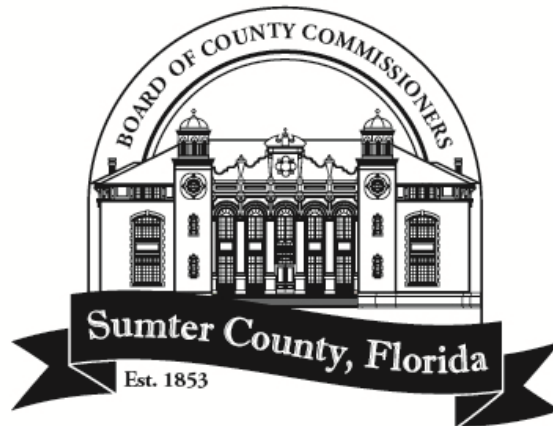


INVITATION TO BID
FOR
SUMTER COUNTY
COUNTYWIDE PAVEMENT MAINTENANCE AND REHABILITATION
SERVICES

ITB # 045-0-2023/RS



Sumter County Board of County Commissioners
Purchasing Division
319 E. Anderson Avenue
Bushnell, Florida 33513
Phone (352) 689-4400
Fax (352) 689-4401

Date of Issue: September 26, 2023

CALENDAR OF EVENTS / ITB TIMELINE

Listed below are the important dates and times by which the actions noted must be completed. All dates are subject to change by the BOCC. If the BOCC finds it necessary to change any of these dates or times prior to the bid due date, the change will be accomplished by addendum.

<u>ACTION</u>	<u>COMPLETION DATE</u>
Issue ITB	<u>September 26, 2023</u>
Mandatory Pre Bid Meeting	<u>None</u>
Last Day for Questions	<u>October 10, 2023 at 5:00 p.m.</u> <u>October 30, 2023 at 2:00 p.m.</u> Purchasing Division 319 E. Anderson Avenue Bushnell, FL 33513
Bids Due	<u>October 30, 2023 at 2:05 p.m.</u> Purchasing Division 319 E. Anderson Avenue Bushnell, FL 33513
Bids Opened	<u>October 31, 2023 at 3:00 p.m.</u> Purchasing Division 319 E. Anderson Avenue Bushnell, FL 33513
Selection Committee Meeting	<u>November 14, 2023</u>

PART 1 INTENT AND GENERAL INFORMATION

REQUEST FOR BIDS

Sealed bids will be received by the Sumter County Board of County Commissioners (BOCC) Purchasing Division, 319 E. Anderson Avenue, Bushnell, Florida 33513, **no later than 2:00 p.m. on October 30, 2023**. Bidders shall take careful notice of the following conditions of this Request for Bids:

- Submissions by FAX will not be accepted under any circumstances. Late submissions will not be accepted under any circumstances.
- Submitters may withdraw and/or replace bids at any time until the deadline for submission of bids.
- All questions received by will be considered.
Questions will not be answered over the phone to BOCC. Questions regarding the ITB process must be in writing and faxed to (352) 689-4401 attention Jackie Valdez, or via email to: Purchasing@sumtercountyfl.gov. All Requests for Information (RFI's) regarding the project must be faxed to BOCC, Attention Jackie Valdez at (352) 689-4401 or emailed to Purchasing@sumtercountyfl.gov.
- Do not attempt to contact any Selection Committee Member, staff member or person other than Jackie Valdez for questions relating to this project. Anyone attempting to lobby BOCC representatives may be disqualified. The Selection Committee Members shall be: Steven Cohoon, Assistant Public Works Director of Planning and Design, Mike Bryant, Assistant Public Works Director of Operations, and Shailesh Patel, Assistant Public Works Director of Construction, Engineering and Inspection.
- Any bidder affected adversely by an intended decision with respect to the award of any bid, shall file with the Purchasing Division for the BOCC, a written notice of intent to file a protest not later than seventy-two (72) hours (excluding Saturdays, Sundays, and legal holidays), after the posting of the bid tabulation. Bid protest procedures may be obtained in the Purchasing Division Purchasing Division, 319 E. Anderson Avenue, Bushnell, Florida 33513 from 8:00 A.M. to 5:00 P.M.

• ***IT IS THE SOLE RESPONSIBILITY OF EACH CONTRACTOR TO MONITOR DEMANDSTAR.COM FOR ANY AND ALL BID DOCUMENTS, INCLUDING ADDENDUMS***

OPEN RECORDS

The BOCC is governed by Florida's public record laws, Chapter 119 and Section 255.0518 of the Florida Statutes. Formal solicitations and documentation are open for public inspection thirty (30) days after the solicitation opening or when BOCC provides notice of a decision or intended decision, whichever is earlier. In addition, notwithstanding F.S.119.01(1) (b), the BOCC shall announce bidder and price submitted in the bid pursuant to a competitive solicitation for construction or repairs on a public building or public work. Certain proprietary and financial information from Vendors may be excluded from release under very strict circumstances. This includes proprietary information or intellectual property as defined in F.S.119.071 (1) (f).

VENDOR RESPONSIBILITY

Submitters are fully and completely responsible for the labeling, identification and delivery of their Bids. BOCC will not be responsible for any mislabeled or misdirected submissions, nor those handled by delivery persons, couriers, or the U. S. Postal Service.

- Submissions shipped by express delivery, or in overnight or courier envelopes, boxes, or packages must be prominently marked on the outside of such envelopes, boxes or packages with the sealed

Bids identification.

- Any envelopes, boxes, or packages, which are not properly labeled, identified, and prominently marked with the sealed Bids identification, may be inadvertently opened upon receipt, thereby invalidating such Bids, and excluded from the official Bids opening process.
- Firms or individuals submit their responses on a voluntary basis, and therefore are not entitled to compensation of any kind. No proposer will be reimbursed for any cost incurred as a result of preparing or submitting Bids. Additionally, no travel expenses incurred as a result of participating in the Bids process will be reimbursed.
- A person or affiliate who has been placed on the convicted Vendor list following a conviction for a public entity crime may not submit Proposal on a contract to provide any goods or services to a public entity, may not submit Proposal on a contract with a public entity for the construction or repair of a public building or public work, may not submit Bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Florida Statutes Section 287.017, for CATEGORY TWO for a period of thirty-six (36) months from the date of being placed on the convicted Vendor list.
- Bids that are incomplete, unbalanced, conditional, obscure, or which contain additions not called for, alterations, or irregularities of any kind, or which do not comply with these documents may be rejected at the option of the BOCC, in its sole and absolute discretion.

STANDARD INSURANCE REQUIREMENTS

The Contractor shall maintain, on a primary basis and at its sole expense, at all times while performing work for Sumter County, the "Standard Insurance Requirements" described herein. Contractors responding to a Request for Proposal, Request for Qualifications, or an Invitation to Bid shall provide with their submittal, a Certificate of Insurance (COI) or a letter from the insurance company stating required coverage is obtainable. Prior to commencement of any work being done for Sumter County, a COI naming Sumter County as a certificate holder will be required. The requirements contained herein, as well as the Sumter County's review or acknowledgement, is not intended to and shall not in any manner limit or qualify the liabilities and obligations assumed by the Contractor under the contract.

Financial Rating of Insurance Companies All insurance companies must have financial rating of **A-** or higher by A.M. Best Company, Inc.

- All insurance policies shall be written on companies authorized to do business in the State of Florida and satisfactory to the Sumter County BOCC. Prior to commencing services pursuant to the award of this proposal, the Contractor shall furnish to Sumter County BOCC certificates of insurance showing the required coverage has been procured and paid for in advance. Within thirty (30) days prior to expiration, the Contractor shall provide Sumter County BOCC with proof that required coverage has been extended.

Commercial General Liability Insurance The Contractor shall maintain Commercial General Liability Insurance at a limit of liability not less than **\$1,000,000** each occurrence and **\$2,000,000** annual aggregate. Due to the nature of the work involved, consultants performing program and / or contract management services are required to maintain not less than **\$1,000,000** for each occurrence and not less than **\$5,000,000** annual general aggregate. The coverage shall not contain any endorsement(s) excluding nor limiting Product/Completed Operations, Independent Contractors, Broad Form Property Damage, X-C-U Coverage, Contractual Liability or Cross Liability.

If this project involved work on or in the vicinity of utility-owned property or facilities, the utility shall be added as an Additional Insured on the Commercial Liability policy.

