agricultural lime, fertilizer or seed is applied. Lawn areas shall be fine graded to a smooth, positively draining slope, removing all stones over one inch.
- c. Seeding: Seed shall be sown within 24 hours following the application of fertilizer and lime, and preparation of the seedbed. Do not seed when the ground is muddy, frozen, snow covered, or in any unsatisfactory condition for seeding. If special conditions exist that may warrant a variance in the above seeding dates or conditions, submit a written request to the County Engineer stating the special conditions and proposed variance.

Sow seed with approved sowing equipment using one or a combination of the following methods at the rate of 130 pounds per acre. Sow 1/2 the seed in one direction, and sow the remainder at right angles to the first sowing. For Drill, Broadcast, and Drop Seeding, incorporate fertilizer and lime into the soil to a minimum depth of 6 inches prior to seeding. For Hydroseeding, apply liquid fertilizer in amounts sufficient to promote the specified stand of turf and apply lime manually during subgrade preparation.

- d. Drill Seeding: Use cultipacker seeders or grass seed drills. Drill seed uniformly to a maximum depth of 1/4 inch in clayed soils and 1/2 inch in sandy soils. Cover seed by spiketooth harrow, cultipacker, or other approved devices.
- e. Broadcast Seeding and Drop Seeding: Use Broadcast or Drop Seeders. Cover seed uniformly to a maximum depth of 1/4 inch in clayey soil and 1/2 inch in sandy soils. Cover seed by spike tooth harrow, raking, or other approved devices. Immediately after seeding, firm entire area, except for slopes in excess of 3 to 1, with a roller not exceeding 90 pounds for each foot of roller width.
- f. Hydroseeding: Mix seed, fertilizer, and wood cellulose fiber in required amount of water to produce a homogeneous slurry. After seed, water, and fertilizer have been thoroughly mixed, add 200 pounds of wood cellulose fiber per acre (dry weight) and apply the slurry. Seed shall not remain in water containing fertilizer for more than one hour prior to application, unless otherwise approved. Keep liquid fertilizer agitated during application. Immediately following application of slurry mix, make separate application of wood cellulose mulch at the rate of 800 pounds (dry weight) per acre. When hydraulically sprayed on the ground, material shall form a

blotterlike cover impregnated uniformly with grass seed. Cover shall allow rainfall of applied water to percolate to underlying soil.

- g. Mulch: Except when hydroseeding, spread straw mulch evenly at the rate of 1.5 tons per acre. Anchor by crimping mulch with a serrated disc or by spraying asphalt emulsion on the mulched surface at the rate of 5 gallons per 1000 square feet. Take precautionary measures to prevent asphalt materials from marking or defacing structures, pavements, utilities, or plantings and do not use asphalt near pedestrian traffic areas.
- h. Erosion Control Matting: Install as specified in Section 02270 - "Erosion Control".
- i. Protection of Seeded Areas: Immediately after seeding, protect the area against traffic or other use by erecting barricades, as required, and placing approved signs at appropriate intervals until final acceptance.

4.0 SODDING:

- a. Preparation of Sodbed: Prepare sodbed as specified for Soil Preparation and apply fertilizer and lime as specified.
- b. Laying of Sod: Place first line of sod along straight walk, edging, building face, or staked string, and butt following courses closely to preceding courses, taking care that lateral joints do not coincide. Place boards over sod for foot traffic and tamp all pieces to insure total sod contact with sodbed. Lightly topdress with topsoil and/or sand and work into joint between sod pieces using a broom or mat. Thoroughly soak sodded area with water. After roots have developed sufficiently to hold sod firmly in place, allow surface to become quite dry and then apply additional topdressing of topsoil or sand to true the lawn surface. The sod shall then be rolled with a lawn roller to finish surface.
- c. Interim Maintenance: Perform all maintenance operations necessary to properly care for sodded areas until they can be maintained by the County without danger of dislodgment or other significant damage to sod pieces.
- d. Replacement of Sod: All portions of sodded areas shall give evidence of development into a smooth, homogeneous lawn of the material specified and shall have roots sufficiently developed to hold sod pieces in place during County maintenance operations. Sod which does not properly root and develop into a homogeneous lawn shall be replaced at no extra cost using the procedures specified above.

