CONTRACT DOCUMENTS AND SPECIFICATIONS

FOR

CHESTERFIELD COUNTY, SOUTH CAROLINA

CHESTERFIELD COUNTY ASPHALT PAVING

W. Elizabeth Street

Project No: 21-04464-002

Bid No: PCN #42083

May 2023

JMT, Inc. CONSULTING ENGINEERS 3600 FOREST DRIVE SUITE 102 COLUMBIA, SC 29204 CHESTERFIELD COUNTY CHESTERFIELD COUNTY ADMIN BLDG. 178 MILL STREET CHESTERFIELD, SC 29709

TIMOTHY L. EUBANKS, CHESTERFIELD COUNTY ADMINISTRATOR

TABLE OF CONTENTS

<u>ltem</u>	<u>Page</u>
INVITATION TO BID	1
INSTRUCTIONS TO BIDDERS	2
BID	7
CERTIFICATION OF NON-SEGREGATED FACILITIES	14
NON-COLLUSION AFFIDAVIT OF PRIME BIDDER	15
DRUG-FREE WORKPLACE CERTIFICATION	16
BID BOND	17
PERFORMANCE AND PAYMENT BOND	19
CONSTRUCTION CONTRACT	21
TECHNICAL SPECIFICATIONS	
SECTION 1 - SPECIAL PROVISIONS	23
SECTION 2 - GENERAL SITE WORK	27
SECTION 3 - ASPHALT CONCRETE & PAVEMENT MARKINGS	37

APPENDIX

STANDARD GENERAL CONDITIONS CONTRACT

INVITATION TO BID

Sealed bids for ASPHALT PAVING ON W. ELIZABETH STREET, PAGELAND, CHESTERFIELD COUNTY, SOUTH CAROLINA will be received by CHESTERFIELD COUNTY (hereinafter called the Owner) at the Chesterfield County Administration Building, 178 Mill Street, Chesterfield, South Carolina until 1:00 p.m., May 25, 2023. At that time and place, bids will be opened, and emails sent out to all bidders stating the bids received and low bid winner. **A MANDATORY PRE-BID MEETING** will be held onsite on May 23,2023 at 10:30 am.

The work on W. ELIZABETH STREET consists of applying approximately 2,765 linear feet of Hot Mix Asphalt (HMA) Surface Type C at 22 feet wide (2 x 11' lanes with 2 x 4' shoulders) onto a CMB (6" Uniform at 27#/sy) or Macadam Stone at 6" and storm drainage improvements.

The Contract Documents, including Drawings and Technical Specifications, are on file for examination at the offices of the Chesterfield County Administration Building, 178 Mill Street, Chesterfield, SC. Specifications and contract documents may be obtained in person from the office of the JMT, 3600 Forest Drive, Suite 102, Columbia SC upon a non-refundable payment of \$125.00. If mailed, a \$15.00 shipping and handling fee will be added. When obtaining contract documents, provide the following information about your company: mailing address, street (UPS) address, telephone number, and E-mail address. Please contact Joe Montgomery at (803) 532-7179 with any questions.

The Chesterfield County
BY: Timothy L. Eubanks

TITLE: Chesterfield County Administrator

DATE: May 2020

INSTRUCTIONS TO BIDDERS

- 1. RECEIPT AND OPENING OF BIDS: Bids will be received and opened as specified in the Invitation to Bid.
- (a) The Owner may consider informal any bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities or reject any and all bids.
- (b) Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No bidder may withdraw a bid within 60 days after the actual date of the opening thereof.
- 2. PREPARATION OF BID: All Bids shall be on copies of the printed forms herein, and shall be for all labor, material and equipment required to complete the work embraced in the contract in accordance with the Plans and Specifications.
- (a) Bid forms shall not be torn or removed from the Bound Volume. Bids shall be submitted on a copy of the Bid form.
- (b) Bids shall be typewritten or completed in ink. All blank spaces for bid prices must be filled in, in figures, or in both words and figures if so indicated in the Bid form. In addition, any other information requested in the Bid form must be completed. If requested in the Bid, each bidder shall show the make of materials and equipment used in his quotation. No change in equipment or materials will be allowed after bids are received without the written approval of the Engineer.
- (c) Failure to name the maker of equipment and materials, if requested, shall give the Owner the right to select equipment and materials of his choice at the prices listed in the Bid.
- (d) Each bidder shall show, in the spaces provided at the end of the Bid, the names of any subcontractors and the scope of their work, which he may employ on the Project. Subcontractors will be required to comply with all applicable requirements of the Specifications.
- (e) Each bidder shall acknowledge receipt of all addenda in the spaces provided in the Bid form. It shall be each Bidder's responsibility to assure himself that all addenda have been received. No claim for failure to receive addenda will be considered.
- (f) If called for in the Bid, each bidder shall submit a price for all alternates listed therein. Failure to do so will result in the Bid being considered incomplete and may result in rejection of the Bid.

- (g) On the first sheet of the Bid form, the bidder shall write his name and address, and Contractor's License Number. In South Carolina, where a mechanical contract amounts to \$10,000 or more, the name and license number of the subcontractor shall also be shown.
- (h) Each Bid must be submitted in a sealed envelope, addressed to the Owner along with the name of the project for which the bid is submitted. The bidder shall also show his name and license number and subcontractor's name and mechanical license number, if required, on the outside of the envelope. Failure to show the required license numbers may result in rejection of bid, unopened. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope.
- (i) No bid will be considered unless the bidder is legally qualified under the provisions of the South Carolina Contractor's Licensing Law (SC Code of Laws as amended in 1976, Chapter 11, Sections 40-11-10 through 40-11-428). Contractors shall have a classification of Asphalt Paving (AP) and Grading (GD).
- 3. TELEGRAPHIC MODIFICATION: Any bidder may modify his bid by telegraphic communication, at any time prior to the scheduled closing time for receipt of bids, provided such telegraphic communication is received by the Owner prior to the closing time; and, provided further, the Owner is satisfied that a written confirmation of the telegraphic modification over the signature of the bidder was mailed prior to the closing time. Telegraphic communication should not reveal the bid price but should provide the addition or subtraction or other modification so that the final prices or terms will not be known by the Owner until the sealed bid is opened. If written confirmation is not received within two days from the closing time, no consideration will be given to the telegraphic modification.
- 4. BIDDERS QUALIFICATIONS: To be acceptable to the Owner, bidders must be skilled in the class of work on which they bid, and no bid will be considered from any bidder who is unable to show that he has actually performed considerable work of similar character to that on which he is bidding.
- (a) The Owner may make such investigations as deemed necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request.
- (b) The Owner reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the Owner that such bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein. Conditional bids will not be accepted.
- 5. BID GUARANTY: The Bid must be accompanied by a Bid guaranty which shall not be less than 5 percent (5%) of the amount of the Bid. At the option of the bidder, the guaranty may be a certified check, bank draft, negotiable U.S. Government Bonds (at par value), or a bid bond in the form attached. The bid bond

shall be secured by a guaranty, or a surety company listed in the latest issue of U.S. Treasury Circular 570. The amount of such bid bond shall be within the maximum amount specified for such Company in said Circular 570. No Bid will be considered unless it is accompanied by the required guaranty. Certified check or bank draft must be made payable to the order of the Owner. Cash deposits will not be accepted. The Bid guaranty shall insure the execution of the Agreement and the furnishing of the surety bond or bonds by the successful bidder, all as required by the Contract Documents.

- (a) Revised Bids submitted before the opening of Bids whether forwarded by mail or telegram, if representing an increase in excess of two percent (2%) of the original Bid, must have the Bid guaranty adjusted; accordingly, otherwise the Bid will not be considered.
- (b) Certified checks or bank drafts, or the amount thereof, bid bonds, and negotiable U.S. Government bonds of unsuccessful bidders will be returned as soon as practical after the opening of the Bids.
- 6. EXECUTION OF CONTRACT: The bidder to whom an award is made shall execute and deliver to the Owner a written contract on the form attached hereto within seven (7) days after notice of award has been received. The successful bidder will also be required to provide a Performance Bond and SCDHEC Co-Permittee Agreement before proceeding with the work.
- 7. LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT: The successful bidder, upon his failure or refusal to execute and deliver the contract required within seven (7) days after he has received notice of the acceptance of his bid, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with his bid.
- 8. LICENSES AND PERMITS: In addition to the licenses required by the advertisement and specifications, the following is required:
- (a) South Carolina law provides that a building permit shall be secured by the successful bidder for each particular contract, if applicable.
- 9. TIME OF COMPLETION AND LIQUIDATED DAMAGES: The bidder must agree to commence work within the time stipulated in the Bid Form and to fully complete the project within the time stipulated in the Contract. Bidders must also agree to pay as liquidated damages the amount set forth in the Contract for each consecutive calendar day that the work is incomplete after the date of completion, plus the cost of those agents representing the Owner who are engaged in the project after the scheduled completion date.
- 10. EXAMINATION OF PROJECT: Each of the bidders shall fully familiarize himself with the Plans, Specifications, soil properties and other conditions relating to the project to ensure complete understanding of all the details involved. He

shall satisfy himself as to the actual conditions and requirements of the work by personal examination of its location or other means, so as to enable him to make up his bid intelligently and to advantage. Failure to do so will not relieve a successful bidder of his obligation to furnish all material and labor necessary to complete the provision of his contract. No allowance will be made for any claims that a bid was based on incomplete information as to the nature and character of the sites and of the work involved.