Business Automobile Liability Insurance The Contractor shall maintain Business Automobile Liability Insurance at a limit of liability not less than **\$1,000,000** each occurrence. Coverage shall include liability for owned, non-owned & hired automobiles. In the event the Contractor does not own automobiles, the Contractor shall maintain coverage for hired & non-owned auto liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Business Auto Liability policy.

Worker's Compensation Insurance & Employers Liability Insurance The Contractor shall maintain its own Worker's Compensation Insurance & Employers Liability in accordance with Florida Statute Chapter 440. **(NOTE: Elective exemptions or coverage through an employee leasing arrangement will be on a case by case basis).**

Umbrella or Excess Liability Insurance (needed for large contracts as determined by FSD) The Contractor shall maintain either a Commercial Umbrella or Excess Liability Insurance at a limit of liability not less than **\$2,000,000** each occurrence and **\$2,000,000** aggregate. The Contractor shall endorse the BOCC as an "Additional Insured" and certificate holder on the Umbrella or Excess Liability Insurance, unless the Commercial Umbrella/Excess Liability Insurance provides coverage on a pure "True Follow-Form" basis, or the BOCC is automatically defined as an additional protected person.

Professional or Errors & Omissions Liability Insurance (when applicable) The Contractor shall maintain a Professional Liability or Errors & Omissions policy at a limit of liability no less than \$2,000,000. The Contractor shall endorse the BOCC as an "Additional Insured" on the Professional and/or Errors & Omissions Liability Insurance.

Additional Insured The Contractor shall endorse the BOCC as an Additional Insured on the Commercial General Liability Insurance with a CG 2010 Additional Insured – Owners, Lessees, or Contractors, or CG2026 Additional Insured – Owners, Lessees, or Contractors – Scheduled Person or Organization endorsement, or similar endorsement providing equal or broader Additional Insured coverage.

In addition, the Contractor shall endorse the BOCC as an Additional Insured under the Contractor's Commercial Umbrella/Excess Liability as required herein.

Indemnification, Insurance and Sovereign Immunity. Vendor shall be solely and entirely responsible for its tortious acts and for the tortious acts of its agents, employees, or servants during the performance of this Agreement. Vendor shall indemnify and save harmless the County, its agents, employees and officers from and against all liabilities, claims, demands, or actions at law and equity including court costs and attorney's fees that may hereafter at any time be made or brought by anyone for the purposes of enforcing a claim on account of any injury or damage allegedly caused or occurring to any person or property in which was caused in whole or in part by any tortious, wrongful, or intentional acts or omissions of Vendor, its agents, or employees during performance under this Agreement. Vendor shall provide County with a certificate of coverage identifying County as both a Named Insured and a Certificate Holder. The foregoing is not intended, and shall not be construed, as a waiver by County of the benefits of Section 768.28, Florida Statutes.

Builder's Risk Insurance is required for all projects when a new building is being constructed from the ground up. The Contractor, prior to notice to proceed or commencement of work, whichever occurs first, shall obtain Builder's Risk insurance providing coverage to protect the interests of the BOCC, Contractor, and Subcontractors. Coverage shall be written on an All-Risk, Replacement Cost, and Completed Value Form basis in an amount at least equal to 100% of the projected completed value of the Project as well as subsequent modifications of that sum. Flat deductible(s) shall not exceed \$25,000, wind percentage deductible (when applicable) shall not exceed ten-percent (10%), and flood sub limit shall not be less than 25% of the projected completed value of the project. The Contractor shall endorse the policy with a

manuscript endorsement eliminating the automatic termination of coverage in the event the building is occupied in whole or in part, or put to its intended use, or partially accepted by the BOCC. The manuscript endorsement shall amend the automatic termination clause to only terminate coverage if the policy expires, is cancelled, the BOCC's interest in the building ceases, or the building is accepted or insured by the BOCC.

The Contractor shall endorse the BOCC as Additional Insured, or Loss Payee, on the Builder's Risk policy.

Deductibles, & Coinsurance Penalties The Contractor shall be fully and solely responsible for any costs or expenses as a result of a coverage deductible, coinsurance penalty, including any loss not covered because of the operation of such deductible, coinsurance penalty, or coverage exclusion or limitation. For deductible amounts that exceed the amounts stated herein that are acceptable to the BOCC, the Contractor shall, when requested by the BOCC, maintain a Commercial Surety Bond in an amount equal to said deductible amount. Evidence of Commercial Surety Bond shall be furnished to Sumter County BOCC showing that the required coverage has been procured and paid for in advance. Within thirty (30) days prior to expiration, the Contractor shall provide Sumter County BOCC with proof that required Surety Bond has been extended.

Waiver of Subrogation The Contractor shall provide a Waiver of Subrogation in favor of the BOCC, Contractor, subcontractor, architects, or engineers for each required policy providing coverage during the life of this Contract. When required by the insurer, or should a policy condition not permit the Contractor to enter into a pre-loss agreement to waive subrogation without an endorsement, then the Contractor shall notify the insurer and request the policy be endorsed with a Waiver of Transfer of Rights of Recovery Against Others, or an equivalent endorsement. This Waiver of Subrogation requirement shall not apply to any policy, which includes a condition specifically prohibiting such an endorsement, or voids coverage should the Contractor enter into such an agreement on a pre-loss basis.

Right to Revise or Reject The BOCC reserves the right, but not the obligation, to review and revise any insurance requirement, not limited to limits, coverages and endorsements based on insurance market conditions affecting the availability or affordability of coverage; or changes in the scope of work/specifications affecting the applicability of coverage. Additionally, the BOCC reserves the right, but not the obligation, to review and reject any insurance policies failing to meet the criteria stated herein, or any insurer(s) providing coverage due to its poor financial condition or failure to operate legally. In such events, the BOCC shall provide the Contractor written notice of such revisions or rejections.

No Representation of Coverage Adequacy The coverages, limits or endorsements required herein protect the primary interests of the BOCC, and these coverages, limits or endorsements shall in no way be required to be relied upon when assessing the extent or determining appropriate types and limits of coverage to protect the Contractor against any loss exposures, whether as a result of the Project or otherwise.

Certificate(s) of Insurance The Contractor shall provide the BOCC with a COI clearly evidencing that all coverage, limits and endorsements required herein are maintained and in full force and effect. A minimum thirty (30) day endeavor to notify due to cancellation or non-renewal of coverage shall be identified on each Certificate of Insurance. In the event the BOCC is notified that a required insurance coverage will cancel or expire during the period of this Contract, the Contractor agrees to furnish the BOCC prior to the expiration of such insurance, a new Certificate of Insurance evidencing replacement coverage. When notified by the BOCC, the Contractor agrees not to continue work pursuant to this Contract, unless all required insurance remains in effect.

The BOCC shall have the right, but not the obligation, of prohibiting the Contractor from entering the Project site until a new COI is provided to the County evidencing the replacement coverage. The Contractor agrees the BOCC reserves the right to withhold payment to the Contractor until evidence of reinstated or replacement coverage is provided to the BOCC. If the Contractor fails to maintain the insurance as set

forth herein, the Contractor agrees the BOCC shall have the right, but not the obligation, to purchase replacement insurance, and the Contractor agrees to reimburse any premiums or expenses incurred by the BOCC.

The Contractor agrees the Certificate(s) of Insurance shall:

1. Clearly indicate the BOCC has been endorsed on the Commercial General Liability Insurance with a CG 2010 Additional Insured – Owners, Lessees, or Contractors, or CG 2026 Additional Insured – Owners, Lessees, or Contractors – Scheduled Person or Organization endorsement, or similar endorsement providing equal or greater Additional Insured coverage.
2. Clearly indicate the BOCC is endorsed as an Additional Insured, or Loss Payee, on the Builder's Risk Insurance, and when applicable, Additional Insured on the Commercial Umbrella/Excess Liability Insurance as required herein.
3. Clearly identify each policy's limits, flat & percentage deductibles, sub limits, which exceed the amounts or percentages set forth herein.
4. Clearly indicate a minimum thirty (30) day endeavor to notify requirement in the event of cancellation or non-renewal of coverage.
5. Forward original to and clearly indicate Certificate Holder and Additional Insured as follows:

Sumter County Board of County Commissioners
Attention: Purchasing Division
7375 Powell Road
Wildwood, FL 34785

EXAMINATION OF BID DOCUMENTS

- Each Vendor shall carefully examine the Scope of Work and other applicable documents, and inform himself/herself thoroughly regarding any and all conditions and requirements that may in any manner affect cost, progress or performance of the work to be performed under the Contract. Ignorance on the part of the Contractor will in no way relieve him/her of the obligations and responsibilities assumed under the Contract.
- Should a Vendor find discrepancies or ambiguities in, or omissions from the Scope of Work, or should he/she be in doubt as to their meaning, he/she shall at once notify BOCC in writing.