RESTORATION, ESTABLISHMENT, & FINAL INSPECTION

- a. Restoration: Restore to original condition existing lawn areas which were damaged during grassing operations. Keep at least one paved pedestrian access route and one paved vehicular access route to each building clean at all times. Clean other paving when work in adjacent areas is complete.
- b. Establishment Period: The establishment period will be in effect until the seeded and sodded areas are mowed three times. During the establishment period, the Contractor shall mow the seeded and sodded areas to an average height of 2 inches whenever the average height of grass reaches 4 inches. The Contractor shall remove excess clippings, eradicate weeds, water, fertilize, overseed, and perform other operations necessary to promote growth.
- c. Final Inspection and Acceptance: At the end of the establishment period, final inspection will be made upon written request at least 10 days prior to the anticipated date. Final acceptance will be based upon a satisfactory stand of grass, defined as 95 percent ground cover of the

specified species. The Contractor will repair any bare spots over 2 inches square due to uneven seed distribution, drought specified planting dates.

- d. Reseeding and Repair: Any areas that require reseeding and/or refertilization will be designated by the County Engineer. Any damage following seeding or if seedlings are destroyed, the portion affected shall be repaired to re-establishment condition and grade of the soil prior to original seeding, and then reseeded following the above specifications.

END OF SECTION

RELATED DOCUMENTS: Attention is directed to related sections of the Specifications, as they pertain to the guidelines, materials, and methods described in this section. Also, the General Provisions and Special Provisions of the Contract shall apply to all Sections of the Work.

1.0 SCOPE:

- a. General Requirements: Provide the work of this section as indicated and specified as follows:
1. Preparation of planting areas, including topsoil and soil amendments for beds.
 2. Furnishing and installation of plants and related materials.
 3. Furnishing and installation of sod and related materials.
 4. Fine grading and seeding of lawns.
 5. Interim maintenance of all work until acceptance.
 6. Guaranty and replacement of all plant materials.

2.0 INSPECTIONS AND REPORTS:

- a. Inspection Of Plant Material - all planting beds shall be prepared and all plant material shall be on site for an inspection by the County project manager prior to planting.
- b. Punch list inspection - upon substantial completion of work.
- c. Inspection for Acceptance of Work - upon completion of work.
- d. Inspection for Final Approval - at end of Guaranty Period.
- e. Report of Unfavorable Conditions - promptly notify the County project manager of adverse soil drainage conditions or other unfavorable conditions which would affect plant health. See later section concerning Subsurface Drainage Investigations.

3.0 TEMPORARY FACILITIES:

- a. Protective Devices: Provide barricades, lanterns, signs, etc., necessary to protect the public from dangerous conditions resulting from work and to protect work from trespass.
- b. Pavement Cleaning: Clean pavements at end of working day and before onset of inclement weather to prevent staining by or tracking of materials.

4.0 INSPECTION FOR ACCEPTANCE OF WORK:

- a. Punch List Preparation: When work had been substantially completed; except for very minor items, Contractor shall notify the County project manager that work is ready for Punch List Inspections. The County project manager or representative, within a reasonable time, will check the work and prepare a Punch List stating observed deficiencies of work which need correction prior to Acceptance Inspection. The Punch List is for the Contractor's convenience and shall not relieve him of any obligations of the Contract. The County project manager may waive this requirement upon consultation with the Landscape Contractor.

- b. Preparation for Acceptance Inspection(s): Contractor is expected to review Contract Documents and to inspect work to determine that all requirements have been met prior to Acceptance Inspection(s). All items on the County's punch list shall also have been attended to prior to Acceptance Inspection(s).
- c. Acceptance of Work: After Inspection, Contractor will be notified of Acceptance of work in writing by the County provided work offered for acceptance comprises all required work entirely completed, but exclusive of possible future replacement of plants. Final payment will be due at this time.