- 11. INTERPRETATIONS OF PLANS AND SPECIFICATIONS: No interpretation of the meaning of the Plans, Specifications, or other documents will be made to any bidder orally prior to the receipt of bids.
- (a) Any request for such interruption shall be in writing addressed to the Owner. To be given consideration, such requests must be received at least seven (7) days prior to the scheduled date for opening bids. Any such interpretations or supplemental instructions will be issued in the form of addenda to the Contract Documents which will be faxed or mailed to all persons receiving a set of documents, not later than five days prior to the date for opening of bids.
- (b) Failure of any bidder to receive such addenda shall not relieve him of any obligation under his Contract Documents.
- 12. RIGHT TO INCREASE OR DECREASE THE AMOUNT OF WORK: The work comprises approximately the quantities shown in the Bid Form which will be used as a basis for comparison of bids and not for final estimate.
- (a) The Owner does not, by expression or by implication, agree that the actual amount of work shall correspond with the estimated quantities.
- (b) The Owner reserves the right to increase or decrease the amount of work under the Contract to the extent of 30% of the work contemplated, at the unit prices quoted in the Bid.
- 13. POWER OF ATTORNEY: Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power-of-attorney.
- 14. LAW AND REGULATIONS: The bidder's attention is directed to the fact that all applicable State laws, local ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full.
- 15. STATE SET-ASIDE LAW FOR DBE/DWBE: In accordance with the State Set-Aside Law (South Carolina Code Section 12-28-2930); a minimum of ten (10%) percent of this contract is set-aside for qualified and certified Disadvantaged Business

Enterprises (DBE's) or Women Business Enterprises (DWBE's). All mentions of DBEs in these specifications or other contract documents reference both DBE' and DWBE's.

- (a) The DBE Certification Directory can be found on the SCDOT website (http://www.scdot.org/doing/doingPDFs/businessDevelop/UCP_DBE_Directory.pdf) Firms listed are prequalified by SCDOT.
- (b) The prime contractor shall provide documentation and certification of DBE contract amounts including proof of final payment. DBEs shall be indicated on the Bid form under the "Proposed Sub-Contractors." If no certified DBE firms are available at competitive prices, the contractor shall verify and document this information. Good faith efforts must be made to meet DBE goals.
- 16. METHOD OF AWARD: Contracts will be awarded to the low bidder whose bid, in conjunction with any combination of alternates, appears to serve the best interest of the Owner, provided that such low bidder is considered by the Owner to be responsible and capable of performing the work. Quality and performance of equipment and materials will be evaluated, in conjunction with price, as important considerations in determination of award to the low bidder. The Owner reserves the right to accept or reject, in whole or in part, such bids as appears in its judgment to be in their best interests, or to waive any informalities in the bidding.
- 17. OBLIGATION OF BIDDER: At the time of the opening of bids, each bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the Plans and Contract Documents (including all addenda). The failure or omission of any bidder to examine any form, instruction or document shall in no way relieve any bidder from any obligation in respect to this bid. No bids may be withdrawn for a period of sixty (60) days after the actual date of the opening of bids.
- 18. NOTICE OF SPECIAL CONDITIONS: Attention is called to those parts of the Contract Documents and Specifications which deal with the items below, if they are included in the following specifications:
 - (a) Insurance requirements
 - (b) Protection of property

<u>BID</u>

Place: Chesterfield County Administration Council Chambers 178 Mill Street Chesterfield, SC 29709 Project No. 21-04464-002 PCN #42083 Asphalt Paving W. Elizabeth Street

Time: 1:00 PM.

Date: May 25, 2023

FROM:	Bidder
	Address
	Contractor's License No.

TO: The Chesterfield County (Hereinafter called the OWNER)

The Bidder, in compliance with your Invitation to Bid for ASPHALT PAVING ON W. ELIZABETH STREET, TOWN OF PAGELAND, CHESTERFIELD COUNTY, SOUTH CAROLINA having examined the Plans and Specifications with related documents and the site of the proposed work, and being familiar with all of the conditions surrounding the construction of the proposed project including soil conditions and the availability of materials and labor, hereby proposes to furnish all labor, materials, and supplies, and to construct the project in accordance with the contract documents, of which this Bid is a part.

The Bidder hereby declares that the only person or persons interested in the Bid as principal(s) is, or are, named herein and that no other person has any interest in the Bid or in the contract to be entered into; that this Bid is made without connection with any other person, company or parties making a bid; and that is in all respects fair and in good faith without collusion or fraud.

The Bidder further proposes and agrees, if this Bid is accepted, to contract with the Owner, in the attached form of contract; to furnish all materials, equipment, tools, apparatus, means of transportation, and labor necessary thereto, and to complete the construction of the proposed facilities in full and complete accordance with the Plans, Specifications, and Contract Documents, to the full and entire satisfaction of the Owner and Engineer, at the prices listed below. Bidder agrees bids may not be withdrawn for a period of sixty (60) days after actual date of the opening of bids.

Bidder further agrees to commence work on the date stipulated in the notice to proceed and to fully complete the project within the number of consecutive calendar days thereafter as listed below. Bidder also agrees to pay as liquidated damages, the sum as listed below for each consecutive calendar day thereafter that the project remains incomplete as provided in the Standard General Conditions.

<u>Completion Time</u> <u>Liquidated Damages</u>

150 Days \$300 per day

Names of equipment and material suppliers, proposed subcontractors and other information requested herein must be shown. Failure to do so may result in rejection of the Bid.

The amounts listed on the Bid Schedule include all labor, materials, tools, equipment, transportation, removal, overhead, profit, insurance, taxes, etc., to cover the finished work in place.

Unit prices and/or lump sums are shown on the Bid Schedule below. In case of error in extension, the Unit Price shall govern rather than the Amount. Where Lump Sum Amounts are bid, the amount for each bid item shall govern rather than the total of any several items.

The work comprises approximately the quantities shown in the Bid Schedule which will be used as a basis for comparison for bids and not for final estimate. The Owner does not, by expression or by implication, agree that the actual amount of work shall correspond with the estimated quantities.

The quantities used for Unclassified Excavation – cut, Unclassified Excavation – fill and / or Sub-base are based on estimated amounts. Should any unsuitable material need to be removed and replaced, these same pay items along with their corresponding unit prices will be used to excavate and refill. There will be no adjustment in unit prices regardless of the amount of unsuitable material encountered.

Bidder agrees to perform all work described in the Specifications and Plans, for the following unit prices and/or lump sum amounts.