INTERPRETATIONS, CLARIFICATIONS AND ADDENDA

- No oral interpretations will be made to any Vendor as to the meaning of the Bids/Contract Documents. Any questions or request for interpretation received IN WRITING by the BOCC before 5:00 p.m., October 10, 2023, will be given consideration. All such changes or interpretations will be made in writing in the form of an addendum and, if issued, will be distributed at or after the Pre-Bid Conference (if applicable), mailed or sent by available or electronic means to all attending prospective Submitters prior to the established Bid opening date. Each Vendor shall acknowledge receipt of such addenda in the space provided on the Bid Form.
- In case any Vendor fails to acknowledge receipt of such addenda or addendum, his/her Bid will nevertheless be construed as though it had been received and acknowledged and the submission of his Bid will constitute acknowledgment of the receipt of same. All addenda are a part of the Bid Documents and each Vendor will be bound by such addenda, whether or not received by him/her. It is the responsibility of each Vendor to verify that he/she has received all addenda issued before

Bids are opened.

- In the case of unit price items, the quantities of work to be done and materials to be furnished under this Bid/Contract are to be considered as approximate only and are to be used solely for the comparison of Bids received. BOCC and/or Consultants do not expressly or by implication represent that the actual quantities involved will correspond exactly therewith; nor shall the Vendor plead misunderstanding or deception because of such estimate or quantities of work performed or material furnished in accordance with the specifications and/or drawings and other Bid Documents, and it is understood that the quantities may be increased or diminished as provided herein without in any way invalidating any of the unit or lump sum prices Bids.

The Contractor shall thoroughly examine and familiarize themselves with the drawings and/or specifications related to field conditions, the difficulties, logistical restrictions required to meet the requirements of this ITB. Deficient understanding of the existing field conditions will in no way relieve the Contractor from the contractual obligations of this ITB. Any damage to existing County assets as a result of the Contractors' activities will be replaced at the sole expense of the Contractor.

GOVERNING LAWS AND REGULATIONS

The Vendor is required to be familiar with and shall be responsible for complying with all federal, state and local laws, ordinances, rules and regulations that in any manner affect the Scope of Work.

PREPARATION OF BIDS

- Signature of the Vendor: The Vendor must sign the Bids forms in the space provided for the signature. If the Vendor is an individual, the words "Doing Business As _____," must appear beneath such signature. In the case of a partnership, the signature of at least one of the partners must follow the partnership name and the words, "Member of the Firm" should be written beneath such signature. If the Vendor is a corporation, the title of the officer signing the Bids on behalf of the corporation must be stated and evidence of his authority to sign the Bids must be submitted. The Vendor shall state in the Bids Form the name and address of each person interested therein.
- Basis for Bids: The price proposed for each item shall be on a lump sum or unit price basis according to the form of the Bids. The Bids prices shall remain unchanged for the duration of the Contract and no claims for cost escalation during the progress of the work will be considered.

FISCAL YEAR FUNDING APPROPRIATION

Unless otherwise provided by law, a contract for supplies or services may be entered into for any period of time deemed to be in the best interests of the BOCC, provided the term of the contract and conditions of renewal or extension, if any, are included in the solicitation and funds are available for the fiscal period at the time of the contract. Payment and performance obligations for succeeding fiscal periods shall be subject to appropriation by the BOCC of funds thereafter.

When funds are not appropriated or otherwise made available to support continuation of performance in a subsequent fiscal period, the contract shall be cancelled and the contractor shall be entitled to reimbursement for the reasonable value of any nonrecurring cost incurred but not advertised in the price of the supplied or services delivered under the contract or otherwise recoverable.

TAX EXEMPT STATUS

The BOCC is a governmental agency under Florida law and exempt from Florida sales tax. The tax-exempt number will be provided upon request. This exemption does not apply to goods and services purchased separately by Contractor in connection with its contract obligations. The Contractor shall be responsible

for paying any taxes, fees, or similar payments that are required to be paid in connection with the contract work.

PROTECTION OF RESIDENT WORKERS

The BOCC actively supports the Immigration and Nationality Act (INA), which includes provisions addressing employment eligibility, employment verification, and nondiscrimination. Under the INA, employers may hire only persons who may legally work in the United States (i.e. citizens and nationals of the U.S.) and aliens authorized to work in the U.S. The employer must verify the identity and employment eligibility of anyone to be hired, which includes completing the Employment Eligibility Verification Form (I-9). The Contractor shall establish appropriate procedures and controls so no services or products under the Contract Documents will be performed or manufactured by any worker who is not legally eligible to perform such services or employment. The Contractor must be able to verify an employee's eligibility to work in the U.S. upon demand by the BOCC throughout the duration of the contract.

SUMTER COUNTY BOARD OF COUNTY COMMISSIONERS

The BOCC is a unit of local government and as such reserves the right to reject any and/or all Bids, reserve the right to waive any informalities or irregularities in the Bids or examination process, reserves the right to select low Bids per item, and reserves the right to award Bids and/or contracts in the best interest of the BOCC.

E- VERIFY

BOCC requires all bidders, contractors, and subcontractors of any tier to certify compliance with the federal E-Verify program for all employees hired on or after the date of the contractor's registration on the Department of Homeland Security website <http://www.dhs.gov/e-verify> by providing the Memorandum of Understanding (MOU) electronic signature page with the date of registration and company ID number. In the case of contractors, this includes obtaining written certification from all subcontractors who will participate in the performance of the contract. All subcontractor certifications must be kept on file with the contract Vendor and made available to the state and/or Sumter County upon request. Vendor/Contractor shall be required to submit the Department of Homeland Security MOU documentation and completed "E-Verify Certification".

RIGHT TO AUDIT RECORDS

The BOCC shall be entitled to audit the books and records of the Contractor or any sub-contractor to the extent that such books and records relate to the performance of the Contract or any sub-contract to the Contract. Such books and records shall be maintained by the Contractor for a period of five (5) years from the date of final payment under the Agreement and by the sub-contractor for a period of three (3) years from the date of final payment under the sub-contract unless a shorter period is otherwise authorized in writing.

MANDATORY PRE-BID MEETING

There will not be a mandatory pre-bid meeting.

DISCRIMINATION

The Contractor will not discriminate against any employee employed in the performance of this Agreement, or against any applicant for employment because of age, ethnicity, race, religious belief, disability, national origin, or sex. The Contractor shall provide a harassment-free workplace, with any allegation of harassment given priority attention and action by management. The Contractor shall insert similar provisions in all contracts and subcontracts for services by this Agreement. The Contractor affirms that it is aware of the provision of Section 287.134(2)(a), Florida Statutes. An entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and any not transact business with any public Contractor. The Contractor further agrees that it shall not violate Section 287.134(2)(a), Florida Statutes, and

acknowledges and agrees that placement on the list during the term of this Agreement may result in the termination of this Agreement.

PART 2 EVALUATION AND AWARD

BID EVALUATION

This Request for Invitation to Bid includes following all the procedures in this document and sending the sealed bid information to the BOCC by the due date and time. Once bids are received, they will be opened at 2:05 p.m. on October 30, 2023 Purchasing Division, 319 E. Anderson, Avenue, Bushnell, FL 33513, in accordance with policy and F.S. 119.

Do not attempt to contact any Selection Committee Member, staff member, or person other than Becky Segretfor questions relating to this project. Anyone attempting to contact any Sumter County BOCC representatives may be disqualified.

Recommendation of award will be posted on Demand Star. All Selection Committee recommendations are subject to Board approval. The Board has the authority to reject any or all recommendations and contracts.

The Selection Committee will meet to evaluate bids in the Public Works Training Room at 3:00 p.m. on October 31, 2023 at Purchasing Division, 319. E. Anderson Avenue, Bushnell, FL 33513. The Selection Committee will send their recommendation to the BOCC on November 14, 2023 for a final decision. The BOCC has the authority to reject all recommendations and/or contracts.

