

### NOTICE OF SOLICITATION – INVITATION TO BID: Bulloch County Board of Commissioners Engineering Department and the Office of Capital Projects

**DESCRIPTION OF PROJECT:** The Bulloch County Board of Commissioners is accepting sealed bids from qualified contractors for this project: **Bulloch County HA5 High Density Mineral Bond.** 

**TIME ALLOWED FOR PERFORMANCE:** Work shall commence within **ten (10)** calendar days and be completed within **ninety (90)** calendar days after issuance of the notice to proceed.

**TERMS AND TIME OF PAYMENT:** The contractor shall receive payment within fifteen (15) days of receipt of an approved invoice for quantities installed, with a retainage factor as specified in the bid package and contract. The County reserves the right to increase or decrease quantities for any work items from the awarded contract. Payment shall be based on the actual approved quantities of work performed, with no adjustment in the bid unit price.

**AWARD AND RESERVATIONS:** It is understood and agreed that in consideration of the sum of One Dollar and No/100 (\$1.00) cash in hand paid, receipt whereof is hereby acknowledged, the bidder agrees that this bid shall be an option, which is hereby given to the Purchaser to accept or reject this bid at any time within thirty (30) calendar days from the date on which it is opened and read. It is expressly covenanted and agreed that this bid is not subject to withdrawal by the bidder during the term of said option. The party submitting the bid is solely responsible for delivering the bid to the exact location and by the time stated. Award will be made to the lowest responsive and responsible bidder whose bid meets the requirements and criteria set forth herein; provided, however, that Bulloch County reserves the right to reject any and all bids and to waive any technicalities or informalities. Bulloch County reserves the right to use or not use any alternate bid associated with this solicitation.

OBTAINING PLANS, SPECIFICATIONS AND BID FORMS: Specifications and requirements may be obtained from and/or examined at the Bulloch County Engineer's Office at 115 N Main Street, Statesboro, Georgia 30458. Also, a bid package may be requested by emailing the Bulloch County Purchasing Manager, Faye Bragg, at fbragg@bullochcounty.net or by going to the County's https://bullochcounty.net/procurement/. It will be the sole responsibility of the contractor to periodically check Bulloch County's website for any addenda associated with this bid. Failure to include a signed copy of any addenda issued for this project in the submitted bid package will result in the submitted bid not being considered for this project. For technical questions concerning the bid, contact Bulloch County Engineer Brad Deal at bdeal@bullochcounty.net.

**AMOUNT OF PROPOSAL GUARANTY:** A bid bond in the amount of 5% of the total bid is required to be submitted with the bid. If the contract is awarded, the successful bidder will be required to furnish payment and performance bonds in the amount of the contract. Sureties for bid bonds, payment bonds, and performance bonds must be good and solvent sureties licensed to do business in the State of Georgia and must be in the most recent U.S. Treasury Department's list of approved sureties in Circular 570.

**TIME AND PLACE FOR SUBMISSION AND OPENING OF BIDS:** Vendors are responsible for the actual delivery of sealed bids during normal business hours to the Bulloch County Purchasing Office. The original bid along with one (1) copy and supporting documents must be submitted in a sealed clearly marked envelope. The deadline for receipt of all bids is **March 18, 2021 at 3:00 pm**, at which time the bids will be publicly opened and the cost components read and recorded at the Bulloch County North Main Annex, 115 N. Main St., Statesboro, GA 30458. The bid review team will then proceed to determine conformity with the specifications and other criteria. Upon the closure of the review, the bid review team will recommend selection of a vendor to the Board of Commissioners for final approval at their next subsequent regular meeting.

#### TERMS AND CONDITIONS OF PROCUREMENT

BID IDENTIFICATION: The outside of the sealed envelope shall include the wording: Bulloch County HA5 High Density Mineral Bond; Bid Opening: March 18, 2021 at 3:00 PM; Attn: Purchasing Manager.

<u>Disqualification</u>: Bids may be disqualified for: a) receipt of the bid by the County past the stated deadline; b) any irregularities; c) unbalanced unit price or extensions; d) unbalanced value of any items; or, e) failure to complete proposal information correctly. If in the opinion of the Bulloch County Board of Commissioners, the vendor is not in a position to perform the contract, the bid may be disqualified. The County reserves the right to waive any minor informality or irregularities.

<u>Lawsuits/Bribery</u>: Prospective vendors shall disclose any record of pending lawsuits, criminal violations and/or convictions, etc., conflicts of interest, or contract defaults.

<u>Liability</u>: The County is not liable for any cost incurred in the preparation of the bid. Nor is the County bound by any information provided unless reduced to writing and distributed as a written addendum.

<u>Clarification of submittals</u>: The County reserves the right to seek clarification of any point in a respondent's bid, or to obtain additional information.

Correction or withdrawal of bids, cancellation of awards: Correction or withdrawal of bids after the deadline for submitting bids has passed, or cancellation of awards or contracts may be permitted only to the extent that the vendor can show by clear and convincing evidence that a clerical mistake of non-judgmental character was made, or where the withdrawal or cancellation is in the best interest of the County.

<u>County Obligations</u>: Bulloch County has a standing policy to disqualify or withhold compensation to vendors, contractors and professional consultants if there are existing obligations to Bulloch County for any liens, ad valorem taxes, licenses or other financial remittances due to the county.

<u>Forms</u>: The vendor shall complete all forms included in Attachment A, including: a) Bid Form; b) Non-Collusion Affidavit; c) Vendor's Declaration; d) Contractor Affidavit.

<u>Brand Name</u>: This Invitation to Bid is issued for the provision and application of a specific brand-name road treatment product. Such identification is intended to be descriptive, and is to indicate the quality and characteristics of products that may be offered. Alternative products may be considered for award if clearly identified in the bid. Products must meet required specifications, and must be of a quality which will adequately serve the use and purpose for which intended.

<u>Bidder Substitutions</u>: Bidders offering substitutions or deviations from the specifications stated in the Invitation to Bid shall list such substitutions or deviations on the "Exceptions to Specifications" sheet provided, or on a separate sheet to be submitted with the bid. The absence of such list shall indicate that the bidder has taken no exception to the specifications. The evaluation of bids and the determination as to equality and acceptablity of products or services offered shall be the responsibility of the County.