5.0 GUARANTY, INSTRUCTIONS, INSPECTIONS, AND REPLACEMENTS:

- a. Guaranty: All trees, shrubs, and ground covers shall be guaranteed to have acceptable appearance, to be alive and healthy, and to have exhibited vigorous normal growth for one full year from date of acceptance of the work. Seeded and sodded areas shall be guaranteed for 1 full year. All seeded areas shall have a vigorous stand comprising 100% coverage of all seeded areas. (No bare areas or washout areas).
- b. Maintenance Instructions: Contractor shall provide to County two written copies each of adequate and reasonable maintenance procedures to be followed by the property owner(s) during the one year Guaranty Period.
- c. Contractor's Inspections of Owner's Maintenance: During guaranty period, Contractor shall make periodic visits to site (especially during times of unusually severe weather conditions) to inspect plants installed and guaranteed by him. If he should determine that conditions such as maintenance which are not directly under his control are not sufficient to sustain plants, he shall promptly file written notice with the County project manager stating his findings and giving recommendations for corrections. If insufficient maintenance or other damaging condition continues, Contractor may request that the County inspect the site and make a determination of the situation.
- e. Voiding of Plant Guaranty: If the County project manager concurs with Contractor after inspection, the Contractor may then file written notice with the County that unless proper maintenance or other necessary work has been completed by a reasonable given date, and sustained thereafter, the terms of Plant Guaranty will become null and void for all or stated portions of work.
- f. Dead or other Unsatisfactory Plants: Remove promptly upon discovery, and during periodic visits; mark location with stake to facilitate future replacement.
- g. Replacements: All replacements required under Guaranty shall be made at no cost to the County or private property owner during earliest favorable weather and season following original specifications unless directed otherwise by the County project manager. The County project manager shall be notified in writing if and when any replacements are made.
- h. Satisfaction of Guaranty: Near end of Guaranty Period, the County project manager or representative shall determine if plants are in satisfactory condition. When all plants are acceptable to the County, the Contractor shall be notified and will be relieved of the responsibility of any further replacements.

6.0 GRADING FOR LAWNS:

a. Fine Grading: Fine grading of all lawn areas is to be performed by the Contractor.

7.0 SUBSURFACE DRAINAGE INVESTIGATION:

a. Required Tests: Subsurface drains have not been included as part of project, therefore, Contractor shall make such reasonable percolation tests approved by the County project manager as may be necessary to determine if subsurface drainage conditions in landscape areas are so poor as to support moisture conditions potentially fatal to plantings. The following procedure is recommended:

1. Wait at least 24 hours after rain and dig test pit 12 inches square to depth of bottom of plant bed, trench or pit; remove all loose soil (if standing water is visible, notify the County project manger).
2. Quickly fill pit bottom with 6 inches (approximately 3-1/4 gallons) of water.
3. Record length of time from filling until disappearance of water and divide number of minutes by 6 to give average of 1 inch fall.
4. Compare 1 inch fall time with following table:

<u>TIME INTERVAL</u>	<u>SOIL CONDITION</u>
0 - 3 Minutes	Rapid Absorption
3 - 5 Minutes	Medium Absorption
5 - 30 Minutes	Slow Absorption
30 - 60 Minutes	Semi-impervious
Over 60 Minutes	Impervious

b. Impervious or Semi-impervious Condition: If soil is indicated to be semi-impervious or impervious, or if water is initially found in test pit, notify the County project manager before proceeding further.

c. Contractor Responsibility for Subsurface Water Damage: If Contractor does not make tests at representative locations and file records of results with the County project manager, or if he plants in areas shown to have poor drainage without written release from Owner, he shall be liable for any future guaranteed replacements due to subsurface water damage. If Contractor makes proper tests and files complete records indicating no semi-impervious or worse conditions, he will not be held responsible for future subsurface water damage to work of Contract. The County project manager may supervise testing at any time.

d. Relocation or Omission of Plants: Where subsurface conditions provide inadequate drainage and subsurface drainage system is not to be used as remedy, make reasonable relocation of plants as directed by the County project manager. Drainage conditions necessitating omission of plants shall be covered by Change Order.

e. Authorization of Drains as Extra Work: The County project manager or representative may authorize installation of subsurface drains to alleviate moisture problems at locations determined by the County project manager or representative. Perform work at agreed extra cost; begin work only after receipt of Change Order. Locations, appropriate materials, and construction techniques will be agreed upon prior to issuance of Change Order.