BID SCHEDULE W. ELIZABETH STREET PAVING

NOTE: Bids shall include all applicable taxes and fees

ITE M	DESCRIPTION	QUANTIT Y	UNIT PRICE	AMOUNT	
1.	Mobilization	lump sum		\$	
2.	Traffic Control (Include signs, stop bars, white broken thermo lines and 30' double yellow lines for both intersections)	lump sum		\$	
3.	Clearing & Grubbing	lump sum		\$	
4.	Unclassified Excavation - Cut	1298 CY	\$	\$	
5.	Borrow Excavation - Fill	76 CY	\$	\$	
6.	Macadam Base Course (6" Uniform)	5580 SY	\$	\$	
7.	CMRB 6" at 27#/sy cement uniform (Price should include curing & leveling)	5580 SY	\$	\$ <u>11,900</u> \$	Y
8.	Maintenance Stone	100 TN	\$	\$	
9.	175#/sy Hot Mix Asphalt Surface C	415 TN	\$	\$ 966 to	ns
10.	Driveway Paving- Surface type C	70 TN	\$	\$ 132 t on	s
11.	Permanent Construction Signs	96 SF			
12.	24" WH SLD, Line-PVT.EDGE-FD PNT	30 LF	\$	\$	
13.	Flat Sheet Type III. Fixed Size Signs 3'x3' with 8' U-Section Post	18 SF	\$	\$	
14.	15" RCP Culvert Class III	256 LF	\$	\$	
15.	18" RCP Culvert Class III	84 LF			
16.	24" RCP Culvert Class III	52 LF	\$	\$	
17.	Class "A" Rip Rap Ditch Checks	160 tons	\$	\$	
18.	Class "B" Rip Rap	24 tons			
16.	Geotextile Fabric	30 SY	\$	\$	
17.	Permanent Vegetation	4.17 MSY	\$	\$	
18.	Sediment Tubes (TYP.) 10'	40 LF	\$	\$	
19.	Silt Fencing (TYP.)	3,310 LF	\$	\$	

Bid (continued)

20.	TEMP. EROSION CONTROL BLANKET	1240 SY	\$ \$	
			\$ \$	
21.	RESET Fence	30 LF	 	
22	36" X 36" Junction Box	1 EA	\$ \$	
23.	4" WH BRKLINE THERMO-90 MIL.	100 LF	\$ \$	
24.	Removal and Disposal of Existing Asphalt	19 SY	\$ \$	
25.	Replace/remove silt fence	331 LF	\$ \$	
26.	Remove Silt Retained by Silt Fence	828 LF	\$ \$	
27.	Stabilized Construction Entrance	550 SY	\$ \$	
28.	Temporary Vegetation	2.09 MSY	\$ \$	
29.	PRIME COAT	1507 GAL.	\$ \$	
	Denotes base choice (choose only one)			
	Total Cost:		\$	

Bid (continued)

PAYMENT FOR UNSUITABLE MATERIAL REMOVAL & REPLACEMENT

I, the undersigned, understand and accept that no unit price adjustments will be made for Unclassified Excavation - cut and / or Unclassified Excavation - fill or Select Fill (sub-base) regardless of the amount of unsuitable material encountered. I understand no additional pay items will be added to compensate for removing and replacing unsuitable material.

Removal will be paid at the Unclassified Excavation – cut unit price and shall include appropriate disposal offsite. Replacement will be paid for at the Unclassified Excavation – fill or Select Fill (sub-base) unit price using the materials and methods outlined in the specifications. Payment of the amount of actual quantities at the unit prices in the bid will be the only compensation for removing and replacing unsuitable material.

Bidder	
	(Bidder name printed)
	,
	(Bidder signature)
	(Diador digitatoro)

The Bidder further proposes and agrees hereby to commence the work with adequate forces and equipment within ten (10) days after being notified by the Owner to proceed, unless otherwise agreed upon by both parties, and to complete the work within the specified time.

Respectfully submitted,		
Contractor:		
Ву:		
Title:		
Address:		
Zip Code:	Telephone No.:	
Seal - (If Bid is by a Corporation)	FAX No.:	
Date:		
License Number:		
Proposed Sub-Contractors*:	T 15 (10 (10 (10 (10 (10 (10 (10 (DD E
Name Address	Type and Extent of Work	DBE
		Yes / No

*Sub-Contractor Notes – per SCDOT requirements:

- Both DBE and Non-DBE sub-contractors may be used and listed
- Good faith efforts must be made to "sub-out" 10% of contract with DBE's. If No DBEs are used, provide documentation as prescribed in #15 of the INSTRUCTIONS TO BIDDERS.

•	All listed sub-contractors (DBE or not) must be used and may only be replaced for non-performance issues per SCDOT guidelines.

the time above set forth, as liquidated damages for the delay and additional expense to

the Owner caused thereby.

Bid (continued)

CERTIFICATION OF NONSEGRATED FACILITIES

The Bidder certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control where segregated facilities are maintained. The Bidder certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location under his control where segregated facilities are maintained. The Bidder agrees that a breach of this certification will be a violation of the Equal Opportunity clause in any contract resulting from acceptance of this Bid. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants, and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin, because of habit, local custom, or otherwise. The Bidder agrees that (except where he has obtained identical certification from proposed subcontractors for specific time periods) he will obtain identical certifications from proposed subcontractors prior to the award of subcontract exceeding \$10,000.00 which are not exempt from the provisions of the Equal Opportunity clause, and that he will retain such certification in his files.

NOTE: The penalty for making false stater	ments in offers is prescribed in 18 II, S.C. 1001.
BY:	
DATE:, 20	
Official Address (including Zip Code).	

NONCOLLUSION AFFIDAVIT OF PRIME BIDDER

Attached hereto is an affidavit in proof that the undersigned had not entered into a collusive agreement with any person in respect to this Bid or any other Bid or the submitting of Bids for the Contract for which this Bid is submitted.

State of	
County of	
	, being first duly sworn, deposes and says that:
(1) He is the Bidder that has submitted the	of, e attached Bid:
(2) He is fully informed respe and of all pertinent circumstance	ecting the preparation and contents of the attached Bid s respecting such Bid:
(3) Such Bid is genuine and i	s not a collusive or sham Bid:
representatives, employees or p colluded, conspired, connived or or person to submit a collusive or attached Bid has been submitted Contract, or has in any manner, or communication on conference prices in the attached Bid or of a element of the Bid price or the E collusion, conspiracy, connivance	nor any of its officers, partners, owners, agents, arties in interest, including this affiant, has in any way agreed, directly or indirectly with any other Bidder, firm sham Bid in connection with the Contract for which the ed or to refrain from bidding in connection with such directly or indirectly, sought by agreement or collusion with any other bidder, firm or person to fix the price or any other Bidder, or to fix any overhead, profit or cost Bid price of any other Bidder, or to secure through any be or unlawful agreement any advantage against the EFIELD or any person interested in the proposed
any collusion, conspiracy, conni-	attached Bid are fair and proper and are not tainted by vance or unlawful agreement on the part of the Bidder ves, owners, employees, or parties in interest, including
Subscribed and sworn to before this,	` •
	(Title)
(Title) My commission expires	(Seal)

DRUG-FREE WORKPLACE CERTIFICATION

In accordance with Section 44-107-30, South Carolina code of Laws (1976), as amended, and as a condition precedent to the execution of this agreement, the undersigned, who is an authorized representative of the PARTICIPANT certifies on behalf of the PARTICIPANT that the PARTICIPANT will provide a drug-free workplace by:

- (1) publishing a statement notifying employees that the unlawful manufacture, distribution, dispensations, possession, or use of a controlled substance is prohibited in the PARTICIPANTS workplace and specifying the actions that will be taken against employees for violations of the prohibition.
- (2) establishing a drug-free awareness program to inform employees about:
 - (a) the dangers of drug abuse in the workplace.
 - (b) the person's policy of maintaining a drug-free workplace.
 - (c) any available drug counseling, rehabilitation, and employee assistance programs; and
 - (d) the penalties that may be imposed upon employees for drug violations.
- (3) making it a requirement that each employee to be engaged in the performance of the agreement be given a copy of the statement required by item (1);
- (4) notifying the employee in the statement required by item (1) that, as a condition of employment of this agreement, the employee will:
 - (a) abide by the terms of the statement; and
 - (b) notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after the conviction.
- (5) notifying the South Carolina Department of Transportation within ten days after receiving notice under item (4)(b) from an employee or otherwise receiving actual notice of the conviction.
- (6) imposing a sanction on, or requiring the satisfactory participation in a drug abuse assistance or rehabilitation program by, any employee convicted as required in Section 44-107-50; and
- (7) making a good faith effort to continue to maintain a drug-free workplace through implementation of items (1), (2), (3), (4), (5), and (6).

PARTICIPANT:		
	(Signature)	

BID BOND

KNOW ALL MEN BY THESE PRESENT	S, THAT WE, the undersigned,	
	, as Principal, and	
	, as Surety, are hereby held and	firmly
bound unto	, As Owner, in the pena	al sum
of	<u>(</u> \$	<u>)</u> ,
for the payment of which, well and truly t	o be made, we hereby jointly and seve	rally
bind ourselves, our heirs, executors, adn	ninistrators, successors and assigns.	
Signed, this day of	, 20	
The condition of the above obligation is s	such that whereas the Principal has sul	bmitted
to a certain B	id, attached hereto and hereby made a	a part
hereof into a contract in writing, for the_		

NOW, THEREFORE,

- (a) If said Bid shall be rejected, or in the alternate,
- (b) If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said Bid) and shall in all other respects perform the agreement caused by the acceptance of said Bid, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

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

Bib Bond (continued)

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

Principal	(L.S.)
Ву:	

(SEAL)

PERFORMANCE AND PAYMENT BOND

KNOW ALL MEN BY TH	ESE PRESENTS: That we _	
a	hereinafter called "Pri	ncipal" and
	of	<u> </u>
State of	, hereinafter calle	ed the "Surety", are held firmly
bound unto the	hereinafter	called "Owner" in the
penal sum of	Dollars (\$) in lawful money
	ecutors, administrators, and s	well and truly be made, we bind successors, jointly and severally
THE CONDITION OF TH	IIS OBLIGATION is such that	whereas, the Principal entered
into a certain contract wit	th the Owner, dated the	day of,
20, a copy of which is	s hereto attached and made a	part hereof for the construction .