<u>Samples</u>: When the County requires samples as part of the bid and vendor selection process, bidders must provide requested samples within the time allotted, and at no cost to the County unless otherwise specified. Any goods provided under contract shall conform to the sample submitted. The County will return samples only at the bidder's requiest, and at the bidder's expense, if they are not destroyed by testing.

<u>Award</u>: If awarded, the project will be awarded to the lowest responsive and responsible bidder. The vendor to whom the award is made will be notified at the earliest possible date. The purchaser reserves the right to reject the award to a vendor who has previously failed to perform properly, or to complete on time contracts of a similar nature.

<u>Contract</u>: The successful bidder will be required to execute a contract in the form attached hereto as Attachment D.

<u>Insurance.</u> Contractor shall purchase from and maintain in a company or companies authorized to do business in the state of Georgia the following types of insurance:

- A. Statutorily required workers' compensation insurance.
- B. General comprehensive liability insurance, with an endorsement naming the County and its officials, officers, and employees as an additional insured, and with limits of not less than \$1,000,000.00 per occurrence and \$2,000,000.00 aggregate.

C.Auto liability insurance, with an endorsement naming the County as an additional insured, and with limits of not less than \$1,000,000.00 per occurrence and \$2,000,000.00 aggregate.

The Contractor shall provide the County with certificates of insurance prior to the start of construction and thirty (30) days' written notice prior to cancellation, and registered as a corporate surety in the most recent edition of Circular 570 of the United States Department of the Treasury.

#### PROJECT PROFILE

This project includes crack-sealing and the installation of HA5 High Density Mineral Bond on the roads in three subdivisions in Bulloch County. Refer to the location maps in Attachment B for more information.

#### **Road Locations and Quantities:**

Subdivision	High Cotton	Sandalwood	Sweet Briar	Total
Crack Seal (Mile)	0.74	1.01	0.66	2.41
High Density Mineral Bond (SY)	10,150	13,100	9,310	32,560

#### SPECIFICATIONS AND SPECIAL PROVISIONS

Approximate bid quantities for unit cost pricing are included in **Form A: Bid Form**, as attached. In addition to bidding on proposed quantities, the following special provisions for this project shall apply:

- 1. The project shall commence within **ten (10)** calendar days and be completed within **ninety (90)** calendar days of issuance of the notice to proceed.
- 2. Contractor shall provide two coats of HA5 High Density Mineral Bond on all of the locations described in the Project Profile.
- 3. Materials and work shall conform with the specifications of Section 32 01 13.68 High Density Mineral Bond, as shown in Attachment C.
- 4. Contractor shall clean and crack seal all pavement prior to HA5 application. This includes removal of plant materials from cracks, edges, joints, and blowing cracks with compressed air. The roads in Sandalwood and High Cotton are inverted crown, and the work includes crack sealing the centerline joint in the roads.
- 5. The Contractor shall warranty their work for a period of five years when applied to pavement in appropriate condition. The warranty includes coverage for peeling and premature wear.
- 6. Final mat appearance will have no runoff onto concrete curbs and shoulders, no streaking, no light spots and no debonding due to road contaminants.
- 7. High Density Mineral Bond will be placed only in appropriate weather that will allow it to dry and have traffic back on the new treated surface in no longer than eight hours.

- 8. Contractor will propose a construction schedule and road closure plan to the County Engineer for approval, prior to beginning work.
- 9. Contractor shall be responsible for all traffic control during the project.
- 10. Contractor shall be responsible for transportation of residents between their homes and designated parking areas during the drying stage.
- 11. The County will provide the contractor with contact information for any garbage collection contractors that will require schedule coordination in each subdivision.
- 12. Contractor shall prepare and distribute a flyer to the affected residents with contact numbers to request transportation three days in advance of road closure.
- 13. The County shall provide a general information letter to the affected residents of the project 7 days in advance of road closure.
- 14. The County Engineer reserves the right to reject any defective material which does not meet specifications on-site.
- 15. Contractors shall bid on only those items provided in the bid schedule. No alternative material types submitted by the contractor will be considered during the bidding phase, unless an addendum addressing the request is issued.
- 16. The quantities shown on the Bid Form are estimated for bidding purposes only.
- 17. Any additional construction staking as may be required is the responsibility of the Contractor.
- 18. Engineering supervision of construction and necessary construction inspection will be performed by the County Engineer unless otherwise noted.
- 19. The contractor is responsible for cleaning up any waste materials or trash related to the contractor's work from project sites prior to payment of retainage.
- 20. The successful bidder shall furnish satisfactory performance and payment bonds each in an amount not less than one hundred percent (100%) of the total contract price from a good and solvent surety licensed to do business in the State of Georgia and registered as a corporate surety in the most recent edition of Circular 570 of the United States Department of the Treasury.
- 21. The successful bidder shall purchase from and maintain in a company or companies authorized to do business in the state of Georgia the following types of insurance: statutorily required workers' compensation insurance; general comprehensive insurance, with the County as an additional insured, and with limits of not less than \$1,000,000.00 per occurrence and \$2,000,000.00 aggregate; auto liability insurance, with an endorsement naming the County and its officials, officers, and employees as an additional insured, and with limits of not less than \$1,000,000.00 per occurrence and \$2,000,000.00 aggregate. The Contractor shall provide the County with certificates of insurance prior to the start of construction and (30) days written notice prior to cancellation.

- Other contractors or municipalities may be working on this project during the life of the contract awarded for performing this work. Bulloch County reserves the right to coordinate the work being performed on the same project by different forces and further reserves the right to schedule the construction in a sequence most advantageous to the County and convenience to the public. Also, certain public and private utilities and public agencies may be working within the project limits. No claims for extra compensation or adjustments in unit prices will be allowed the contractor because of any delay, inconvenience or extra work caused by other parties working on the project.
- 23. The Contractor shall be responsible for the protection of all existing utilities during construction of this project. Any utilities damaged by the Contractor shall be repaired in accordance with the related utility's specifications at the Contractor's expense.