8.0 TOPSOIL:

- a. Source of Topsoil: If obtained from off-site locations, use well-drained sites not previously stripped.
- b. Soil Characteristics: Natural, friable, fertile, fine, loamy soil representative of topsoils in job site vicinity which produce heavy growth.
- c. Cleanliness: Free of subsoil, objectionable weeds, litter, sods, stiff clay, stones larger than 1 inch diameter, stumps, roots, trash, toxic substances, or any matter harmful to plant growth or a hindrance to installation or maintenance.
- d. Moisture Content: Not frozen or muddy when delivered or spread.
- e. Soil Depth: Depth of topsoil shall depend on depth required to fine grade site to finish grade, but in no case shall the depth of topsoil be less than 4 inches in all areas shown on the plans to receive topsoil.
- f. Clean-Up: Before the placement of any topsoil, all objectionable material shall be removed from the subgrade to a depth of not less than 12 inches.
- g. Placement: Areas to receive topsoil (including all planting beds) to be disked and pulverized to a depth of 12-16" before the placement of topsoil.

9.0 SOIL CONDITIONING MATERIALS:

- a. Aluminum Sulfate: Unadulterated, in manufacturer's original unopened container labeled with analysis and net weight. Use to acidify soil (lower pH).
- b. Limestone: Raw, ground agricultural limestone, containing at least 90 percent calcium carbonate; 90 percent shall pass No. 10 sieve and 50 percent pass No. 50 sieve. Use to decrease acidity of soil (raise pH).
- c. Peat: Domestic or imported material consisting of at least 50 percent partially de-composed vegetable matter of natural occurrence, brown in color, clean, low in mineral and woody content, mildly acid, and either granulated or shredded.

10.0 FERTILIZERS AND LIME:

- a. Fertilizer: Shall be 16-4-8 slow release fertilizer as manufactured by Pendleton Oil Mill, Pendleton, South Carolina at the rate of 30-lbs./1000-sq.ft. Other blends and manufacturers of fertilizer are acceptable provided they are approved by the County project manager before application. Fertilizer will be delivered mixed as specified, in standard unopened containers showing weight, analysis, and name of manufacturer. Fertilizer to be kept dry at all times to insure retention of effectiveness and free-flowing composition. Bulk delivery and spreading is acceptable when authorized by the County provided the Contractor supplies the County with written affidavit certifying weight and analysis of fertilizer.
- b. Lime: Ground dolomitic limestone acceptable as agricultural limestone containing not less than 85% of total carbonates shall be applied at the rate of 50-lbs./1000 SF (not less than 2000 lbs per acre). Lime shall meet requirements of Section 810, SCHD Standard Specification, Edition 1973. Liming operation shall be sufficient to provide a pH of 6.5.

- c. Soil Incorporation: In areas to be seeded or sodded, all of required lime (50-lbs./1000-sq.ft.) and fertilizer (50-lbs./1000-sq.ft.) shall be thoroughly and evenly incorporated with the soil to a minimum depth of 4 inches (4") by disking or other approved methods. In areas inaccessible to power equipment, it shall be incorporated with the soil by use of hand tools.

11.0 PLANT MATERIALS:

- a. Nomenclature: Names of plants required for use as trees, shrubs, vines, groundcovers, etc., conform generally with names accepted in nursery trade, but authority in case of dispute shall be STANDARDIZED PLANT NAMES, Second Edition, American Joint Committee on Horticulture, 1942, J. Horace McFarland Company, Harrisburg, Pennsylvania.
- b. Specifications: Except when stated otherwise, specifications refer to standards for nursery stock, published by the American Association of Nurserymen, Washington, D.C. In case of conflict of stated measurements use greater requirement.
- c. Abbreviations: Terms abbreviated hereinafter may include:

Balled and Burlapped	B&B
Division	DIV.
Espalier	ESP.
Clump	CLP.
Container Grown	CONT.