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the Owner, with or without notice to the Surety, and which may be granted by the Owner, with or without notice to the Surety, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the Owner from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the Owner all outlay and expense which the Owner may incur in making good any default, and shall promptly make payment to all persons, firms, subcontractors, and corporation furnishing materials for or performing labor in the prosecution of the work provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such work, and all insurance premiums on said work, and for all labor, performed in such work, whether by subcontractor or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying

the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

PROVIDED, FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is exe	ecuted incounterparts each one	
of which shall be deemed an original, this	day of, 20	
ATTEST:	(0)	
(Principal) Secretary	Principal	
(SEAL)	By:(S)	
Address	Address	
ATTEST:		
(Surety) Secretary	Surety	
(SEAL)	Ву	
Witness	Attorney-in-Fact	
Address	Address	

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

- (1) Name of Contractor
- (2) Corporation, Partnership, Individual
- (3) Name of Surety
- (4) Name of Owner
- (5) If partnership, all partners should execute Bond.

(Attach Power of Attorney where applicable)

CONSTRUCTION CONTRACT

STATE OF SOUTH CAROLINA CHESTERFIELD COUNTY <u>, 20</u> , by and THIS CONTRACT made and entered into on the __ day of ____ , Party of the First Part, and CHESTERFIELD COUNTY, Party of the Second Part: WITNESSETH: That the Party of the First Part, for the consideration hereinafter fully set out, hereby agrees with the Party of the Second Part as follows: That the Party of The First Part shall, at his own cost and expense furnish all materials and all equipment, and perform all the work necessary for the ASPHALT PAVING ON W.ELIZABETH STREET, TOWN OF PAGELAND, IN CHESTERFIELD COUNTY, SOUTH CAROLINA according to the requirements of the Drawings, dated , the Specifications, and other documents, which are made a part hereof as is fully contained herein, to the full satisfaction of the Engineer and the Party of the Second Part. That the Party of the First Part shall commence the work to be performed under this contract at a date provided for in the Bid and shall fully complete all work hereunder within 150 consecutive calendar days from said date. The Party of the First Part further agrees to pay as liquidated damages the sum of \$ 300.00 for each consecutive calendar day thereafter as provided in the General Specifications; General Conditions, Part I and Special Conditions. The Party of the Second Part hereby agrees to make payment to the Party of the First Part for work faithfully performed under this Contract at the prices quoted in the BID

The Party of the First Part shall submit pay requests to the Engineer no more than once per month. The Party of the Second Part shall make partial payment within sixty (60) days of receipt to the Party of the First Part on the basis of the pay request and the Engineer's duly approved estimate of work performed, less ten percent (10%) of such estimate, which will be retained until completion of the work and an acceptable stand of grass is established.

amounting to the estimated sum of \$, the said amount being subject to

subtractions and/or additions as provided for in the Bid and Specifications.

Within sixty (60) days after completion by the Party of the First Part of all work and delivery of all equipment covered by this Contract, and the acceptance of such work and equipment by the Party of the Second Part and the Engineer, and upon submission by

Contractor Initials:
Elizabeth St. – 21-04464-002
Owner Initials:

the Party of the First Part of evidence satisfactory to the Party of the Second Part that all payrolls, material bills and other liabilities incurred by the Party of the First Part in connection with the construction of the work have been paid in full, the balance due on this Contract will be paid the Party of the First Part.

The Party of the First Part hereby guarantees the work done and equipment furnished hereunder to be free from defects, for a period of one year from the date of acceptance thereof.

During the year of guarantee, the Party of the First Part shall correct any defects that may develop in work done or material and equipment furnished under this Contract, but he will not be responsible for injury thereto due to improper handling or maintenance. Should the Party of the First Part fail to correct defects in the work or equipment within a reasonable time after being notified of them, the Party of the Second Part may proceed to correct them and charge the cost against the Party of the First Part, who shall be liable therefore together with his bonding company.

IN WITNESS WHEREOF: The Parties hereto have executed this Contract on the day and date first above written, in <u>two (2)</u> counterparts, each of which shall, without proof of accounting for the other counterparts, be deemed an original Contract.

Signed and sealed in the Presence of	Party of the First Part
	Ву:
	Title:
(Clerk)	
(Seal)	CHESTERFIELD COUNTY Party of the Second Part By:
(Clerk)	Title: <u>Administrator</u>
(Seal)	

SECTION 1 SPECIAL PROVISIONS

Index

1-01 Project Scope	1-05 Classification of Earthwork
1-02 Contract Documents	1-06 Special Provisions
1-03 Completion Time	1-07 Work on Highway Right of Way
1-04 Liquidated Damages	1-08 Special Attention for Bidders

- <u>1-01. PROJECT SCOPE</u>: Work covered by the Contract Documents consists of constructing roadway paving improvements as described in the "Invitation for Bids:" itemized in the "bid", and as specified herein. All Bids shall include labor, materials, transportation, equipment, services, applicable taxes and other items necessary for a complete and acceptable job in compliance with the Drawings and Specifications.
- <u>1-02. CONTRACT DOCUMENTS</u>: Documents covering the work under this project consist of the following items:
 - A. <u>Contract Documents</u>: Dated May 2023 containing.
 - 1) Invitation to Bid
 - 2) Instructions to Bidders
 - 3) Bid
 - 4) Certification of Non-Segregated Facilities
 - 5) Non-collusion Affidavit
 - 6) Drug-Free Workplace Certification
 - 7) Bid Bond
 - 8) Performance and Payment Bond
 - 9) Construction Contract
 - 10) Special Conditions Section 1
 - 11) General Site Work Technical Specifications Section 2
 - 12) Asphalt Concrete and Pavement Marking Technical Specifications- Section 3
 - 13) Standard General Conditions of the Construction Contract
 - B. Drawings: No. 1 through 42 (Project 21-04464-002) dated 5/9/2023.
- C. <u>All Documents</u> are a part of this Contract, and the requirements of each part shall apply to the entire project as may be applicable.
- <u>1-03. COMPLETION TIME</u>: Work on the project shall be commenced with adequate forces, within the time stipulated in the "Bid" and shall be fully completed within 150 Days which shall include Sundays and holidays.
- **1-04. LIQUIDATED DAMAGES**: Liquidated damages sustained by the Owner for the Project not being completed within the stipulated time shall be \$300.00 per day.

- <u>1-05. CLASSIFICATION OF EARTHWORK</u>: All excavation and grading shall be unclassified.
- **1-06. SPECIAL PROVISIONS**: The following special provisions shall be a part of this Contract.
- A. <u>Any areas</u> on or adjacent to the work site disturbed during construction shall be restored to their present or better condition at the contractor's expense.
- B. <u>All chemicals</u> used during project construction or furnished for project operation, whether herbicide, pesticide, disinfectant, polymers, reactant or of other classification, must show approval of either EPA or USDA. Use of all such chemicals and disposal of residues shall be in conformance with instructions and specifications.
- C. <u>Safety and Health Regulations</u>: The Contractor shall comply with the Department of Labor Safety and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (PL 91-596) and under Section 107 of the Contract Work Hours and Safety Standards Act (PL 91-54).
- D. <u>Protection of Property</u>: The operations of the Contractor shall be conducted with full consideration of all the proper and legal rights of the Owner, and of adjacent property owners and the public, and with the least possible amount of inconvenience to them. Contractor shall coordinate all construction activities and schedules with Owner. Construction shall not begin until the Contractor has verified property line locations.
- E. <u>Construction Staking</u>: Contractor shall perform or provide all construction layout survey and grade staking. Alignments shall be staked at each station (a minimum of every 100') and marked in a manner where the station is readable while standing on the roadway centerline. Survey control points are in place and identified on the plans. Disturbed iron pins will be replaced by registered surveyors. Survey work shall not be paid for directly but shall be considered a part of various pay items of the contract.
- F. <u>Siltation and Erosion Control</u>: Erosion of soil shall be minimized during construction. Any areas on or adjacent to the work site disturbed during construction operations shall be restored to present or better condition. Contractor shall employee SCDHEC Best Management Practices (BMP's) sufficient to prevent silt erosion into main drainage channels and storm drainage structures; follow an approved SCDHEC Stormwater Pollution Prevention Plan (SWPPP); and sign an SCDHEC Contractor Certification agreement if applicable. Any erosion damage to roadways, structures, property etc. will be repaired by the contractor at no cost to the owner.
- G. <u>Underground Utilities</u>: Sewer and water mains/services, telephone lines, power lines, gas lines and cables may be encountered and should be anticipated along roadways and rights-of-ways. The Contractor shall contact

representatives of all utilities to determine the exact locations of all existing facilities and underground utilities and shall make every effort to avoid damage to such. Any utility lines and power poles, guys, etc., obstructing construction shall be protected from damage or moved by utility company, as necessary.