#### VENDOR SUPPORT

The County staff will assist by providing vendor support to confer on technical matters relating to the project. The Office of the County Engineer will provide all relevant construction documents and will address all site-specific issues.

Project Management – Mr. Brad Deal, PE, County Engineer Bidding Procedure – Ms. Faye Bragg, County Purchasing Manager

### **BID SUBMISSION FORMAT**

Please submit one (1) original bid and (1) copy in a sealed envelope clearly marked on the outside as follows: **Bulloch County HA5 High Density Mineral Bond; Bid Opening: March 18, 2021 at 3:00 PM; Attn: Purchasing Manager.** Bid must be delivered to the Bulloch County Purchasing Office, 115 N. Main St, Statesboro, GA 30458, no later than March 18, 2021 at 3:00 PM, at which time and place the bids will be publicly opened and read aloud. **LATE BIDS WILL NOT BE CONSIDERED.** Bids should be bound or stapled whereby additional copies can be easily made by county staff. Pages should be 8 ½" X 11" in size with larger sheets folded to fit within bindings. The bid package should be ordered in the following format. All forms must be completed, signed and notarized where indicated. Failure to include any of the listed documentation will be just cause not to accept a submitted sealed bid for this project:

Bid Bond: In the amount of 5% of the total bid

Form A: Bid Form

Form B: Non-Collusion Affidavit

Form C: Vendor's Declaration

Form D: Contractor Affidavit

All bids must be USPS mailed, hand or service delivered to the following address, no faxes or emails are accepted for sealed bids:

Bulloch County Commissioners Attn: Purchasing Manager 115 N Main Street Statesboro, GA 30458

Bidders will be fully responsible for the delivery of their bids in a timely manner. Reliance upon U.S. Mail or other carriers is at the bidder's risk. Late bids will not be considered.

BID SCHEDULE						
ACTIVITY	DATE	ACTION				
Notice of Solicitation Issued	March 4, 2021	Begin circulation				
Vendor's Conference	NA	NA				
Return of Responses to	NA	NA				
Questions at Vendor's						
Conference						
Bid Submission Deadline	March 18, 2021 at	Submit one (1) original &				
and Bid Opening	3:00 p.m.	one (1) copy with all				
		attachments to:				
		Bulloch County BOC,				
		Purchasing Office,				
		115 N. Main St.,				
		Statesboro, GA 30458				
Estimated Award Date	April 6, 2021	Board of Commissioners				

### ATTACHMENT A: REQUIRED FORMS

FORM A: BID FORM

TO: Bulloch County Board of Commissioners

115 North Main Street Statesboro, Georgia 30458

ATTN: Purchasing Manager

### Base Bid:

Description	Unit	Est. Quantity	Unit Price	Extended Price
High Density Mineral Bond	SY	32,560	\$	\$
Crack Seal	Mile	2.41	\$	\$
Traffic Control & Mobilization	LS	1	\$	\$

# FORM B: NON-COLLUSION AFFIDAVIT The following affidavit is to accompany the bid: STATE OF: COUNTY OF: Owner, Partner or Officer of Firm: Company Name, Address, County and State: Being of lawful age and being first duly sworn, the above-named individual on oath says that he/she is the agent authorized by the vendor to submit the attached proposal. Affiant further states that neither the vendor nor any of its employees or agents has prevented or attempted to prevent competition in such bidding by any means whatever; nor has the vendor or any of its employees or agents prevented or endeavored to prevent anyone from making a bid or proposal therefor by any means whatever; nor has the vendor or any of its employees or agents caused or induced another to withdraw a bid or proposal for the work. Affiant further states that neither the vendor nor any of its employees or agents has directly or indirectly violated Section 36-91-21(d) of the Official Code of Georgia Annotated. FIRM NAME SIGNATURE TITLE

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_.

NOTARY PUBLIC

#### FORM C: VENDOR DECLARATION

The vendor understands, agrees and warrants:

That the vendor has carefully read and fully understands the full scope of the specifications.

That the vendor has the capability to successfully undertake and complete the responsibilities and obligations in said specifications.

That this bid shall be valid for 30 days.

That this bid may be withdrawn by requesting such withdrawal in writing at any time prior to <u>March 18, 2021 at 3:00 PM</u>, but may not be withdrawn after such date and time for a period of <u>30</u> days.

That Bulloch County reserves the right to reject any or all bids and to accept that bid which will, in its opinion, best serve the public interest. Bulloch County reserves the right to waive any technicalities or informalities in the bidding.

That by submission of this bid the vendor acknowledges that Bulloch County has the right to make any inquiry or investigation it deems appropriate to substantiate or supplement information supplied by the vendor.

If a partnership, a general partner must sign.

If a corporation the authorized corporate officer(s) must sign and the corporate seal must be affixed to this proposal.

VENDOR:		
Name	Title	
Name	Title	
AFFIX CORPORATE SEAL (if applicable)		
Subscribed and sworn to before me this day of	20	
NOTARY PUBLIC		

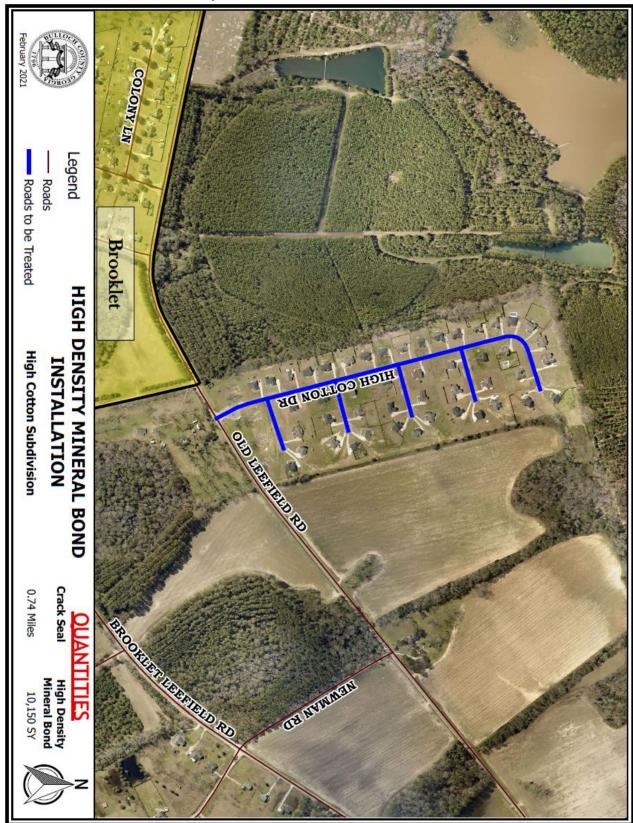
### FORM D: Contractor Affidavit under O.C.G.A. § 13-10-91(b)(1)