- d. Substitutions and Alternatives: Plants specified shall be used unless sufficient evidence is submitted to the County project manager indicating plant is unavailable from sources east of Mississippi River and south of Kentucky and Virginia (unless source has been otherwise specified) and upon request of filed Change Order authorizing substitution.
- e. Substitution of B&B and Container Plants: Root types may be freely substituted in case of B&B and Cont., all other specifications remaining unchanged.
- f. Alternate Material: If alternate has been specified, it may be used only for entire quantity of original material without prior approval of the County project manager.
- g. Condition of Plants Supplied: Well-shaped within normal habit of growth; sound, healthy, vigorous, of proper color and free from insects, pests, disease or physical injury.

12.0 SOD MATERIAL:

- a. Material Quality: Sod shall be dense, well rooted sod composed of approximately 2" of roots and soil. It shall be free of weeds, debris or other undesirable grasses.
- b. Chemical Treatment: Sod shall not be treated with any chemical herbicide or insecticide for a minimum of 7 days prior to cutting and transport to the site.
- c. Transport & Handling: Sod must be kept moist for protection and to facilitate handling. Sod shall be rolled in tight rolls or laid on boards or planks and lifted and transported to storage piles or carried to the point of installation without breaking or tearing. No sod shall be dumped from vehicles, it must be loaded and unloaded by hand or by such methods as not to disturb root mat.
- d. Storage: Sod shall not remain in storage piles longer than 24 hours and it shall be protected from wind and rain during such storage periods.

13.0 SEED MATERIAL

a. Material Quality: Grass Seed shall be certified, fresh, clean, new crop composed of the following varieties having the indicated quality.

<u>VARIETY</u>	<u>%GERMINATION</u>	<u>%PURITY</u>	<u>NOXIOUS WEEDS</u>
Kentucky 31 Fescue	90%	98%	0%
Annual Rye	90%	98%	0%
Bermuda (hulled), Spring	90%	98%	0%
Bermuda (unhulled), Fall	90%	98%	0%

b. Standards and Requirements: All seed shall meet the requirements of the Seed Laws of the State of Georgia and the U.S. Department of Agriculture Rules and Regulations under the Federal Seed Act in effect on the date bids are received.

c. Delivery and Storage: Seed shall be delivered in standard unopened containers with seed quality tag affixed. Seed which has become wet, moldy or damaged in transit or storage will not be acceptable.

d. Rate of Application: Grass areas shall be sown with Bermuda (hulled) at the rate of 3-lbs./1000-sq.ft., Annual Rye at the rate of 2-lbs./1000-sq.ft. and Kentucky 31 Fescue at the rate of 5-lbs./1000-sq.ft.

e. Hydraulic Seeding:

1. Hydroseeding may be substituted for mechanical seeding with the County project manager's approval.

2. Seed Rates:

K-31 Fescue	15 lbs per 1000 SF
Common Bermuda	5 lbs per 1000 SF

3. Seed shall be sown using with 500 lbs. per acre approved hydromulch (i.e., Conwed, Conwed 2000, Weyerhaeuer, etc.).

4. Hydromulch at 2000 lbs. per acre will then be applied in a separate operation.

5. Any material applied to building, lighting fixtures, fencing or paving shall be removed at Contractor's expense.

6. Note: Soil amendments will be applied mechanically and incorporated into the soil, not applied hydraulically.

14.0. STAKING, GUYING AND WRAPPING MATERIALS:

a. Tree Stakes: Sound, durable lumber with minimum uniform cross-section above point of 2 x 3 inches nominal dimensions, capable of withstanding above ground and underground conditions until Final Acceptance.

b. Guy Stakes: Sound, durable lumber with minimum uniform cross-section above point of 2 x 3 inches nominal dimensions, capable of withstanding above ground and underground conditions until Final Acceptance; or steel rod, minimum of 1/2 inch diameter.