H. <u>Codes and Standards</u>: Wherever reference is made to codes, standard specifications, and regulations, on the Drawings or in these specifications, included but not limited to Federal Specifications, ASTM, ANSI specifications, various institute specifications, etc., it shall be understood that such reference is to the latest edition including addenda and revisions in effect on the date of these Contract Documents. Abbreviations of agencies, codes and standards in these specifications are as follows:

AASHTO American Association of State Highway and Transportation Officials AIA American Institute of Architects ANSI American National Standards Institute ASTM American Society for Testing and Materials **Environmental Protection Agency** EPA SCDOT South Carolina Department of Transportation SCDHEC South Carolina Department of Health and Environmental Control United States Army Corp of Engineers USACE United States Department of Agriculture USDA MUTCD Manual on Uniform Traffic Control Devices

- I. <u>Construction Schedule</u>: The Contractor shall submit to the Owner a construction schedule of proposed work sequence, target dates and activities, completely coordinated with the State Department of Transportation officials prior to submittal.
- J. <u>Construction Materials and Methods</u> shall conform to the SCDOT <u>Standard Specifications for Highway Construction</u> (<u>Std Specs</u>), latest edition unless stated otherwise in the plans or in the technical special provisions.
- K. <u>Condition of Work Site During Construction</u>: The work site shall be left in a safe condition and shall be free from trash on a daily basis. The contractor shall maintain the roadway and roadside to the owner's satisfaction for the entire duration of the project, including during stop work delays or delays due to weather, seasonal constraints, etc.
- <u>1-07 WORK ON HIGHWAY RIGHT-OF-WAY</u>: The Contractor shall not begin work on any property of the State Department of Transportation until he has secured necessary permits. He shall conform to all requirements of the Highway Department, or its authorized representatives in the prosecution of this portion of the work. It shall be the responsibility of each Bidder to contact the local highway representative and to determine the requirements for the work to be done. Requirements shall include, but are not limited to the following:

- A. <u>Maintenance of Traffic</u>: The Contractor shall erect adequate warning signs and where necessary, place flagmen with appropriate flags, to control traffic at construction site. The Contractor and all subcontractors will provide adequate barricades to properly protect the work and to warn all pedestrians and drivers as to the construction. From sundown to sun-up, adequate lighting will be provided to mark all construction and hazards at night. Signs and flagman shall be placed at sufficient distances from the work site so that ample warning is given to approaching traffic. Cost of traffic control shall be included in Mobilization lump sum pay item.
- B. <u>Construction equipment</u> such as loaders, tractors, cranes and trucks shall be operated in a manner to provide a safe condition and usable area for two-way traffic.
- **1-08. SPECIAL ATTENTION FOR BIDDERS:** Bidders are directed to pay special attention to the following:

A. Submittal of Bids:

- 1) Comply exactly with all requirements and especially:
 - (a) Show Contractor License number on outside of envelope.
 - (b) All bids are to be submitted on an extra copy of the Bid Form and signed by a responsible Agent of the Bidder.
 - (c) Show receipt of all Addenda.
 - (d) Include a 5% Certified Check or Bid Bond (based on highest bid schedule).
- B. <u>Taxes</u>: It is to be noted that all applicable taxes are to be included in the Contract prices for all work and equipment.
- C. <u>Intent of Specifications</u>: These Specifications specify and show materials deemed most suitable for the service anticipated. This is not done, however, to eliminate other products equally as good and efficient. The Contractor shall prepare his bid based on the particular materials specified. The awarding of the contract shall constitute a contractual obligation to furnish the specified materials or approved equal materials.

SECTION 2 GENERAL SITE WORK

Index

2-01 General2-04 Permanent Vegetation2-02 Earthwork2-05 Erosion Control2-03 Storm Drainage2-06 Payment

- **2-01. GENERAL:** Work under this section consists of all clearing, grubbing, excavation, borrowing, grading, topsoil, storm drainage, fertilizing, grassing, and other items necessary for general site preparation, erosion control, and completion in accordance with the Drawings and these Specifications. Construction materials and methods shall conform to SCDOT <u>Std Specs</u>, latest edition with exceptions as outlined in this section.
- **2-02. EARTHWORK**: All earthwork construction methods and materials shall conform to Section 200 of the SCDOT <u>Std Specs</u>. Cleanup of the site shall be made upon completion of any major part thereof and all excess material disposed of to the Engineer's satisfaction. Excess material shall be disposed of offsite.
- A. <u>Clearing and Grubbing</u>: This work shall consist of clearing, grubbing, removing, and disposing of all vegetation, trees, stumps, posts, debris, pipes, pavement, and obstructions in order to construct road as designed. All construction methods shall conform to Section 201 of the SCDOT <u>Std Specs</u>, unless stated otherwise in the plans or in these specifications.
 - 1) The Contractor shall consult with the Owner and Engineer prior to beginning clearing, and a full understanding is to be reached as to procedure. The Contractor shall then conduct clearing and grubbing operations in strict accordance with these agreements, and as shown on the Drawings.
 - 2) Burning of cleared material will be allowed provided local authorities give permission and necessary permits are obtained.
- B. Roadway and Drainage Excavation: This work shall consist of the removal and satisfactory placement and compaction or disposal of all materials of whatsoever character encountered within the limits of the right-of-way and borrow pits, including intersecting roads, driveways, ditches, channels, parking areas, removal and replacement of unsuitable material in subgrade or under structures, stripping the roadway, stripping of material pits, and shall include such excavation as is necessary for the formation, compaction, and shaping of all embankments, subgrade, shoulders, slopes, intersections, approach ramps, and private entrances to conform to the typical

cross section shown on the plans and to the lines and grades established by the Engineer. All construction methods and materials shall conform to Section 203 of the SCDOT <u>Std Specs</u>, unless stated otherwise in the plans or in these specifications.

- 1) <u>Classification:</u> All excavation will be unclassified, unless stated otherwise. Overhaul shall not be paid for directly. Overhaul shall be included in the unit price for unclassified excavation. The contractor shall dispose of all surpluses (cut) material off-site at his expense. Also, off-site fill material necessary for the proper construction of the embankment, subgrade or subbase shall be included in the unit price for unclassified excavation.
- 2) <u>Procedures:</u> All excavation and grading shall be confined to the construction area, as shown on the Drawings, and shall be done in an approved manner, with proper equipment.
- 3) <u>Dewatering:</u> Depending upon the construction season, high groundwater levels may be encountered at the construction site. The Contractor shall provide, where required, open channel ditches, pumping sumps, well points or whatever other means are necessary to dewater the site prior to initiation of stripping and construction activities.
- C. <u>Embankment Construction</u>: This work shall consist of the formation of embankments in accordance with Section 205 of the SCDOT <u>Std Specs</u>, unless stated otherwise in the plans or in these specifications. Embankment construction will not be paid for directly but will be considered a necessary part of the work paid for under the items included in the contract prescribed under the Roadway and Drainage Excavation.
 - 1) The Owner may retain the services of a testing laboratory to perform all required soils sampling and testing. In areas where the density of the fill or embankment is specified, field density tests may be performed in sufficient numbers to ensure that the specified density is being obtained. These tests will be made at no cost to the Contractor. Areas in which testing reveals compaction below the specified density shall be reworked by the Contractor until specified compaction is attained.
 - 2) The contractor will provide a three-axle vehicle (and driver) with a minimum gross weight of 18 tons in order to proof roll any location the engineer deems necessary. The Contractor shall rework areas in which proof rolling reveals deficiencies until acceptable compaction is attained.
 - 3) Material that is too dry for proper compaction shall be moistened by suitable watering devices, turned, and harrowed to distribute the moisture and then properly compacted. When material is too wet for proper compaction, drying shall be accomplished by spreading and disc harrowing. Should weather conditions prevent proper drying, operations shall cease until such time as drying is possible.