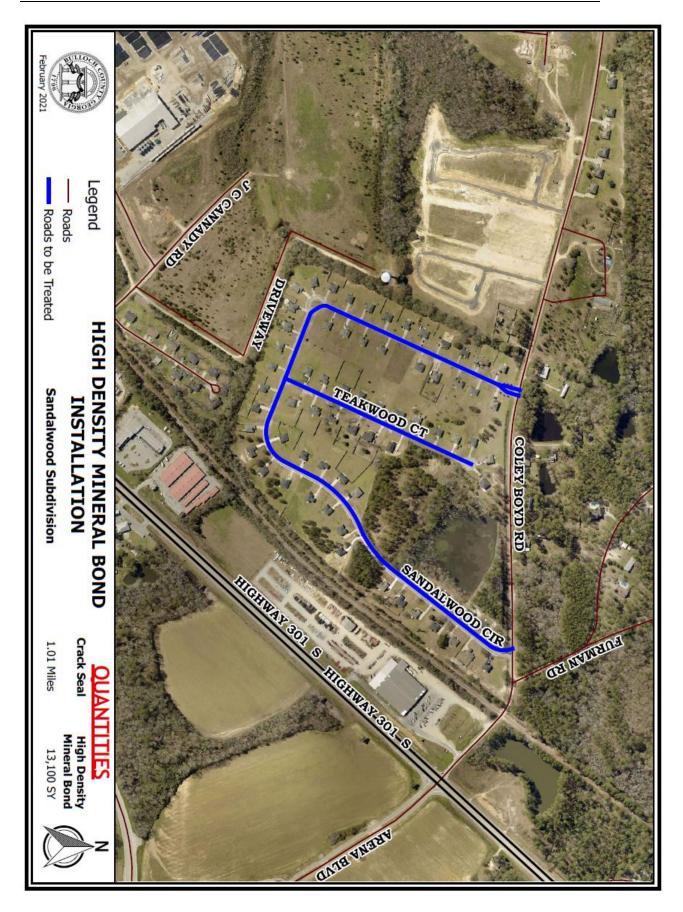
By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services on behalf of Bulloch County, Georgia has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned contractor will continue to use the federal work authorization program throughout the contract period and the undersigned contractor will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the contractor with the information required by O.C.G.A. § 13-10-91(b). Contractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

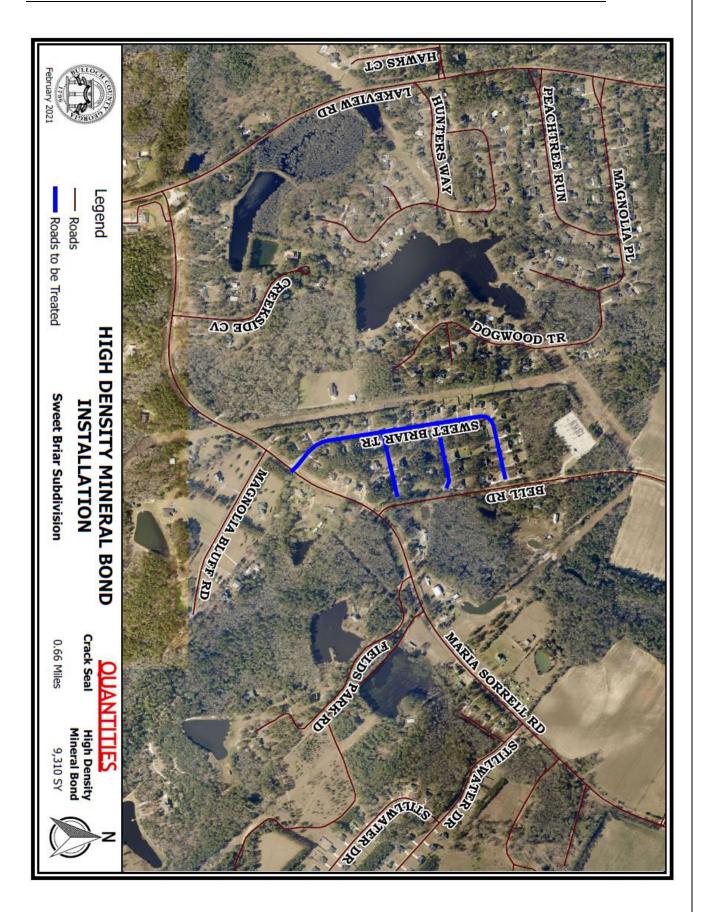
Federal Work Authorization E-verify Comp	any ID#	Date of Authorization	
Name of Company			
Name of Contractor			
Bulloch County HA5 High Density Mines Name of Project	ral Bond		
Bulloch County, Georgia Name of Public Employer	-		
I hereby declare under penalty of perjury the Executed on,, 20			(state).
Signature of Authorized Officer or Agent			
Printed Name and Title of Authorized Offic	er or Agent		
SUBSCRIBED AND SWORN BEFORE ME ON THIS THE DAY OF		<u>.</u>	
NOTARY PUBLIC			
My Commission Expires:			

<sup>\*</sup> As of the effective date of O.C.G.A. § 13-10-91, the applicable federal work authorization program is the "EEV/Basic Pilot Program" operated by the U.S. Citizenship and Immigration Services Bureau of the U.S. Department of Homeland Security, in conjunction with the Social Security Administration (SSA).