BID AWARD

Submitters and vendors registered through www.demandstar.com will have access to award documents via the website. All others wishing to receive an official tabulation of the results of the opening of this Bid are to contact Jackie Valdez via email at Purchasing@sumtercountyfl.gov.

LIQUID DAMAGES

- The Contractor and Owner recognize that time is of the essence of this Agreement and that the Owner will suffer financial loss if the Work is not completed within the times specified in the "project time" section. The parties also recognize the delays, expenses, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by the Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, the Owner and Contractor agree that as liquidated damages for delay (but not as a penalty), Contractor shall pay Owner a certain amount each day that expires after the time specified in the Project Time for final completion. Liquidated damages to apply to each project. Liquidated damages will be based on the entire project amount per calendar day using the below figures:

Original Contract Amount Daily Charge Per Calendar Day

\$50,000 and under	\$250
Over \$50,000 but less than \$250,000	\$500
\$250,000 but less than \$500,000	\$750
\$500,000 but less than \$2,500,000	\$1,000
\$2,500,000 and over	\$2,712

PAY AND PERFORMANCE BOND

A 5% pay and performance bond will be required for any task orders that exceed \$200,000.

PART 3

BID DOCUMENTS CHECKLIST OF ITEMS REQUIRED TO BE SUBMITTED

The following documents and forms in the following arrangement must accompany each bid or alternate bid submitted:

Documents that are mandatory and MUST accompany the submittal of the bid in order for the submission to be considered:

- ✧ One (1) original bid, clearly labeled "Original"
- ✧ Bid Cover Page. This is to be used as the first page of the ITB. This form must be fully completed and signed by an authorized officer of the vendor.
- ✧ Bidder Certification / Addenda Acknowledgement Form
- ✧ Statement of General Terms and Conditions
- ✧ A sworn, notarized Statement of Contractor's Experience and Personnel
- ✧ A sworn, notarized Drug Free Work Place Certificate must accompany each bid or alternate bid.
- ✧ A sworn, notarized Statement of Public Entity Crimes
- ✧ Bid / Price Form
- ✧ A separate sheet or sheets, clearly identified and numbered, of Exceptions or Deviations from the minimum specifications, must be attached to the Bid Form (if applicable).
- ✧ Bid Bond 5%
- ✧ Anti-Collusion Statement
- ✧ Hold Harmless Agreement

Documents that are required as part of the submittal but will be considered minor discrepancies if turned in within 24 business hours (Monday – Friday 8:00 a.m. to 5:00 p.m.) after opening of the bid and are found to be in compliance with the purchasing standards of Sumter County:

- ✧ Three (3) printed copies of the bid in its entirety; and one (1) electronic single PDF version not password protected of the original submitted bid in its entirety.
- ✧ E-Verify Certification Form
- ✧ Electronic signature page of the E-Verify Memorandum of Understanding from the Department of Homeland Security. This must be dated prior to the ITB due date.
- ✧ Bid Document Checklist of Items Required to be Submitted
- ✧ A Certificate of Insurability, acceptable to the County, shall accompany each bid or alternate bid, in the amounts as prescribed by State and Sumter County BOCC .
 - All insurance policies shall be written on companies authorized to do business in the State of Florida and satisfactory to the Sumter County BOCC. Prior to commencing services

pursuant to the award of this bid, the Contractor shall furnish to the Sumter County BOCC certificates of insurance showing the required coverage has been procured and paid for in advance. Within thirty (30) days prior to expiration, the Vendor shall provide the Sumter County BOCC with proof that required coverage has been extended.

W-9

Date: _____

I, _____ (name), an authorized officer of _____ (company/vendor), confirm that the above listed documents are provided in our company's bid being submitted to Sumter County and confirm I have read and understand the ITB document in its entirety.

BID SUBMITTAL

One (1) original, one (1) electronic single PDF version not password protected and in the original document format, and three (3) copies (for a total of 5), of each bid or alternate bid shall be submitted in a sealed envelope, prominently marked on the outside with the words, “**ITB 045-0-2023/RS Countywide Pavement Maintenance and Rehabilitation Services**” with the firm name and return address. Bids submitted in express, overnight or courier envelopes, boxes or packages must be prominently marked on the outside with the words, “**ITB 045-0-2023/RS Countywide Pavement Maintenance and Rehabilitation Services**” and the contents sealed as required.

- Deadline for submissions in response to this Request for Bids: Bids must be received no later than October 30, 2023 at 2:00 p.m. Bids submitted by FAX will not be accepted under any circumstances. **Late bids will not be accepted, and will be returned, unopened, to the proposer, at the proposer's expense.**
- Any person or affiliate who has been placed on the convicted Vendor list following a conviction for a public entity crime, may not submit a Proposals on a contract to provide any goods or services to a public entity, may not submit a Proposals on a contract with a public entity for the construction or repair of any public building or public work, may not submit Proposals on leases of real property to a public entity crime, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of thirty five thousand dollars, (\$35,000.00) for a period of thirty-six (36) months from the date of being placed on the convicted Vendor list, pursuant to paragraph 2a of Section 287.133, Florida Statutes.
- The Sumter County Board of County Commissioner as a unit of local government reserves the right to reject any and/or all Proposals, reserves the right to waive any informalities or irregularities in the Proposals or evaluation process, and reserves the right to award contract(s) in the best interest of the Sumter County BOCC.

PAGE SPECIFICATIONS

- Page Limit – None.
- Page Size – 8 ½ x 11; oversized or pullout pages must be folded to accommodate this size.
- Binding – Shall be neat, professional and appropriate for the document's thickness.
- Professional Cover Page – Not required but acceptable. If used, the cover page shall indicate the name and number of the solicitation. It shall NOT be used as a replacement for the Bid Cover Page listed herein.
- Original Document – Shall have original signatures and be clearly noted ORIGINAL on the cover.

PART 4 BID DOCUMENTS INVITATION TO BID COVER PAGE

Name of Firm, Entity or Organization:
Federal Employer Identification Number (FEIN):

State of Florida License Number (If Applicable):

Name of Contact Person:

Title:

E-Mail Address:

Mailing Address:

Street Address (if different):

City, State, Zip:

Telephone:

Fax:

Organizational Structure – Please Check One:

Corporation ☐ **Partnership** ☐ **Proprietorship** ☐ **Joint Venture** ☐ **Other** ☐

If Corporation:

Date of Incorporation:

State of Incorporation:

States Registered in as Foreign Corporation:

Authorized Signature:

Print Name: _____

Signature: _____

Title: _____

Phone: _____

This document must be completed and returned with your Submittal.

BIDDER'S CERTIFICATION

Submit To: Sumter County Board of County Commissioners

7375 Powell Road
Wildwood, FL 34785
Phone 352-689-4400
Fax 352-689-4401

SUMTER COUNTY BOARD OF COUNTY COMMISSIONERS

INVITATION TO BID (ITB) CERTIFICATION

AND ADDENDA ACKNOWLEDGMENT

DUE DATE: October 30, 2023

DUE TIME: 2:00 P.M.

ITB # 045-0-2023/RS

TITLE: Countywide Pavement Maintenance and Rehabilitation Services

VENDOR NAME:

PHONE NUMBER:

VENDOR MAILING ADDRESS:

FAX NUMBER:

CITY/STATE/ZIP:	E-MAIL ADDRESS:
------------------------	------------------------

"I, the undersigned, certify that I have reviewed the addenda listed below (list all addenda received to date). I understand that timely commencement will be considered in award of this ITB and that cancellation of award will be considered if commencement time is not met, and that untimely commencement may be cause for termination of contract. I further certify that the services will meet or exceed the ITB requirements. I, the undersigned, declare that I have carefully examined the ITB, specifications, terms and conditions as applicable for this Request, and that I am thoroughly familiar with all provisions and the quality and type of coverage and services specified. I further declare that I have not divulged, discussed, or compared this ITB with any other Offeror and have not colluded with any Offerors or parties to an ITB whatsoever for any fraudulent purpose."