- 4) Borrow/Fill (unclassified) material, as needed, will be provided by the Contractor from the work site or other acceptable source, approved by Engineer and Owner as a borrow pit. Only the following soil types are acceptable for use as fill material: A-1, A-2-4, A-2-5, A-3, A-4(0), and A-2-6(0). Borrow shall be brought up in eight (8) inch lifts. The Contractor will have an independent testing laboratory verify soil type and density.
- D. <u>Subgrade</u>: This work shall consist of the construction and preparation of the subgrade on that part of the roadway intended to receive the pavement, sidewalk, curb, curb and gutter, base course, and shoulders. All construction methods and materials shall conform to Section 208 of the SCDOT <u>Std Specs</u>, unless stated otherwise in the plans or in these specifications. The subgrade will not be paid for directly but shall be considered as included and paid for in the various pay items of the contract.
- E. <u>Topsoil</u> shall consist of a natural loamy soil suitable as surfacing for lawns or roads, occurring usually in a surface layer six to eight inches thick. It shall be free from stones, sticks, weeds, unacceptable grass and other objectionable material. Topsoil shall be placed on the entire shoulder area. It shall be distributed to a depth of four inches, measured loose, dressed off neatly to finish grade and all sticks, weeds, or other debris removed. Topsoil shall not be paid for directly but shall be considered as included and paid for in the various pay items of the contract. All topsoil shall be approved by the Engineer.
- **<u>2-03. STORM DRAINAGE</u>**: Construction materials and methods shall conform to Section 714 of the SCDOT <u>Std Specs</u>, latest edition, unless otherwise specified.
- A. <u>Permanent Pipe Culverts</u> shall conform to the requirements of *SCDOT Supplemental Technical Specifications for Permanent Pipe Culverts* (SC-M-714), latest edition, unless stated otherwise in the plans or in these specifications. Culvert types for each project shall be of the same material (i.e., all RCP, all HDPE, etc.).
 - 1) Reinforced Concrete Pipe (RCP): ONLY AASHTO M 198 Preformed Flexible Joint Sealant shall be allowed. Rubber Gasket Joints shall not be used. Concrete pipe joint installation shall be in accordance with the recommendations of the manufacturer of the joint material. If, while making the joint the jointing material becomes loose and can be seen through the exterior joint recess when the joint is pulled up to within one inch of closure, the pipe shall be removed and the joint remade.
 - 2) <u>Corrugated High Density Polyethylene (HDPE):</u> ONLY AASHTO M 294, Type S pipe with an outer corrugated high density pipe wall and a smooth inner shall be used for permanent applications.

- 3) Layouts of pipelines and invert elevations at governing points are shown on the Drawings. All grades shown as pipe elevations are to be bottom inside of pipe. All pipes in place shall be approved by Engineer before backfilling is begun.
- 4) All backfill will be Pipe Structural Backfill material, unless otherwise shown in the plans. Structural backfill will be well graded sand or gravel meeting the requirements SC-M-714. Geotextile wrap, if required, shall be included in the cost of the pipe.
- 5) Contractor shall provide AASHTO accredited independent testing firm to substantiate density requirements as stated in SC-M-714 and as follows:
 - a. Foundation for Pipe shall not be less than 95.0% of the maximum dry density when measured in accordance to SC-T-29.
 - b. Bed for Pipe: Ensure that bedding material outside the middle third of pipe is compacted to a minimum of 95.0% of the maximum dry density when measured in accordance to SC-T-29.
 - c. Pipe Structural Backfill: Ensure that the compaction of structural backfill is a minimum of 95.0% of the maximum dry density when measured in accordance with SC-T-29. A compaction pattern shall be established. For all culverts, a minimum of one verification compaction test at the spring line of the pipe will be taken for each run of pipe between drainage structures or pipe ends. In the event of 2 failing compaction tests within a single run of pipe (between drainage structures or pipe ends), remove the pipe structural backfill, clean trench and set a new compaction pattern at the engineer's discretion.
- B. <u>Perforated Pipe Underdrain</u>: This work shall consist of constructing an underdrain using perforated HDPE pipe and granular filter material in accordance with the plans and Section 802 of the SCDOT <u>Std Specs</u>, unless stated otherwise in these specifications.
- C. Removal OF Existing Pipe shall be performed in accordance with Section 202.4.3 of the SCDOT Std Specs, unless stated otherwise in the plans or in these specifications. Removing existing pipe will not be paid for directly but shall be considered as included and paid for in the various storm drainage and clearing and grubbing pay items of the contract.
- D. <u>Cleaning Out Pipe</u>: Thoroughly clean out the entire length of existing pipe culverts. Remove all debris and settlement that affects the hydraulic performance of the entire pipe, including all debris within two pipe diameters of each end of the pipe. Cleaning out pipe will not be paid for directly but shall be considered as included and paid for in the various storm drainage and clearing and grubbing pay items of the contract.

- E. <u>Catch Basins, Junction Boxes, and Drop Inlets</u> shall be constructed and installed per Section 719 of the SCDOT <u>Std Specs</u>, unless stated otherwise in the plans or in these specifications.
- F. <u>Headwalls</u> shall be constructed and installed per Section 722 of the SCDOT <u>Std Specs</u>, unless stated otherwise in the plans or in these specifications and shall include riprap class B installed per the plans and SCDOT Standard Drawings.
- 2-04. PERMANENT VEGETATION: This item shall include adding topsoil, cultivating, fertilizing, and planting grass on fill slopes, cut slopes and graded areas, as shown on the Drawings or required by the Specifications. Complete and full grass coverage of all areas to be grassed shall be obtained before these areas are acceptable. All eroded areas shall be filled and completely covered with grass before being accepted. The Contractor shall repair any damage due to erosion OR OTHER CAUSE and shall maintain all slopes and grassed areas in good condition until a grass cover acceptable to the Engineer and Owner is obtained. The construction methods and materials shall conform to Section 810 of the SCDOT <u>Std Specs</u>, unless stated otherwise in the plans or these specifications.
- A. <u>Materials</u> for topsoil, fertilizing and grassing shall be as follows and be approved by the Engineer prior to use. All materials necessary to achieve permanent grass coverage shall be included in the permanent vegetation unit price.
 - 1) Topsoil shall consist of a natural loamy soil suitable as surfacing for lawns or roads, occurring usually in a surface layer six to eight inches thick. It shall be free from stones, sticks, weeds, unacceptable grass and other objectionable material. Topsoil shall be placed on the entire shoulder area. It shall be distributed to a depth of four inches, measured loose, dressed off neatly to finish grade. Topsoil shall not be paid for directly but shall be considered as included and paid for in the various pay items of the contract. All topsoil shall be approved by the Engineer.
 - 2) Fertilizer shall be an acceptable commercial fertilizer known as 10-10-10, or equivalent, conforming in quality and preparation with the law of the State of South Carolina. For centipede grass, use only 15-0-15 or 16-4-8 fertilizer.
 - 3) Limestone shall be agricultural grade conforming to the current Rules, Regulations and Standards of the Fertilizer Board of Control at Clemson University. Liquid lime may be substituted for ground lime if it meets all requirements for agricultural grade lime specified in the specifications.
 - 4) Seed shall conform to the laws of the State of South Carolina and the requirements and regulations of the South Carolina Department of Agriculture.