### **ATTACHMENT B: Location Maps and Details**







#### **ATTACHMENT C**

#### SECTION 32 01 13.68 LOADED FOR INSTALLATION HIGH DENSITY MINERAL BOND

#### PART 1 GENERAL

#### 1.1. SECTION INCLUDES

A. Mineral aggregate and asphalt binder slurry spread as a high density mineral bond seal coat over a roadway surface.

#### 1.2 REFERENCES

#### A. AASHTO Standards

R 9: Standard Recommended Practice for Acceptance Sampling Plans for Highway

Construction, B. ANSI Standards

B74.8: Procedure for Ball Mill Test for Friability of Abrasive Grain.

#### C. ASTM Standards

ASTM C 114: Standard Test Methods for Analysis of Hydraulic Cement.

ASTM C117: Standard Test Method for Materials Finer Than 0.075mm (No. 22) Sieve in Mineral Aggregates by Washing.

ASTM C128: Standard Test Method for Density, Relative Density (Specific Gravity), and Absorption of Fine Aggregate.

ASTM C 136: Standard Method for Sieve Analysis of Fine and Coarse Aggregates.

ASTM C 170: Standard Test Method for Compressive Strength of Dimension Stone.

ASTM C 604: Standard Test Method for True Specific Gravity of Refractory Materials by Gas Companison Pycnometer.

ASTM C 1326: Standard Test Method for Knoop Indentation Hardness of Advanced Ceramics.

ASTM D 217: Standard Test Method for Cone Penetration of Lubricating Grease

ASTM D 721: Standard Test Method for Oil Content of petroleum Waxes.

ASTM D 1644: Standard Test Method for Nonvolatile Content (Solids by weight).

ASTM D 2170: Standard Test Method for Kinematic Viscosity of Asphalts (Bitumens).

ASTM D 2172: Standard Test Methods for Quantitative Extraction of Bitumen From Bituminous Paving Mixtures.

ASTM D 2196: Standard Test Method for Rheological Properties of Non-Newtonian materials by Rotational (Brook field type) Viscometer.

ASTM D 2216: Standard Test Methods for laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass.

ASTM D 2486: Standard Test Method for determining wear resistance in cycles.

ASTM D 2697: Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings.

ASTM D 2939: Standard Test Method for Emulsified Bitumens used as Protective Coatings.

A STM D 3960: Standard Practice for Determining Volatile Organic Compound Content of Paints and Related Coatings.

ASTM E 70: Standard Test Method for pH of Aqueous solutions with the Glass Electrode.

#### 1.3 SUBMITTALS

- A. Results of wear resistance test current within one calendar year (Article 2.3).
- B. Traffic control and notification plan.
- C. Mix Design: 10 days prior to use, submit proportions of aggregate, filler, water, polymer, and emulsion in the mix.
- Equipment: List of construction equipment to be used.
- E. Certification from emulsion manufacturer that states the emulsion meets the requirements described in Article 2.1 of this Section.
- F. Warranty.

#### 1.4 QUALITY ASSURANCE

- A. CONTRACTOR has successfully completed at least five (5) projects of similar size and nature, using the same mix design as described in this section. Upon request, provide a list of five (5) projects which have demonstrated a five year minimum proven performance on a bituminous surface. Acceptable performance after five year period is no less than 70% residual coverage in the treated surface area.
- B. Foreman of the crew has completed at least three (3) projects of similar size and nature.
- C. Do not change the source of the emulsified asphalt or aggregate without supporting changes in the mix design.
- Reject asphalt emulsion that does not meet requirements of this section.
- E. Remove product found defective after installation and install acceptable product at no additional cost to OWNER.
- F. If requested, submit a quality control inspections and testing report describing source and field quality control activities performed by CONTRACTOR and its Suppliers.

#### 1.5 WEATHER

#### A. Temperature:

- Apply surface treatment material when air and roadbed temperatures in the shade are 55 deg F. and rising.
- Do not apply surface treatment material if pavement or air temperature is below 60 deg F. and falling or if the finished product will freeze before 48 hours.
- B. Moisture: Do not apply surface treatment materials during rain, unsuitable weather, or 24 hours prior to forecast rain.

#### 1.6 NOTICE

- A. Follow Laws and Regulations concerning when and to whom notices are to be given. Give written notices at least 2 days prior to applying surface treatment material.
- B. Indicate application time and when the surface can be used. Include a map signifying the specific area to be closed providing detailed directions.
- C. Provide a minimum of two contacts that represent the CONTRACTOR with phone numbers which can be reached at any time during the project.
- D. Warn of potential vehicle tow away and other construction issues affecting neighborhood.
- E. Should work not occur on specified day, send a new notice before the end of the day.

#### 1.7 ACCEPTANCE

#### A. General:

- Acceptance is by Lot.
- If non-complying material has been installed and no price for the material is specified, apply price adjustment against cost of work requiring complying material as part of its installation, Section 01 29 00.
- Opening flexible paving surface treatment to vehicular traffic does not constitute acceptance.
- Observation of CONTRACTOR's field quality control testing does not constitute acceptance. Such testing; however, may be used by ENGINEER for acceptance if requirements of Section 01 35 10 are met.
- Dispute resolution, Section 01 35 10.

#### B. Surface Treatment Material:

- Paving Asphalt: Acceptance is not specified in this Section. Refer to Section 32 12 03 and the material requirements in this Section for acceptance.
- Aggregate Source: Verify suitability of aggregate source.
- Mixture, Ready to Install: Lot size is one days' production with 10,000 gallons sub-lots. Collect samples randomly and test for density, ASTM D2939.

#### C. Placement

- Lot size is 1 lane mile. Sub-lot size is 0.1 lane mile.
- Mat Appearance:
  - a. No runoff onto concrete curbs and shoulders.
  - No streaking.
  - c. No light spots.
  - d. No de-bonding due to road contaminants.
- D. Price Adjustment: Mat appearance defects may be accepted if a 2.5 percent price reduction is applied against the Lot for each condition not met. Maximum price reduction for the Lot is 5 percent. ENGINEER may waive price adjustment if CONTRACTOR corrects deficiencies at no additional cost to OWNER.