Addendum #

Addendum #

Addendum #

Addendum #

Addendum #

"I certify that this quote is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting an ITB for the same material, supplies, equipment or services and is in all respects fair and without collusion or fraud. I agree to abide by all conditions of this ITB and certify that I am authorized to sign this response and that the offer is in compliance with all requirements of the ITB, including but not limited to certification requirements. In conducting offers with an agency for Sumter County Board of County Commissioners (BOCC), respondent agrees that if this Proposals is accepted, the respondent will convey, sell, assign, or transfer to the Sumter County BOCC all rights, title and interest in and to all causes of action it may now or hereafter acquire under the anti-trust laws of the United States for price fixing relating to the particular commodities or services purchased or acquired by the COUNTY. At the Sumter County BOCC discretion, such assignment shall be made and become effective at the time the purchasing agency renders final payment to the respondent."

Authorized Agent Name, Title (Print)

Authorized Signature Date

This document must be completed and returned with your Submittal

S

STATEMENT OF TERMS AND CONDITIONS

TATEMENT OF VENDOR'S EXPERIENCE AND PERSONNEL

PUBLIC ENTITY CRIME: A person or affiliate who has been placed on the convicted Vendor list following a conviction for a public entity crime may not submit a Proposals/Bid on a contract to provide any goods or services to a public entity, for the construction or repair of a public building or public work, may not submit Proposals/Bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted Vendor list.

INDEMNIFICATION: Indemnification, Insurance and Sovereign Immunity. Vendor shall be solely and entirely responsible for its tortious acts and for the tortious acts of its agents, employees, or servants during the performance of this Agreement. Vendor shall indemnify and save harmless the County, its agents, employees and officers from and against all liabilities, claims, demands, or actions at law and equity including court costs and attorney's fees that may hereafter at any time be made or brought by anyone for the purposes of enforcing a claim on account of any injury or damage allegedly caused or occurring to any person or property in which was caused in whole or in part by any tortious, wrongful, or intentional acts or omissions of Vendor, its agents, or employees during performance under this Agreement. Vendor shall provide County with a certificate of coverage identifying County as both a Named Insured and a Certificate Holder. The foregoing is not intended, and shall not be construed, as a waiver by County of the benefits of Section 768.28, Florida Statutes.

PROHIBITION OF LOBBYING: During the black-out period which is, the period between the time the submittals for Invitation to Bid or the Request for Proposals, or Qualifications, or information, as applicable, are received at Contracts / Purchasing and the time the Board awards the contract, no proposer, no lobbyist, principal, or other person may lobby, on behalf of a competing party in a particular procurement matter, any member of the Board, or any Board employee other than the Purchasing Division Manager. Violation of this provision may result in disqualification of violating party. All questions regarding this Request for Proposals (RFP) or Invitation to Bid (BID) must be submitted in writing to the Board's Purchasing Division Manager.

ANTI TRUST LAWS: By submission of a signed RFP or BID, the successful Vendor acknowledges compliance with all antitrust laws of the United States and the State of Florida, in order to protect the public from restraint of trade, which illegally increases prices.

CONFLICT OF INTEREST: The award of the contract hereunder is subject to the provisions of Chapter 112 of the Florida Statutes. Vendors shall disclose the name of any Officer, Director, Partner, Associate, or Agent who is also an Officer, Appointee, or Employee of any of the Boards at the time of the RFP or BID, or at the time of occurrence of the Conflict of Interest thereafter.

INTERPRETATION, CLARIFICATIONS AND ADDENDA: No oral interpretations will be made to any Vendor as to the meaning of the RFP/BID Contract Documents. Any inquiry or request for interpretation received by the Purchasing Division Manager before the date listed herein will be given consideration. All such changes or interpretations will be made in writing in the form of an addendum and, if issued, will be distributed at or after the Pre-Proposals/Pre-Bid Conference, mailed or sent by available or electronic means to all attending prospective Submitters prior to the established RFP/BID opening date. Each Vendor shall acknowledge receipt of such addenda in the space provided. In case any Proposer/Bidder fails to acknowledge receipt of such addenda or addendum, his offer will nevertheless be construed as though it had been received and acknowledged and the submission of his bid will constitute acknowledgment of the receipt of same. All addenda are a part of the RFP/BID FORMS and each Proposer/Bidder will be bound by such addenda, whether or not received by him. It is the responsibility of each proposer/bidder to verify that he has received all addenda issued before RFP's/BID's are opened. In the case of unit price items, the quantities of work to be done and materials to be furnished under this RFP/BID Contract are to be considered as approximate only and are to be used solely for the comparison of RFP's/BID's received. The Board and/or his CONSULTANT do not expressly or by implication represent that the actual quantities involved will correspond exactly therewith; nor shall the Vendor plead misunderstanding or deception because of such estimate or quantities of work performed or material furnished in accordance with the Specifications and/or Drawings and other Proposals/Bid Documents, and it is understood that the quantities may be increased or diminished as provided herein without in any way invalidating any of the unit or lump sum prices bid.

GOVERNING LAWS AND REGULATIONS: The Vendor is required to be familiar with and shall be responsible for complying with all federal, state and local laws, ordinances, rules and regulations that in any manner affect the work.

PROPRIETARY/CONFIDENTIAL INFORMATION: Vendors are hereby notified that all information submitted as part of, or in support of RFP's/BID's, will be available for public inspection ten days after opening of the RFP's/BID's or until a short list is recommended whichever comes first, in compliance with Chapter 119, and 287 of the Florida Statutes. Any person wishing to view the RFP's/BID's must make an appointment by calling the Purchasing Division Manager at (352) 689-4400. All RFP's/BID's submitted in response to this solicitation become the property of the Board. Unless information submitted is proprietary, copy written, trademarked, or patented, the Board reserves the right to utilize any or all information, ideas, conceptions, or portions of any RFP/BID, in its best interest.

TAXES: The Board of Sumter County Commissioners is exempt from any taxes imposed by the State and/or Federal Government. Exemption certificates will be provided upon request.

NON-COLLUSION DECLARATION: By signing this RFP/BID, all Vendors shall affirm that they shall not collude, conspire, connive or agree, directly or indirectly, with any other Proposer, firm, or person to submit a collusive or sham Proposals in connection with the work for which their RFP/BID has been submitted; or to refrain from Bidding in connection with such work; or have in any manner, directly or indirectly, sought by person to fix the price or prices in the RFP/BID or of any other Bidder, or to fix any overhead, profit, or cost elements of the RFP/BID price or the RFP/BID price of any other Bidder, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against any other Bidder, or any person interested in the proposed work.

By signing this form, the Contractor/Vendor agrees that this quote is made without any other understanding, agreement, or connection with any person, corporation, or firm submitting a quote for the same purpose and that the quote is in all respects fair and without collusion or fraud. IT IS AGREED BY THE UNDERSIGNED CONTRACTOR/VENDOR, THAT THE SIGNING AND DELIVERY OF THE QUOTE REPRESENTS THE CONTRACTOR'S/VENDOR'S ACCEPTANCE OF THE TERMS AND CONDITIONS OF THE FORGOING SPECIFICATIONS AND PROVISIONS, AND IF AWARDED, THIS CONTRACT WILL REPRESENT THE AGREEMENT BETWEEN THE CONTRACTOR/VENDOR AND THE BOARD OF SUMTER COUNTY COMMISSIONERS.

PROPOSER RESPONSIBILITY: Invitation by the Board to Vendors is based on the recipient's specific request and application to DemandStar by Ornia at www.DemandStar.com [(800) 711-1712] or as the result of response by the public to the legal advertisements required by State law. Firms or individuals submit their responses on a voluntary basis, and therefore are not entitled to compensation of any kind.

OWNERSHIP OF SUBMITTALS: All responses, inquiries or correspondence relating to or in reference to this RFP/BID, and all other reports, charts, displays, schedules, exhibits and other documentation submitted by the Vendors will become the property of the Board. Reference literature submitted with a previous RFP/BID will not relieve the Bidder from including any required documents with this RFP/BID.

EXAMINATION OF BID DOCUMENTS: Each Bidder shall carefully examine the RFP/BID Document to ensure all pages have been received, all drawings and/or Specifications and other applicable documents are included, and shall inform himself thoroughly regarding any and all conditions and requirements that may in any manner affect cost, progress or performance of the work to be performed under the Contract. Ignorance on the part of the CONTRACTOR will in no way relieve him of the obligations and responsibilities assumed under the Contract.

VENDOR RESPONSIBILITY: Vendors are fully and completely responsible for the labeling, identification and delivery of their submittals. The Purchasing Division Manager will not be responsible for any mislabeled or misdirected submissions, nor those handled by delivery persons, couriers, or the US Postal Service.