- c. Guy Wires: No. 12 gauge, malleable, galvanized iron wire, twisted into double strand, turn buckles optional.
- d. Protective Encasement: Material to cover guy wire where looped around trees shall be two-ply, 1/2 inch minimum diameter reinforced rubber hose or approved comparable, non-injurious product, length sufficient to properly protect trunk.
- e. Trunk Wrapping Material: Commercial tree wrapping product of bituminous impregnated tape, heavy crepe paper, or other approved material 4 to 12 inches wide.
- f. Twine: Not less than a two ply jute twine or comparable non-metallic material of neat, inconspicuous appearance.

15.0 MULCH AND EDGING MATERIALS:

- a. Pine Straw Mulch: Free of bark, sticks, pine cones.
- b. Materials Specified as Requiring Approval: Secure representative sample(s) and arrange for Owner to inspect; if disapproved, resubmit additional sample(s) until approved; keep approved sample for reference until near end of project before incorporating it in work.
- c. Other Materials will be inspected upon Contractor's request; otherwise, inspection may take place at any time. Maintain sample(s) for reference.

16.0 GENERAL SEEDING PROCEDURES:

- a. Seed Bed Preparation: Soil to be leveled off and raked smooth for reception of seed.
- b. Fine Grading: All seed beds shall be fine graded so as to insure positive drainage. Areas graded so as to allow "birdbaths" and accumulation of silt and/or water which is detrimental to the establishment of turf will not be acceptable.
- c. Seed Application: Seeding shall take place immediately after the incorporation of lime and fertilizer into the soil. The required amount of seed should be applied by an accepted method utilizing a minimum of two (2) passes at right angles over the prescribed area.
- d. Rolling & Surface Compaction: Immediately after seeding, the entire area shall be compacted by means of a culti-packer, roller or approved equipment weighing approximately 90-lbs. (90#) per linear foot roller. A pneumatic roller (not wobble-wheel) will be required if the soil is of such type that satisfactory operation cannot be obtained through use of a smooth or corrugated roller. Final rolling of the area shall be at right angles to existing slopes to prevent any erosion by runoff.

17.0 GENERAL SODDING PROCEDURES:

- a. Subgrade Preparation: Preparation of the subgrade and fine grading shall be as outlined in 16.0 GENERAL SEEDING PROCEDURES.
- b. Orientation: Sod shall be rolled out in the orientation as directed by the County project manager or representative.
- c. Laying Sod: The rolls of sod shall be lain to provide tight joints between abutting rolls. No pieces of sod of less than 12" square shall be lain in any location.

- d. Rolling: After the sod is in place it shall be rolled with a roller consisting of a minimum of 50 lbs. per linear foot of roller length.
- e. Repair of Depressed Areas: After rolling, any depressions of greater than 1" within an 18" radius shall be filled by removing the sod and placing soil in the depression sufficient to bring the sod up to grade. Any depressions under 1" in an 18" radius shall be brought to grade by a topdressing of sand.
- f. Watering: The Contractor shall be responsible for keeping all sod watered during sodding operations. After all sod is in place, watering shall be the responsibility of the private property owner.