#### 1.8 WARRANTY

A. The surface treatment material must carry a warranty from both the CONTRACTOR and the manufacturer for a period of five (5) years when applied to pavement in appropriate condition. The warranty includes coverage for peeling and pre-mature wear.

#### PART 2 PRODUCTS

#### 2.1 EMULSIFIED ASPHALT

A. Non-ionic thixotropic mineral colloid at 77 Deg, F, meeting requirements of Section 32 12 03 and the following.

Table 1 - Supplemental Paving Asphalt Properties							
Criterion	ASTM	Min	Max				
Brookfield Viscosity.	D2196	8,000	20,000				
cPs Acidity. pH	E70	6.5	7.5				
Weight, lbs/gal	D2939	8.7	9.1				
Solids, percent	D2939	47	53				

### 2,2. AGGREGATE

#### A. Refined Corundum:

	Pf	vsical Pr	ooer fies			
Criter	ion	Stan	dard	Min	Max	
Specific Gravity		ASTM	C 1326		3.92	
Knoop 100 Hard	iness	ASTM	D 721		2,050	
Ball Mill Fiabili	ty (14 grit)	ANSI	B74.8		50	
Color		ASTM	C 604	Brown		
Shape	ihape		D 2216	Blocky with sh edges		
Sieve	AST	Grada M	Tar	get	Tolerance	
No. 35			9		+1 and -2	
No. 45	C 13	. 1	8	5	+/-2	
No. 50	C 13	° †	3	5	+/-2	
No. 60		1	7		+/- 2	

#### 2.3 MIX DESIGN

A. Use the following table as a guide for HDMB in LOADED Form (Ready to Install).

Asphalt Emu	sion		
Criterion Asphalt	ASTM	Min	Max
content by weight, percent	D 2172	14	
Residual asphalt by weight, percent	D 2939		30
Viscosity, Centipoise	D 2196	850cPs	
Weight per gallon, pounds	D 2939	9.0	15010
pH	E 70	6.1	7.9
Solids weight by percent, percent	D 1644	38	
Aggregate	e		
Criterion	ASTM	Min	Max
Bentonite and attapulgite clay, percent	-	1	1.8
Refined corundum / slate content, percent	-	30.5	-
Sand or other round aggregate, percent	-		6
Maximum VOC:, g/1	-	- 8	10
Wear resistance @ 10,000 cycles (70 mils wet), percent	D 2486*		9.5
Pinholes on glass	-	No grazing	on film
Resistance to re-emulsification		Very good	

<sup>\*</sup>Modified version of D2486: Modified brass brush 1000 grams attached on top, glass substrate panels air dried three days at room temperature, then soaked 24 hours prior to testing. Report in percentage of dry film loss at 10,000 cycles

B. Use the following table as a guide for HDMB in CONCENTRATE Form.

Asphalt Emu	Ision	THE RESERVE AND ADDRESS OF THE PARTY OF THE	
Criterion	ASTM	Min	Max
Asphalt content by weight, percent	D 2172	17	
Residual asphalt by weight, percent	D 2939		30
Cone penetration viscosity, cST/sec	D 217	350	450
Weight per gallon, pounds	D 2939	11	
Solids volume by percent, percent	D 2697	55	65
Solids weight by percent, percent	D 1644	60	
VOC. g/I	D 3960		10
Aggregate			(6)
Criterion	ASTM	Min	Max
Bentonite and attapulgite clay, percent	**		1.8
Refined corundum / slate content, percent		34.5	18
Sand or other round aggregate,			6
percent Maximum VOC:, g/l	**		10
Wear resistance @ 12,000 cycles (70 mils wet), percent	D 2486		9.5
Pinholes on glass	-	No grazin	g on film
Resistance to re-emulsification	1	Very good	

<sup>\*</sup>Modified version of D2486: Modified brass brush 1000 grams attached on top, glass substrate panels air dried three days at room temperature, then soaked 24 hours prior to testing. Report in percentage of dry film loss at 1 0,000 cycles

#### PART 3 EXECUTION

#### 3.1 CONSTRUCTION EQUIPMENT

- A. Paver: Continuous flow mixing unit.
  - 1. Capable of applying at least 15,000 square yards of material per day.
  - 2. Equipped with full sweep helical mixer to assure proper suspension of fine aggregates.
  - Equipped with two separate filters. The primary filter should be at least 200 square inches with a filter face of 3/8 inch. The secondary filter needs to be at least 1500 square inches with a filter face of 1/8 inch.
  - Has a retractable spray bar with spacing of 16 inches between each discharge orifice. The bar should be
    positioned minimum of 20 inches from the surface, no more than 23 inches from the surface.
- B. Paver Calibration: On a test strip at least 300 feet long, determine the correct pump settings on the application equipment. Apply material with pump settings at 80% of maximum output at a ground speed of 352 feet per minute.

#### 3.2 PREPARATION

#### A. General:

- Severely raveled or porous pavements may require tack coat.
- Asphalt concrete in lay may be required in rut deformations.
- B. Surface Repair: Patch any holes, raveled areas, and low areas with asphalt concrete.
- C. Crack Repair: Section 32 01 17.
  - Remove plant materials from cracks, edges, and joints.
  - Blow cracks clean with compressed air.
  - Seal cracks with hot pour crack sealant. Remove excess sealant.
  - Allow crack seal to dry before applying surface treatment material.
- D. Traffic control: Grind off existing pavement markings and lane striping. Use reflective tabs to mark stripping location before applying surface treatment material.

### E. Cleaning:

- 1. Remove loose material, mud spots, sand, dust, oil, vegetation and other objectionable material.
- Do not flush water over cracks or apply pressurized water to cracked pavement.
- 3. Clean the surface immediately prior to installation.

#### F. Tack Coat:

- Apply tack coat to high absorbent, polished, oxidized, or raveled asphalt surfaces or to concrete or brick surfaces.
- Tack coat should consist of one part emulsified asphalt, three parts water and should be SS or CSS grade.