DRUG FREE WORKPLACE: All Proposers/Bidders shall submit the enclosed, duly signed and notarized form entitled "Drug Free Workplace Certificate". The Drug Free Workplace Vendor shall have the burden

of demonstrating that his program complies with Section 287.087 of the Florida Statutes, and any other applicable state law.

BOARD OF SUMTER COUNTY COMMISSIONERS, are political subdivisions of the State of Florida, and reserve the right to reject any and/or all submittals, reserve the right to waive any informalities or irregularities in the examination process, and reserve the right to award contracts and/or in the best interest of the Boards. Submittals not meeting stated minimum terms and qualifications may be rejected by the Boards as non-responsive. The Boards reserve the right to reject any or all submittals without cause. The Boards reserves the right to reject the submission of any Vendor in arrears or in default upon any debt or contract to the Boards, or who has failed to perform faithfully any previous contract with the Boards or with other governmental agencies.

PUBLIC RECORDS LAW: Correspondence, materials and documents received pursuant to this RFP/BID become public records subject to the provisions of Chapter 119, Florida Statutes.

VERIFICATION OF TIME: Nextel time is hereby established as the Official Time of the Boards for Public Works ITBs and the electronic submission stamp of all other responses will establish the Official Time of the Boards.

PREPARATION OF PROPOSALS/BIDS:

Signature of the Bidder: The Bidder must sign the RFP/BID FORMS in the space provided for the signature. If the Proposer/Bidder is an individual, the words "doing business as" must appear beneath such signature. In the case of a partnership, the signature of at least one of the partners must follow the partnership name and the words, "Member of the Firm" should be written beneath such signature. If the Proposer/Bidder is a corporation, the title of the officer signing the RFP/BID on behalf of the corporation must be stated and evidence of his authority to sign the RFP/BID must be submitted. The Proposer/Bidder shall state in the RFP/BID FORMS the name and address of each person interested therein.

Basis for Bidding: The price proposed for each item shall be on a lump sum or unit price basis according to specifications on the RFP/BID FORM. The proposed prices shall remain unchanged for the duration of the Contract and no claims for cost escalation during the progress of the work will be considered, unless otherwise provided herein.

Total Proposed Price/Total Contract Sum Proposed: If applicable, the total price bid for the work shall be the aggregate of the lump sum prices proposed and/or unit prices multiplied by the appropriate estimated quantities for the individual items and shall be stated in figures in the appropriate place on the RFP/BID FORM. In the event that there is a discrepancy on the RFP/BID FORM due to unit price extensions or additions, the corrected extensions and additions shall be used to determine the project bid amount.

TABULATION: Those wishing to receive an official tabulation of the results of the opening of this RFP/BID are to submit to BOCC a self-addressed, stamped business size (No. 10) envelope, prominently marked on the front lower left side, with the RFP identification. Tabulation requested by telephone, fax or electronic media will not be accepted.

OBLIGATION OF WINNING BIDDER: The contents of the RFP/BID of the successful proposer/bidder will become contractual obligations if acquisition action ensues. Failure of the successful Proposer/Bidder to accept these obligations in a contract may result in cancellation of the award and such Vendor may be removed from future participation.

AWARD OF BID: It is the Boards' intent to select a Vendor within **sixty (60) calendar days** of the deadline for receipt of Proposals/Bids. However, Proposals/Bids must be firm and valid for award for at least **ninety (90) calendar days** after the deadline for receipt of the RFP/BID.

ADDITIONAL REQUIREMENTS: The firms shall furnish such additional information as the Boards may reasonably require. This includes information which indicates financial resources as well as ability to provide the services. The Boards reserve the right to make investigations of the qualifications of the firm as it deems appropriate.

PREPARATION COSTS: The Board shall not be obligated or be liable for any costs incurred by Proposers/Bidders prior to issuance of a contract. All costs to prepare and submit a response to this RFP/BID shall be borne by the Proposer/Bidder.

TIMELINESS: All work will commence upon authorization from the Boards' representative (Purchasing Division Manager). All work will proceed in a timely manner without delays. The Vendor shall commence the work UPON RECEIPT OF NOTICE TO PROCEED and/or ORDER PLACED (PURCHASE ORDER PRESENTED), and shall deliver in accordance to the terms and conditions outlined and agreed upon herein.

DELIVERY: All prices shall be FOB Destination, Sumter County, Florida, inside delivery unless otherwise specified.

PLANS, FORMS & SPECIFICATIONS: Bid Packages are available from the Purchasing Division Manager. These packages are available for pickup or by mail. If requested to mail, the Proposer/Bidder must supply a courier account number (UPS, FedEx, etc). Proposers/Bidders are required to use the official RFP/BID FORMS, and all attachments itemized herein, are to be submitted as a single document. Any variation from the minimum specifications must be clearly stated on the RFP/BID FORM and/or Exceptions/Deviations Sheet(s). Only one set of plans, forms, and specifications will be furnished each company or corporation interested in submitting a Proposal/bid. RFP/BID FORM documents for this project are free of charge and are available on-line and are downloadable (Vendor must pay any DemandStar fees or any shipping).

MANUFACTURER'S NAME AND APPROVED EQUIVALENTS: Any manufacturer's names, trade names, brand names, information and/or catalog numbers listed in a specification are for information and not intended to limit competition unless otherwise indicated. The Proposer/Bidder may offer any brand for which he is an authorized representative, which meets or exceeds the RFP/BID specification for any item(s). If RFP's/BID's are based on equivalent products, indicate on the RFP/BID FORM the manufacturer's product name and literature, and/or complete specifications. Reference to literature submitted with a previous RFP/BID will not satisfy this provision. The Proposer/Bidder shall explain in detail the reason(s) why the proposed equivalent will meet the specifications and not be considered an exception thereto. RFP's/BID's which do not comply with these requirements are subject to rejection. RFP's/BID's lacking any written indication of intent to quote an alternate brand will be received and considered in complete compliance with the specifications as listed on the RFP/BID FORM. The Purchasing Division Manager is to be notified, in writing, of any proposed changes in materials used, manufacturing process, or construction. However, changes shall not be binding upon the Boards unless evidenced by a Change Notice issued and signed by the Purchasing Division Manager, or designated representative.

QUANTITIES: The quantities as specified in this RFP/BID are estimates only and are not to be construed as guaranteed minimums.

SAMPLES: Samples of items, when called for, shall be furnished free of expense, and if not destroyed may, upon request, be returned at the Proposer's/Bidder's expense. Each sample shall be labeled with the Proposer's/Bidder's name, manufacturer brand name and number, RFP/BID number and item reference. Samples of successful Proposer's/Bidder's items may remain on file for the term of the contract. Request for return of samples shall be accompanied by instructions which include shipping authorization and must be received at time of opening. Samples not returned may be disposed of by the Boards within a reasonable time as deemed appropriate.

DOCUMENT RE-CREATION: Vendor may choose to re-create any document(s) required for this solicitation, but must do so at his own risk. All required information in the original Board format must be included in any re-created document. Submittals may be deemed non-responsive if required information is not included in any re-created document.

ACKNOWLEDGED:

(Signature and Date)

This document must be completed and returned with your Submittal.

(Vendor may also provide any supplemental company or personnel information that will assist the

Selection Committee in evaluating your bid).

VENDOR: _____

DATE: _____

1. How many years has your organization been in business as a general contractor under your present business name? _____

2. List all previous business names of your organization:

3. How many years of experience in general contracting? _____

Prime Contractor _____ Subcontractor _____

4. List all officers and directors of your organization:

NAME	POSITION/TITLE
_____	_____
_____	_____
_____	_____
_____	_____

5. Have you ever failed to complete any work awarded to you in the last 3 years?
Yes _____ No _____. If yes, where and why?

EXPERIENCE

1. Describe any experience of the principal individuals (Foremen, Superintendents, etc.) who are responsible for the actual general contracting work of your organization?