18.0 GENERAL PLANTING PROCEDURES:

- a. Preplanting Care: Fully protect plants from damage by sun, wind, drought, water and other injurious conditions during transportation to site and during temporary storage before planting. Store B&B plants heeled-in individually; mulch around container plants. Water plants as necessary until planting time.
- b. Time of Planting: Plant under favorable weather conditions. At option of and under full responsibility of Contractor, planting operations may be conducted under unseasonable conditions without additional compensation.
- c. Plant Quantities: A Materials List is provided in Drawings summarizing quantities of major materials required. Under lump sum contract, Contractor shall be wholly responsible for confirming quantities shown on Drawings and on List, for promptly reporting any discrepancy to the County project manager before bidding and for performing all work required by the Drawings and Specifications.
- d. Plant Locations: Place individual plant pits, beds and trenches as indicated in Drawings. Make reasonable adjustments as directed by the County project manager or representative. Staking of layout is recommended, but optional.
- e. Obstructions:
 - 1. At or Below Grade: Remove where possible. Man-made obstructions such as functioning utilities, irrigation systems, etc. shall be avoided and not disturbed. Natural objects too massive to be removed with tractor mounted backhoe will require plant relocations as directed by the County project manager or representative.
 - 2. Above Ground: Report overhead interference such as telephone or power lines and relocate plantings as directed.
 - 3. Repairs: Promptly inform the County project manager of any damage and repair any damage to utilities, etc.

19.0 EXCAVATION OF PLANT LOCATION:

- a. Tree and Shrub Pits: Dig pits with vertical sides to 6 inches deeper than depth of root ball, make diameter 1 foot greater than ball diameter of root spread; remove excavated subsoil from site.
- b. Trenches and Beds: Dig out entire area to 6 inches below plant roots and to lines 6 inches outside root ball diameters or root spread; remove excavated subsoil from site. Beds for groundcovers shall be excavated at least 8 inches deep. All plant beds should be a constant

grade to facilitate the proper installation of metal edging. The County project manager or representative shall inspect each bed prior to planting.

20.0 PREPARATION AND PLACEMENT OF PLANTING SOIL MIXTURE:

- a. Mixture for Trees and Shrubs: Homogenous blend of 1/3 (by volume) peat or finely ground pine bark and 2/3 topsoil with necessary soil conditioners added. Place and compact mixture to 6 inch depth in bottom of pit, bed or trench; reserve enough mixture for backfill. Incorporate fertilizer in proper season.
- b. Groundcover Beds: Till and pulverize soil to depth of 12-16" inches. Add fertilizer according to common horticultural practice.
- c. Treatment of Planting Beds with Post-Emergent Herbicides: All planting beds which have existing vegetative cover shall be treated with an approved post-emergent herbicide prior to bed preparation. The herbicide shall be Round-Up or Paraquat (or approved equal) according to season. Follow manufacturer's recommendations as to rate and method of application with special emphasis on the time the chemical must be in place prior to a rain. The herbicides shall be used strictly in accordance with the manufacturer's directions with respect to the effective and safe application of such toxic substances.
- d. Treatment of Planting Beds with Pre-Emergent Herbicides: After bed preparation, all planting beds shall be treated with Ronstar G., Treflan or a comparable pre-emergent herbicide, that will not harm the type plants to be installed in the beds. These herbicides shall be used strictly in accordance with manufacturer's directions as to application quantity, methods and precautions to be used for effectively and safely applying such a toxic product.

21.0 SETTING TREES AND SHRUBS:

- a. Orientation: Place each plant in vertical position and rotate to obtain visual appearance and proper relationship to nearby buildings or adjacent plants.
- b. Root and Ball Preparation: Remove container from Cont. plants and lightly scarify sides of the root mass. Remove burlap from around trunk of B&B material.
- c. Crown to Grade Relationship: After settlement, crown of root ball shall remain a minimum of 2 inches above average finished grade with compacted planting soil sloping away from trunk or stem and blending with finished grade.
- d. Backfill: Fill remaining hole with planting soil mix; compact lightly and create saucer to trap water. Soak pit, trench or bed thoroughly with water soon after planting.

22.0 WRAPPING AND STAKING OR GUYING OF TREES:

- a. Time: Stake or guy each tree promptly after planting.
- b. Wrapping: Use on high-branched trees; not required on trees branched to ground. Apply insecticide to trunk and then begin wrapping at ground; neatly and snugly spiral wrapping upward with minimum 1-1/2 inch overlap; stop above lowest branch. Tie wrapping securely but not tight enough to constrain trunk growth. Do not wrap River Birch.
- c. Trees, 2" Caliper or Less: Use one or more stakes of length sufficient for height and spread of tree (top of stake shall be at least 4 feet above grade for safety reasons) and locate per Drawings. Do not sever roots. Secure tree to stake with hose encased wire or other approved

tie device; keep guys or ties as low as possible on trunk to encourage more rapid root establishment.