- B. <u>Planting:</u> All preparation, fertilizing, planting and watering shall be done in an acceptable manner and by competent personnel. All labor and equipment necessary to achieve a permanent stand of grass shall be included in the permanent vegetation unit price.
 - 1) Preparation of Surface: The area to be seeded shall be loosened or pulverized to a depth of 3 to 4 inches by disc harrowing, all clods broken up, and all sticks, or other debris removed. Four inches of topsoil shall be added to enhance germination. The cost of the topsoil shall be included in the seed and mulch unit price. Fertilizer shall be distributed over the area at a minimum rate of 1000 pounds per acre, and limestone at a minimum rate of 2000 pounds per acre; and shall be incorporated in the top four inches by harrowing or otherwise. The surface shall be raked smoothly before applying the seed.
 - 2) Seeding: Seed shall be distributed on the prepared area by use of a commercial applicator that will provide an even distribution. Minimum application rates shall be as shown in the seed schedule on the plans and heavier applications shall be made where necessary to provide an acceptable cover. The total pounds of seed per acre shall be the sum total shown for all the varieties of seed in the schedule shown on the plans.
 - 3) The seed shall then be raked into the topsoil and lightly covered. After the seed is covered, the area shall be compacted and dressed smoothly by a culti-packer or other means acceptable to the Engineer. Immediately after seeding, the area shall be covered with a mulch of ripe native hay or other acceptable material. The mulch material shall be held in place by a covering with light poultry netting staked in place or by a coat of suitable asphaltic material, as specified and applied by SCDOT <u>Std Specs</u>.
 - 4) Temporary Cover: Should the grading be completed and ready for seeding at a time inappropriate for establishing permanent grass cover, temporary coverage shall be provided for protection of graded surfaces until such time that permanent cover can be established. Temporary cover shall be provided in accordance with the Temporary Seeding Schedule in the plans, and the Contractor shall return to the site and provide permanent cover, in the manner specified above.
- C. <u>Maintenance</u>: The Contractor shall mow, water, rake or perform any maintenance method necessary to achieve and maintain permanent grass coverage. The Contractor shall repair any damage due to erosion OR OTHER CAUSE and shall maintain all slopes and grassed areas in good condition until a PERMANENT grass cover acceptable to the Owner and the Engineer is obtained. All maintenance shall be considered as included and paid for in permanent or temporary vegetation unit price.

- 1) Watering: After planting is completed, the planted areas shall be sufficiently watered. Watering shall be continued as necessary until acceptable grass coverage is obtained.
- 2) Nitrogen: As soon as the plants show satisfactory growth, apply nitrogen evenly at the rate of 48 pounds per acre as necessary to achieve permanent vegetation. Unless otherwise permitted, apply the nitrogen in a solid form rather than in a liquid state. Do not apply nitrogen to stands of Sericea Lespedeza. Unless otherwise provided, do not apply nitrogen to temporary vegetation.
- 3) Mowing: Mow areas seeded or sodded under the Contract or other areas as necessary, to maintain the project in a satisfactory manner. Ensure that mowing results in a vegetation height of 4 to 6 inches.
- **2-05. EROSION CONTROL**: Erosion control measures shall comply with Section 815 of the SCDOT <u>Std Specs</u> and with Best Management Practices (BMP's) approved by SCDHEC, unless stated otherwise in the plans or these specifications. With the exception of silt fence, sediment tubes, and riprap; erosion control will not be paid for directly but shall be considered as included and paid for in the various pay items of the contract. Unit prices include maintaining all devices in good condition for the duration of the project.
- A. <u>Silt Fence and Sediment Tubes:</u> The Contractor shall install silt fence and sediment tubes in accordance with the manufacturers' specifications, the plans, and SCDOT <u>Std Specs</u>, section 815.
- B. <u>Erosion Control Blankets (ECB) and Turf Reinforcement Mats (TRM):</u> The Contractor shall install ECB's and TRM's in accordance with the manufacturers' specifications, the plans, and SCDOT Std Specs, section 815.
- C. <u>Stabilized Construction Entrance</u>: Locate a stabilized construction entrance, which is a temporary stone stabilized pad with a non-woven geotextile fabric underlining, at defined points of vehicular ingress and egress on construction sites to reduce the amount of mud, dirt, and rocks transported onto public roads by motor vehicles, equipment, and runoff. Taper the edges of the entrance out towards the road to prevent tracking mud at the edge of the entrance, and so that long vehicles do not leave the stabilized area when turning onto or off the paved roadway.
- D. <u>Riprap</u> shall conform and be installed in accordance with Section 804 of the SCDOT <u>Std Specs</u>. Riprap shall be Class A, unless otherwise specified, and be installed to a minimum thickness of 12 inches. Filter fabric shall be placed between the soil and the riprap. Check dams are included in the riprap unit price and check dam materials will conform to details shown in the plans.

- E. <u>Inlet Protection</u> shall be a weighted Inlet Structure Filter, Dandy Sack® Hi-flow, Dandy Pop®, or approved equal installed per the manufacture's specifications, the plans or at the engineer's direction.
- F. <u>CEPSCI Inspections</u>: The contractor shall have a South Carolina Certified Erosion Prevention and Sediment Control Inspector (CEPSCI) inspect all sediment and erosion control devices a minimum of once every calendar week, record daily rainfall data and verify the project is in compliance with the SCDHEC standard notes, SWPPP, SCDHEC Best Management Practices (BMPs), and all applicable SCDHEC permits. Inspections and reports will not be paid for directly but shall be considered as included and paid for in the various pay items of the contract.
 - 1) The contractor shall always maintain a rain-gage onsite.
 - 2) The contractor shall keep copies of written reports and rainfall data with the onsite SWPPP. If a SWPPP is not required, the contractor shall submit the weekly inspection reports and daily rainfall data to the engineer on a monthly basis.
- **2-06. PAYMENT:** Payment for all earthwork, storm drainage, grass and erosion control shall be included in the unit price for the related pay items. The various items for general site work will be paid for at the respective contract prices which shall include all labor, material, equipment, plants, services, and all incidentals required to complete work specified. No additional compensation will be considered, other than for the extension of unit price quantities beyond those in the Bid Schedule, or for work done under the Extra Work Clause of the Contract Documents.
- A. <u>Clearing and Grubbing</u> will be paid for at a lump sum price, which shall include clearing right of way or drainage easement and the removal and disposal of all debris, including cut material, trees, shrubbery, asphalt, concrete, structures and any items obstructing construction.
- B. <u>General Grading</u> will be paid for at the unit price per square yard shown in the bid, which shall include all costs of earth grading, excavation, moisture control, shaping, compaction and all other subgrade, embankment, roadway, and shoulder preparation, in place, as indicated on the Drawings.
- C. <u>Unclassified Excavation</u> will be paid for at the unit price per cubic yard replaced and/or removed, including all excavation, and hauling of all material, borrow and/or fill; formation and compaction of embankments, subgrade, subbase and shoulders to grade; disposal of surplus (cut) or unsuitable material; and the removal and resetting of mailboxes and signs. Only surplus (cut) material or borrow (fill) material will be paid under this pay item. Material that is moved within the job site shall be included in the general grading unit price.

- D. <u>Storm Drain Pipe</u> will be paid for at the unit price per linear foot for the various sizes and material shown in the Bid, which price shall include furnishing materials, trenching, bedding, placement, adjustment to grade, backfill, geotextile, headwalls, flowable fill, concrete collars, additional crushed stone base, compaction, testing, disposal of surplus material, removing or cleaning out existing pipe, connections and incidentals necessary for a complete job, in place.
- E. <u>Headwalls</u> shall be paid for at the unit price each including materials, construction, adjustment to grade, connection with culverts, excavation, backfilling, disposal of surplus material, reinforcing steel, grate, riprap class B, and incidentals necessary to complete the work, in place, regardless of the depth.
- F. <u>Riprap</u> shall be paid for at the unit price per ton including excavation, backfilling, preparation of slopes, disposal of surplus material, filter fabric, and all materials and incidentals necessary to complete the work, in place.
- G. <u>Permanent and Temporary Vegetation</u> will be paid at the unit price per square yard of Permanent Vegetation and Temporary Vegetation in the bid schedule. Four inches of topsoil shall be included in the unit price. Payment will be for Permanent Vegetation when a stand of acceptable permanent grass is established. The Contractor shall provide seed and fertilizer tickets, and required documentation before payment is released. ALSO, CONTRACT RETAINAGE WILL BE HELD UNTIL AN ACCEPTABLE STAND OF PERMANENT GRASS IS ESTABLISHED.
- H. <u>Erosion Control</u> shall be paid for at the unit price per linear foot of silt fence, sediment tube or weighted inlet filter, and per square yard of erosion control blanket or turf reinforcement mat, and each inlet protection unit which price and payment shall be full compensation for furnishing all materials, labor, tools, equipment and incidentals necessary to complete the work; and maintaining in good condition throughout the duration of the project.