Name	Position
Type of Work	Yrs. Experience Yrs. With Firm

Name	Position
Type of Work	Yrs. Experience Yrs. With Firm

Name	Position	
Type of Work	Yrs. Experience	Yrs. With Firm

Name	Position	
Type of Work	Yrs. Experience	Yrs. With Firm

Name	Position	
Type of Work	Yrs. Experience	Yrs. With Firm

2. List/describe five (5) construction contracts that you currently have.

Project	Location
Date	Contract Amount
Project Architect Contact Name and Phone Number	
Owner's Contact Name and Phone Number	

Project	Location
Date	Contract Amount
Project Architect Contact Name and Phone Number	
Contact Name and Phone Number	
Project	Location
Date	Contract Amount
Project Architect Contact Name and Phone Number	
Contact Name and Phone Number	

Project	Location
Date	Contract Amount

Project Architect Contact Name and Phone Number	
Contact Name and Phone Number	

Project	Location
Date	Contract Amount
Project Architect Contact Name and Phone Number	
Contact Name and Phone Number	

VENDOR'S AFFIDAVIT

State of Florida

County of _____

Before me personally appeared _____ who is *(title)* _____ of *(the company described herein)* _____ being duly sworn, deposes and says that the foregoing statements are a true and accurate statement of the position of said organization as of the date thereof, and, that the statements and answers to the foregoing experience questionnaire are correct and true as of the date of this affidavit; and, that he/she understands that intentional inclusion of false, deceptive, or fraudulent statements of this application constitutes fraud; and, agrees to furnish any pertinent information requested by Sumter County Board of County Commissioner deemed necessary to verify the statements made in this application or regarding the ability, standing and general reputation of the applicant.

Personally Known _____ or Produced Identification _____

Sworn to and subscribed before me this _____ day of _____, 20__

 NOTARY PUBLIC - STATE OF FLORIDA
 (Signature of Notary Public)

 (Print Name of Notary Public)

(seal)

This document must be completed and returned with your Submittal

DRUG FREE WORKPLACE CERTIFICATE

I, the undersigned, in accordance with Florida Statute 287.087, hereby certify that,

(print or type name of firm)

- Publishes a written statement notifying that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the workplace named above, and specifying actions that will be taken against violations of such prohibition.
- Informs employees about the dangers of drug abuse in the work place, the firm's policy of maintaining a drug free working environment, and available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug use violations.
- Gives each employee engaged in providing commodities or contractual services that are under proposal or bid, a copy of the statement specified above.
- Notifies the employees that as a condition of working on the commodities or contractual services that are under proposal or bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, please or guilty or nolo contendere to, any violation of Chapter 893, or of any controlled substance law of the State of Florida or the United States, for a violation occurring in the work place, no later than five (5) days after such conviction, and requires employees to sign copies of such written (*) statement to acknowledge their receipt.
- Imposes a sanction on, or requires the satisfactory participation in, a drug abuse assistance or rehabilitation program, if such is available in the employee's community, by any employee who is so convicted.
- Makes a good faith effort to continue to maintain a drug free work place through the implementation of the drug free workplace program.
- "As a person authorized to sign this statement, I certify that the above named business, firm or corporation complies fully with the requirements set forth herein".

Authorized Signature

Date Signed

State of: _____

County of: _____

Sworn to and subscribed before me this _____ day of _____, 20__

Personally known _____ or Produced Identification _____
(Specify Type of Identification)

Signature of Notary

My Commission Expires _____

(seal)

This document must be completed and returned with your Submittal
HOLD HARMLESS AGREEMENT

The Vendor is required to purchase and maintain minimum limits of \$1,000,000 per occurrence for all liability, which includes general liability and, if applicable, automobile liability. Other coverage may be required where applicable.

The Vendor agrees to hold the Board of Sumter County Commissioners harmless against all claims for bodily injury, sickness, disease, death or personal injury or damage to property or loss of use resulting there from, arising out of the agreement, unless such claims are a result of the County's sole negligence.

The Vendor shall purchase and maintain workers' compensation insurance & employer's liability in accordance with Florida Statute Chapter 440.

The Vendor shall also purchase any other coverage required by law for the benefit of employees.

Required insurance shall be documented in Certificates of Insurance and shall be provided to the County representative requesting the service.

By signature upon this form the Vendor stipulates that he/she agrees to the Hold Harmless Agreement, and to abide by all insurance requirements.

Vendor-Print Name

Signature

Project Name

Date

The effective dates of this Hold Harmless Agreement shall be for the duration of the contract associated with this project.

This document must be completed and returned with your Submittal

E-Verify /Vendor/SubVendor Certification

E-Verify is a federal system established by the Department of Homeland Security to determine the immigration and work-eligibility status of prospective employees. Detailed E-Verify program information for employers can be found at <http://www.dhs.gov/e-verify>.

Vendors must certify compliance with the federal E-Verify program for all employees hired on or after the date of registration on the Department of Homeland Security website <http://www.dhs.gov/e-verify> by providing the Memorandum of Understanding electronic signature page with date of registration and company ID number and this E-Verify Certification form. In the case of vendors, this includes obtaining written certification from all sub-vendors who will participate in the performance of the contract. The certification below has been prepared for all County vendors to use for this purpose. All sub-vendor certifications must be kept on file with the contract and made available

to the state and/or Sumter County upon request. E-Verify must be obtained prior to the due date established in this formal solicitation.

CERTIFICATION

I certify that the company shown below is in compliance with the above statement and that I am authorized to sign on its behalf.

Name of Company: _____

Authorized signature: _____

Printed name & Title: _____

Address: _____

Date: _____

Telephone Number: _____

E-mail address: _____

Sumter County reserves the right to determine how it will respond to any instances of non-compliance or false certification of compliance. Potential Sumter County actions include, but are not limited to, cancellation of the contract and/or suspending or debarring the contract Vendor from performing services in any aspect to the Sumter County.

Please contact the Purchasing Division at 352-689-4400 with questions regarding this requirement.

This document must be completed and returned with your Submittal.

ANTI-COLLUSION STATEMENT

By signing this form, the Contractor agrees that this quote is made without any other understanding, agreement, or connection with any person, corporation, or firm submitting a quote for the same purpose and that the quote is in all respects fair and without collusion or fraud,

IT IS AGREED BY THE UNDERSIGNED CONTRACTOR, THAT THE SIGNING AND DELIVERY OF THE QUOTE REPRESENTS THE CONTRACTOR'S ACCEPTANCE OF THE TERMS AND CONDITIONS OF THE FORGOING SPECIFICATIONS AND PROVISIONS, AND IF AWARDED, THIS CONTRACT WILL REPRESENT THE AGREEMENT BETWEEN THE CONTRACTOR AND THE BOARD OF SUMTER COUNTY COMMISSIONERS

NAME OF FIRM: _____

[Sign in ink in the space provided below]

SIGNED BY: _____

TITLE: _____

ADDRESS: _____

CITY & STATE: _____

TELEPHONE: _____

No quotes will be withdrawn for a period of sixty (60) days subsequent to the opening of quotes, without the consent of the Board of Sumter County Commissioners,

NO QUOTE (Reason):

This document must be completed and returned with your Submittal

STATEMENT OF PUBLIC ENTITY CRIMES

This is a sworn statement under Section 287.133(3)(a), Florida Statutes, on public entity crimes and must be signed in the presence of a notary public or other officer authorized to administer oaths.

1. This sworn statement is submitted with Bid, Proposal or Contract No. _____
for _____.
2. This sworn statement is submitted by _____

(Name of entity submitting sworn statement)

whose business address is:

Its Federal Employer Identification Number (FEIN) is _____. (If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement: _____.)

3. I understand that a *Public Entity Crime* as defined in Paragraph 287.133(1)(g), Florida Statutes, is a violation of any State or Federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other State or with the United States, including, but not limited to, any bid, proposal, reply or contract for goods or services, any lease for real property, or any contract for the construction or repair of a public building or public work, involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.
4. I understand that *convicted* or *conviction* as defined in Paragraph 286.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any Federal or State trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, nonjury trial or entry of a plea of guilty or nolo contendere.
5. I understand that an *affiliate* as defined in Paragraph 287.133 (1)(a), Florida Statutes, means:
 - (a) A predecessor or successor of a person convicted of a public entity or crime; or
 - (b) An entity under the control of a natural person who is active in the management of the entity and who has been convicted of a public entity crime. *Affiliate* includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding thirty-six (36) months shall be considered an *affiliate*.
6. I understand that a *person* as defined in Paragraph 287.133(1)(e), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts let by a public entity, or which otherwise transacts or applies to transact business with a public entity. *Person* includes those officers, directors, executives, shareholders, partners, employees, members, and agents who are active in management of an entity.
7. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies.)