#### 3.3 PROTECTION

- A. Implement the traffic control plan requirements. Provide safe passage for pedestrians and vehicles. Do not proceed without flaggers.
- B. Protect trees, plants, and other ground cover from damage.
- C. Prune trees to allow equipment passage underneath, Section 32 01 93. Repair tree damage at no additional cost to OWNER.
- D. Install invert covers, Section 01 71 13.
- E. Mask offend of streets and intersection to provide straight lines:
  - Make straight lines along lip of gutters and shoulders. Keep same thickness in these areas. No runoff
    on these areas will be permitted.
  - Vary edge lines no more than 1/2 inch per 100 feet.
- F. Protect curb, gutter, and sidewalk from spatter, mar, or overcoat.
- G. Protect surface treatment materials from traffic until it has cured.

#### 3.4 APPLICATION

A. Application Rate: Two separate applications coats are required. The first application must be thoroughly dry and free of any damp areas before the second application begins. Machine settings must match the

# ATTACHMENT D CONTRACT FORM - EXAMPLE

### BULLOCH COUNTY, GEORGIA ROAD IMPROVEMENT CONTRACT

Contra	actor Name and	d Address	S: 						
Phone Projec									
			,	AGREEME	NT				
This	Agreement,	made		entered , by an					oi N <b>TY</b>
•	ical subdivisior rity, the Bulloch		ate of C	Georgia, ac	ting by	and thre	ough its	gover e Cou	ning nty")
	actor").								

The County and the Contractor hereby agree as follows:

1. <u>Scope of Work.</u> The Contractor shall furnish all labor, materials, and equipment and perform all of the work as described in the Contract Documents for the following project:

### **Bulloch County HA5 High Density Mineral Bond**

- 2. Contract Documents. The Contract Documents consist of the following:
  - a. This Agreement and any attachments hereto, which attachments are incorporated herein by reference.
  - b. The Notice of Solicitation/Invitation to Bid, including any addenda, for the above-referenced project, which is attached hereto and incorporated herein by reference.
  - c. Any specifications or standards referenced in this Agreement or the Notice of Solicitation/Invitation to Bid, including but not necessarily limited to the Georgia Department of Transportation Standard Specifications for Construction, 2013 edition, or as subsequently amended (hereinafter the 'GDOT Standard Specifications"), which specifications are incorporated herein by reference.
  - d. The Contractor's completed Bid Form, Non-Collusion Affidavit, and Vendor's Declaration, which executed documents are attached hereto and made a part hereof by reference.

- 3. Time for Completion; Extensions; No Damages for Delay. The work shall commence within 10 (ten) calendar days and be completed within 90 (ninety) calendar days after the County's issuance to the Contractor of a Notice to Proceed. No compensation or payment of any kind, other than an extension of time, shall be owed to the Contractor on account of delays in the progress of the work caused for any reason, whether avoidable or unavoidable and whether or not caused in whole or in part by any act or omission of the County or any of its agents or employees, and the Contractor agrees that it will make no claim for additional compensation for any such delays. An extension of time for completion of the work shall be the Contractor's sole remedy for any such delays.
- 4. <u>Contract Sum.</u> The County shall pay the Contractor for the performance of the work based on the unit prices stated on the Bid Form. It is understood that the quantities shown are approximate only and subject to either increase or decrease, and any increases or decreases are to be paid for at the contract unit price given.
- 5. Progress Payments. The County shall make monthly progress payments on account of the contract, less retainage of ten percent (10%), based upon the Contractor's submission to the County of an invoice detailing the work completed. The period covered by each invoice shall be one calendar month ending on the last day of the month, and payment shall be due within fifteen (15) days of the County's receipt of the invoice. Each invoice shall be accompanied by appropriate documentation of the quantities for which payment is requested.
- 6. Acceptance and Final Payment. The Contractor shall notify the County when the Contractor considers the project to be complete. The County shall promptly schedule a final inspection of the entire project, and the Contractor shall accompany the County's representative(s) for such final inspection. The County shall develop a punch list for the project to denote any deficiencies that must be corrected by the Contractor. Final payment shall be due thirty (30) days after the Contractor has completed any punch list items and the County has accepted the project as complete.
- 7. <u>Materials, Appliances and Employees.</u> Except as otherwise noted, the Contractor shall provide and pay for all materials, labor, tools, water, power and other items necessary to complete the work. Unless otherwise specified, all material shall be new, and both workmanship and materials shall be of good quality. All workmen and subcontractors shall be skilled in their trades.
- 8. <u>Surveys</u>, <u>Permits and Regulations</u>. The County shall furnish all surveys unless otherwise specified. Permits and licenses necessary for the prosecution of the work shall be secured and paid for by the Contractor. Easements for permanent structures or permanent changes in existing

facilities shall be secured and paid for by the County unless otherwise specified. The Contractor shall comply with all laws and regulations bearing on the conduct of the work and shall notify the County if the Contract Documents are at variance therewith.

- 9. <u>Protection of Work, Property and Persons.</u> The Contractor shall adequately protect the work, adjacent property and the public and shall be responsible for any damage or injury due to his act or neglect.
- 10. <u>Access to Work.</u> The Contractor shall permit and facilitate observation of the work by the County and its agents and public authorities at all times.
- 11. Changes in the Scope of the Work. The County may order changes in the scope of the work, the contract sum and time for completion being adjusted accordingly. Any changes in the scope of the work involving an increase or decrease in quantities for which unit prices are quoted on the Bid Form shall result in a change order increasing or decreasing the approximate quantities stated on the Bid Form, and the increase or decrease in cost for such changes shall be paid for in accordance with the unit prices quoted on the Bid Form. Any changes involving labor or materials not included in the quantities for which unit prices are quoted on the Bid Form shall result in a change order for which the Contractor shall be compensated on a lump sum basis or on the basis of unit prices established for the additional work required by such changes. No additional work outside the scope of the Contract Documents shall be performed without a written change order executed by the County Manager. Overhead and profit on additional work shall be limited to the following percentages:

14% overhead and profit on additional work performed by the Contractor's own forces; or

- 7.5% overhead and profit on additional work performed by a subcontractor of the Contractor.
- 12. Correction of Work. The Contractor shall re-execute any work that fails to conform to the requirements of the contract and that appears during the progress of the work, and shall remedy any defects due to faulty materials or workmanship which appear within a period of one year from the date of completion of the contract and final acceptance of the work by the County unless the manufacturer of the equipment or materials has a warranty for a longer period of time, which warranties shall be assigned by Contractor to County. The provisions of this article apply to work done by subcontractors as well as to work done by direct employees of the Contractor.
- 13. County's Right to Terminate Contract.