- d. Trees over 2" Caliper: Use 3-point support system per Drawings. Method is optional unless only a staking or only a guying detail is shown; then use only method detailed.
- e. Wires: Encase each wire encircling a tree trunk with hose or other protective device to prevent bark abrasion. Tighten wires and maintain them taut; turnbuckle use is optional.
- f. Flags: Place warning flags on guy wires in areas of pedestrian or maintenance hazard.
- g. Removal of Stakes and Guys: Remove as soon as danger of overturning has passed.

23.0 SETTING GROUNDCOVERS:

- a. Shaping Bed: Finish grade per Drawings to required contours and provide positive surface drainage.
- b. Plant Spacing: Unless otherwise specified, center to center spacing of plants refers to planting bed surface plane, NOT a horizontal plane. Quantity estimates include allowances for such variation.
- c. Root Preparation: Remove container plants and scarify roots in several places before placing in position.
- d. Position of Plants: Place each plant in vertical position or in a manner that will provide best coverage. On steep slopes, this may mean axis of plant is not vertical.
- e. Crown to Grade Relationship: Place crown high enough so plant will not be smothered by mulch. Slope planting mix upward from finished grade to meet crown.
- f. Backfilling and Watering: Fill around roots with planting soil mixture and firmly compact, and form water saucer. Soak bed thoroughly with water soon after planting.
- g. Mulching Groundcovers on Steep Slopes: After planting apply pine straw mulch 4" thick.

24.0 FERTILIZER APPLICATIONS:

- a. Time of Application: Apply at time of planting or promptly thereafter; except do not apply during period of August 16th through March 1st unless otherwise directed by Landscape Architect.
- b. Methods of Application:
 - 1. Commercial Granules: Spread on soil surface (under mulch) or preferably mix into planting soil at specified rate. Uniform distribution is essential.
 - 2. Tablets: Place as recommended by manufacturer.
- c. Rates of Application: Follow manufacturer's recommendations based upon plant sizes.

25.0 PLACEMENT OF MULCH:

- a. Time and Purpose: Place mulch to required uniform depth soon after planting to prevent drying of planting soil around roots. Unless other operations such as top dressing or fertilization necessitate delay, mulch promptly after planting. Do not delay more than 3 days after plants have been set.
- b. Mulch Depths:
- | | |
|------------------|----------------------------------------------|
| TREES AND SHRUBS | 4" Depth, over entire saucer, bed, or trench |
| GROUNDCOVERS | 2" Depth |
| PLANTING BEDS | 4" Depth |

26.0 PRUNING AND REPAIR OF PLANTS:

- a. Time and Purpose: Prior to inspection for Acceptance of work, perform minor pruning of plants to remove any growth damaged during handling, to compensate for root loss, or to enhance visual appearance as instructed by the County project manager or representative.
- b. Care of Cuts and Abrasions: Where surface of any pruning cut exceeds 3/4 inch diameter, thoroughly apply tree wound paint. Where minor abrasions into living tissue may exist, cut back injured cambium per good arboriculture practice and thoroughly apply tree wound dressing.

27.0 REPLACEMENT OF PLANTS:

Any plants to be replaced prior to Acceptance of work or under terms of Guaranty shall be installed following procedure set forth above.

- a. Standard for Acceptance of Plantings: Each plant shall be of proper type, properly installed and maintained in good health. All water saucers and beds shall be neatly mulched and free of weeds and erosion damage.
- b. Clean-Up, Protection, and Repairs: During landscape work, protect materials from loss, damage and deterioration during storage, installation and maintenance periods. Protect from unauthorized persons (trespassers) and landscape operations. Wherever possible, avoid replacement of damaged work, by treating or repairing to restore work to an acceptable condition as directed by the County project manager or representative.

END OF SECTION