SECTION 3 ASPHALT, HOT MIX ASPHALT SURFACE AND PAVEMENT MARKINGS

Index

3-01 General 3-05 Pavement Markings 3-02 Surface Course 3-06 Signs

3-03 Base and Sub-base 3-07 Acceptance and Cleanup

3-04 Geotextile 3-08 Payment

- **3-01. GENERAL:** The work under this Section consists of furnishing all materials, labor, equipment, and plant necessary to place and finish the hot-laid, asphalt concrete in accordance with these Specifications and as directed by the Engineer. All paved roadway construction shall be done in accordance with the applicable section of the SCDOT <u>Std Specs</u>, latest edition unless stated otherwise in the plans or these specifications.
- <u>3-02. SURFACE COURSE</u>: This work shall consist of <u>Asphalt Surface Course</u> <u>- Type C</u> composed of mineral aggregate and asphalt cement, mixed in an approved plant and constructed on a prepared surface in accordance with section 403 of the SCDOT <u>Std Specs</u>, unless stated otherwise in the plans or these specifications. Liquid anti-strip meeting requirements of SCDOT <u>Std Specs</u> section 401 may be used in lieu of hydrated lime. This work shall conform to the lines, grades dimensions, thickness and typical cross section shown on the plans or as otherwise specified by the Engineer.
- <u>3-03. BASE AND SUB-BASE</u>: Construction methods and materials shall be in accordance with Division 300 of the SCDOT <u>Std Specs</u>, latest edition.
 - A. <u>Base:</u> Materials and construction methods for base shall conform to SCDOT <u>Std Specs</u>:

Section 306 Cement Modified Base or

Section 305 Graded Aggregate Base (Alternative 8)

- 1) Only base materials as described Section 306 will be acceptable. All base materials shall be of the same type, from a source approved by the Engineer, and shall conform to gradation limits set forth in the SCDOT <u>Std</u> Specs.
- 2) The base course shall conform to the lines, grades, dimensions, and typical cross-sections shown on the plans or as directed by the Engineer and shall be primed.

- B. <u>Sub-base</u>: Materials and construction methods for the sub-base (if necessary) shall conform to SCDOT <u>Std Specs</u>, latest edition and must have Engineer's approval before placing.
- 1) Materials shall conform to one of the following AASHTO M 145 categories: A-1, A-2-4, A-2-5, A-3, A-4(0) or A-2-6(0); and shall have a Plasticity Index of 13 or less. The Contractor shall provide an independent testing laboratory verify density and soil type.
- 2) All sub-base materials shall be of the same type. The sub-base course shall conform to the lines, grades, dimensions, and typical cross-sections shown on the plans or as directed by the Engineer.
- C. <u>Testing</u>: All base and sub-base shall be proof rolled in the presence of the Engineer or their representative.
- 1) The contractor shall provide a vehicle (and driver) with a minimum gross weight of 18 tons in order to proof roll any location the engineer deems necessary. The Contractor shall rework areas in which proof rolling reveals deficiencies until acceptable compaction is attained.
- 2) The Owner may retain the services of a testing laboratory to perform soils sampling and testing. In areas where density is specified, field density tests may be performed in sufficient numbers to ensure that the specified density is being obtained. Areas in which testing reveals compaction below the specified density shall be reworked by the Contractor until specified compaction is attained.
- <u>3-04. GEOTEXTILE</u>: Geotextile shall be installed in place per the project plans, these specifications, and the manufacturer's specifications; and shall be AASHTO M288 Class 1 or 2, woven or non-woven as specified in plans installed in place; and shall meet ASTM minimum technical specifications indicated in the plans.
- A. <u>Installation</u>: Geotextile fabric shall be installed between the natural ground and the reinforced sub-base and/or rock-bed. Ensure that the natural ground, subgrade or rock-bed to receive the Geotextile fabric is free of loose or extraneous material and sharp objects that may damage the geotextile fabric during installation. Stretch, align, and place the Geotextile fabric in a wrinkle-free manner and ensure that it has intimate contact with the soil and/or rock-bed. Overlap adjacent geotextile fabric edges a minimum of two (2) feet. Overlap will not be paid for directly but is considered as included and paid for in the geotextile in place square yard pay item.
- B. <u>Repairs</u>: At the direction of the Engineer, repair or replace torn or punctured sections of the geotextile fabric. Cut out geotextile fabric damaged during installation by tearing or puncturing, and completely replace or repair by placing a piece

of fabric that is large enough to cover the damaged area with sufficient overlap, two (2) feet minimum, on all sides to secure the damaged geotextile fabric area.

- <u>3-05. PAVEMENT MARKINGS</u>: Construction materials and methods shall conform to sections 625 through 631 of the SCDOT <u>Std Specs</u>, unless stated otherwise in the plans or these specifications.
- A. <u>Pavement Markings</u> shall be the width and material specified in the plans and placed as shown in the plans, or as directed by the Engineer. Materials shall be on the latest applicable SCDOT Qualified Products List.
- <u>3-06. SIGNS</u>: Construction materials and methods shall conform to the MUTCD, and Section 650 through 655 of the SCDOT <u>Std Specs</u>, latest edition, unless stated otherwise in the plans or these specifications. Reflective material shall be of engineering grade or better.
- <u>3-07. ACCEPTANCE AND CLEANUP</u>: Only those materials and methods that have been demonstrated by Contractor tests or observations by Owners representative to meet these Specifications will be acceptable to the Owner.
- A. Quality Assurance: The Contractor shall perform appropriate asphalt tests, both at the plant and on-site to confirm compliance with specifications to the satisfaction of the Owner and SCDOT. The cost of testing shall be included in the unit price for the applicable asphalt. THE CONTRACTOR SHALL PROVIDE ASPHALT WEIGHT TICKETS AND DOCUMENTATION OF ALL REQUIRED SCDOT ASPHALT TESTING (ROADWAY AND LABORATORY) BEFORE PAYMENT FOR ASPHALT IS RELEASED.
- B. <u>Correcting Deficient Work:</u> The finished surface of the pavement shall be smooth and true to the established crown and grade. Any defective places shall be corrected. After completion of the final rolling the smoothness of the pavement shall be checked, any irregularities that exceed the specified tolerances shall be corrected by removing the defective work and replacing with new material, as directed by SCDOT or the Owner.
- C. <u>Final Cleanup</u>: Cleanup during construction activities and upon completion of work at the site(s) shall meet approval of Engineer and Owner. All debris, waste, damaged and excess materials, tools, equipment, etc. shall be removed from the site and public right-of-way. Debris and waste materials shall be disposed of in an approved manner and location in accordance with regulations. The Contractor shall remove and properly dispose of all excess asphalt resulting from the construction of this project.
- <u>3-08. PAYMENT</u>: The various items of asphalt concrete pavement work, base or sub-base, and pavement markings will be paid for at the respective contract prices which shall include all labor, material, equipment, plant, prime or tack coats, as appropriate and services required to complete work specified. No additional

compensation will be considered, other than for the extension of unit price quantities beyond those in the Bid Schedule, or for work done under the Extra Work Clause of the Contract Documents. FUEL AND ASPHALT PRICE ADJUSTMENTS WILL BE MADE TO BASE AND ASPHALT QUANTITIES ONLY IN ACCORDANCE WITH SCDOT MONTHLY INDEXES.

- A. <u>Asphalt Concrete Surface Course Type C</u> will be paid for at the unit price per square yard which shall include asphalt cement in the paving mixture, all costs of manufacture, transportation, placement, compaction, protection, site cleanup, prime or tack coats, as specified, in place and for all labor, equipment, tools, maintenance and incidentals necessary to complete the work. THE CONTRACTOR SHALL PROVIDE ASPHALT WEIGHT TICKETS AND DOCUMENTATION OF ALL REQUIRED SCDOT ASPHALT TESTING (ROADWAY AND LABORATORY) BEFORE PAYMENT IS RELEASED.
- B. <u>Base</u> will be paid at the unit price per square yard which shall include prime coat, hauling, spreading, mixing, shaping, fine grading, compaction, and maintenance, as specified, in place.
- C. <u>Sub-base</u> will be paid for at the unit price per cubic yard in place which shall include hauling, spreading, mixing, shaping, compaction and maintenance, as specified, in place.
- D. <u>Geotextile</u> (of the type and class) required will be paid for at the unit price per square yard which shall include furnishing and placing geotextile as specified or directed; and includes all materials, labor, equipment, tools, supplies, transportation, and incidentals necessary to fulfill the requirements of the pay item in accordance with the plans, the specifications, and manufacturers' recommendations, as specified, in place.
- E. <u>Pavement Markings</u> will be paid for at the unit price per linear foot of solid lane line, extension line, and stop bar; the unit price per single pavement arrow or double pavement arrow, and per message; the unit price for each raised pavement marker (RPM): and shall include all labor, material, equipment, and all incidentals required to complete work as specified, in place.
- F. <u>Signs</u> will be paid for at the unit price per each permanent sign and shall include all labor, material, equipment, and all incidentals required to complete the work per the MUTCD and the plans.

APPENDIX