Termination For Cause: Should the Contractor neglect to prosecute the work properly, or fail to perform any provision of the contract, the County, after seven days' written notice to the Contractor, and its surety, if any, may, without prejudice to any other remedy the County may have, make good the deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor or, at the County's option, may terminate the contract and take possession of all materials, tools, appliances and finish the work by such means as the County sees fit, and if the unpaid balance of the contract price exceeds the expense of finishing the work, such excess shall be paid to the Contractor, but if such expense exceeds such unpaid balance, the Contractor shall pay the difference to the County.

<u>Termination for Convenience:</u> The County shall also have the right to terminate this contract at any time for any reason by giving at least thirty (30) days' written notice to the Contractor. In such event, the Contractor will be paid a fair and reasonable payment as determined by the County the work complete as of the date of termination.

- 14. Withholding of Payments. Payments otherwise due may be withheld on account of, but not necessarily limited to, the following reasons: unsatisfactory job progress; defective construction which has not been remedied; disputed work; third-party claims filed or reasonable evidence that a claim will be filed; failure of the Contractor or its subcontractors to make timely payments for labor, equipment, and materials; damage caused by the Contractor to the County, other contractors, or subcontractors; or reasonable evidence that the contract cannot be completed for the unpaid balance of the contract sum.
- 15. <u>Insurance.</u> Contractor shall purchase from and maintain in a company or companies authorized to do business in the state of Georgia the following types of insurance:
  - A. Statutorily required workers' compensation insurance.
  - B. General comprehensive liability insurance, with an endorsement naming the County and its officials, officers, and employees as an additional insured, and with limits of not less than \$1,000,000.00 per occurrence and \$2,000,000.00 aggregate.
  - C. Auto liability insurance, with an endorsement naming the County as an additional insured, and with limits of not less than \$1,000,000.00 per occurrence and \$2,000,000.00 aggregate.

The Contractor shall provide the County with certificates of insurance

- prior to the start of construction and thirty (30) days' written notice prior to cancellation, and registered as a corporate surety in the most recent edition of Circular 570 of the United States Department of the Treasury.
- 16. <u>Payment and Performance Bonds.</u> Prior to the start of construction, the Contractor shall furnish to the County payment and performance bonds each in an amount not less than one hundred percent (100%) of the total contract price from a good and solvent surety licensed to do business in the state of Georgia.
- 17. <u>Separate Contracts.</u> The County has the right to let other contracts in connection with the work and the Contractor shall properly cooperate with any such other contractors.
- 18. Attorney's Fees and Expenses. Should the Contractor default in any of the provisions of this Agreement and should the County employ an attorney to enforce any provision hereof or to collect damages for breach of this Agreement or to recover on any payment or performance bond furnished by the Contractor, the Contractor and its surety agree to pay the County such reasonable attorney's fees and expenses of litigation as the County may expend therein.
- 19. Choice of Law and Venue. All actions arising out of, or in any way connected with this contract, shall be litigated and decided in the Superior Court of Bulloch County, and the Contractor hereby submits itself to the jurisdiction and venue of that court and waives any rights to insist upon venue or jurisdiction elsewhere or raise any such defenses in any such action.
- 20. <u>Cleaning Up.</u> The Contractor shall keep the premises free from accumulation of waste material and rubbish and at the completion of the work he shall remove from the premises all rubbish, implements and surplus materials and leave the project premises broom-clean.
- 21. <u>Indemnification</u>. The Contractor agrees to indemnify, hold harmless, and defend the County, its officials, and employees (hereinafter collectively "the indemnitees") from and against any and all claims, damages, liabilities, suits, proceedings, costs, and expenses of litigation (including, without limitation, reasonable attorney's fees) related to or arising in any way out of the performance of this Agreement, unless such is attributable to the sole negligence of the indemnitees.
- 22. <u>Prevailing Wages.</u> The hourly minimum rate of wage which may be paid to laborers, workers or mechanics in each trade or occupation to be employed in the performance of the contract shall be not less than such specified hourly minimum rate of wage in the performance of this contract as required by law.

- 23. <u>Equal Opportunity.</u> The Contractor shall not discriminate against any employee or against any applicant for employment on the basis of race, religion, sex, color or national origin.
- 24. No Waiver. No failure on the part of either party to this Agreement at any time to require performance by the other party of any term of this Agreement shall be taken or held to be a waiver of such term or in any way affect such party's right to enforce such term, and no waiver on the part of either party of any term of this Agreement shall be taken or held to be a waiver of any other term hereof or the breach thereof.
- 25. <u>Assignment.</u> This Agreement may not be assigned by either party without the written consent of the other party, and any purported assignment without such written consent shall be null and void. In the event of a valid assignment, this Agreement shall be binding upon and inure to the benefit of the respective successors and assigns of the parties hereto.
- 26. <u>Immunity.</u> Nothing contained in this Agreement shall be construed or deemed to be a waiver of any immunity to which the parties, their officials, or employees are legally entitled.
- 27. Legal Construction; Severability. This Agreement shall be governed by the laws of the state of Georgia. In case any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement and this Agreement shall be construed as if the invalid, illegal, or unenforceable provision had never been contained in it.
- 28. Entire Agreement; Amendment. This Agreement represents the entire agreement between the parties with respect to the subject matter hereof, and all prior agreements relating to the subject matter hereof, whether written or oral, are nullified and superseded hereby, and neither party shall have any further rights or obligations under such superseded agreements. This Agreement may be amended or supplemented only by the mutual consent of the contracting parties in writing signed by all parties to this Agreement.

IN WITNESS WHEREOF, the parties have hereunto set their hands and seals the day and year first above written.

CONTRACTOR	BULLOCH COUNT	Y
BY:	(L.S.) BY:	(L.S.)
TITLE:	County Manager	
ATTEST:		
TITLE:		
DATE:	County Cler DATE:	K