_____ Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989.

_____ The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an

affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989 AND (Please indicate which additional statement applies.)

_____ There has been a proceeding concerning the conviction before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted Vendor list. (Please attach a copy of the final order.)

_____ The person or affiliate was placed on the convicted Vendor list. There has been a subsequent proceeding before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted Vendor list. (Please attach a copy of the final order.)

_____ The person or affiliate has not been placed on the convicted Vendor list. (Please describe any action taken by or pending with the Department of General Services.)

Sworn to and subscribed before me this _____ day of _____, 20____. _____
(Signature)

Personally Known _____

OR produced identification _____ Notary Public – State of _____

_____ My commission expires _____
Type of identification produced

(Printed, typed or stamped
Commissioned name of notary public)

This document must be completed and returned with your Submittal

STATEMENT OF "NO BID"
ITB #045-0-2023/RS

If you do not intend to submit a bid for this project, please complete and return this form prior to date
shown for receipt of bids to: BOCC, 319 E. Anderson Avenue, Bushnell, FL 33513 Attn: Jackie Valdez

We, the undersigned, have declined to submit a bid for your **ITB #045-0-2023/RS Countywide
Pavement Maintenance and Rehabilitation Services** for the following reasons:

_____ Specifications are too "tight", i.e. geared toward one brand or manufacturer
only (please explain reason below)

_____ Insufficient time to respond to Request for Bid.

_____ We do not offer this product/s or equivalent.

_____ Remove us from your Vendor's list for this commodity or service.

_____ Our product schedule would not permit us to perform to specifications.

_____ Unable to meet specifications.

_____ Unable to meet insurance requirements.

_____ Specifications unclear (please explain below).

_____ Competition restricted by pre-approved owner standards.

_____ Other (please specify below or attach a separate sheet).

Remarks:

We understand that if this "No Bid" letter is not executed and returned, our name may be deleted from
the list of qualified proposers for the BOCC for future projects or commodities.

Company Name: _____

Address: _____

Signature and Title:

Telephone Number _____ Date _____

PART 5 SCOPE OF SERVICES

Board of Sumter County Commissioners wishes to solicit **sealed** bids from qualified contractors for construction of **Countywide Pavement Maintenance and Rehabilitation Services**.

The Contractor shall be responsible for providing any and all labor, materials, equipment, and other items required in order to provide pavement/asphalt maintenance and rehabilitation services and striping/pavement marking on an as-needed basis for various roadways throughout Sumter County, as needs are identified, and funding is available. The services include but may not be limited to milling, resurfacing, pavement preservation (asphalt rejuvenation), full depth reclamation, micro-surfacing, crack sealing, and paint and thermoplastic striping/pavement markings. All work shall be performed as needed in accordance with the plans and specifications provided for each project.

PART I – SCOPE OF WORK

1.1 GENERAL

The Scope of Work for the Countywide Pavement Maintenance and Rehabilitation Services shall be to furnish all labor, materials, equipment, and any other items necessary to provide pavement services on an as-needed basis for roadways within Sumter County as needs are identified and funding is available.

Before submitting a cost proposal for task order request under this Contract, the Contractor shall visit the site to inspect any designated areas for any possible obstruction (both overhead and adjacent) and differences in scope (i.e., paving area) and advise the County in writing of any obstructions or other conditions that may pose differences in the proposed scope of work.

1.2 REFERENCE STANDARD

The Special Provisions of these specifications are intended as modifications or supplements to Information for Bidders; General Conditions; or Technical Specifications, with the intent that any provisions of this section shall govern. If at any time, the plans or specifications for this Project are unclear, the CONTRACTOR shall contact the Engineer immediately. For those situations where details are not included in the plans or miscellaneous work that arises during the Project, which is not covered by the plans or specifications for this Project, the construction shall be performed in accordance with FDOT Standard Specifications for Road and Bridge Construction (FY 2023-24).

The Governing Order of the Governing Regulations is as follows:

1. Technical Special Provisions
2. Sumter County Special Provisions
3. Supplemental Conditions
4. General Conditions
5. Project Plans
6. FDOT Standard Plans
7. FDOT Developmental Specifications Division II and Division III
8. FDOT Supplemental Specifications Division II and Division III
9. FDOT Standard Specifications Division II and Division III

1.3 SERVICE TYPES

A. MILLING OF EXISTING ASPHALT

Scope of Work: This work shall include, but is not limited to materials, labor, equipment, traffic control, striping, placement of signs, sodding, erosion and sedimentation control, and any

construction and application procedures necessary to remove existing asphalt pavement by milling to improve the rideability of the finished pavement, to lower the finished grade adjacent to the existing curb before resurfacing, or to remove existing pavement altogether. **The Contractor shall haul millings to a legal location as determined by the Contractor. However, the Contractor shall haul the first 25 truckloads per calendar year to the Sumter County Public Works stockpile at 319 E. Anderson Avenue, Bushnell, FL 33513 or other County locations as deemed appropriate by the County representative.** The milling depth and locations per individual road shall be identified on work plans submitted for specific projects, as needed, to the awarded contractor(s) for task order cost proposals aligned with authorized contract pricing. After milling, the lime rock base shall be primed with asphalt emulsion prime (AEP) following Section 300 of the FDOT Standard Specifications for Road and Bridge Construction, latest edition. The cost of the prime coat shall be included in the asphalt price submitted in the bid response. All material removed shall be considered the contractor's property, excluding the 25 truckloads of milling to be delivered to the County.

Materials: Cold milling shall meet all specifications as shown in Section 327 of the FDOT Standard Specifications for Road and Bridge Construction except section 327-1.

Pavement Edging: All roads to be milled shall be edged to remove excess asphalt before asphalt paving. All edging material shall be removed from the site by the Contractor.

B. STRUCTURAL OVERLAY

Scope of Work: This work shall include but is not limited to materials, labor, equipment, traffic control, placement of signs, and any construction and application procedures necessary for all plant-mixed hot bituminous pavements and bases. Any areas where the stress relief is placed shall be paved with the asphalt surface before allowing traffic on it. This condition may be waived upon approval of the County Representative.

Materials: This Work will meet all specifications as shown in Section 330 and 337 of the FDOT Standard Specifications for Road and Bridge Construction, latest edition with the following modification: 1. The word "County" will be substituted for the word "Department."

Pavement Edging: All roads to be paved shall be edged 6" to 8" to remove grass before asphalt paving. All roads milled shall be edged to remove excess asphalt before asphalt paving. All edging material shall be removed from the site by the Contractor.

Warranty of Structural Overlay: The Contractor must furnish the following warranty after completing the work and before final payment, including Section 338 (Value Added Asphalt Pavement). The Contractor hereby warrants that all workmanship and all materials furnished under the contract comply fully with the requirements of the specifications. If at any time within one year after the date of the final inspection, any unsuitable or defective work should appear which in the opinion of the County is due to inferior materials or workmanship, the Contractor shall take all necessary actions to remedy the defects immediately at no cost to the County. The County will notify the Contractor in writing of the defects and the repairs to be made, and the Contractor will begin repair within a mutually agreed time frame.

The warranty period shall become effective on the date the final payment is approved and signed by the authorized Sumter County representative.

C. CHIP SEAL / FOG SEAL

Scope of Work: The work specified in this section consists of furnishing and applying a single, double, or triple application of the bituminous surface treatment on a paved roadway or

a prepared road base, compacted to the lines, grades, and thickness established by the County and in substantial conformance with the limits established by the owner.

Description: Chip Seal is a pavement surface treatment option that combines a layer of polymer modified liquid asphalt emulsion placed on a prepared base with a layer of aggregate spread and compacted while the asphalt is still liquid.

Materials:

Aggregates: Crushed granite conforming to FDOT Specifications Section 901, table 1 for #89, #78, or #67 gradation for coarse aggregates except as modified herein. The aggregate shall be washed granite obtained from a source approved by the owner. Sampling and testing of aggregate shall be the responsibility of the contractor. Copies of test results from the aggregate supplier shall be furnished to the County before starting the surface treatment.

All aggregate, #89, #78, and #67 shall be treated before applying Emulsified Asphalt Grade CSS-1H at the rate of 0.4% to 0.8% residual asphalt. All aggregate, clean broken stone, shall be pre-coated with an asphaltic material before the oil and chip process. All of the stones shall have 100% total coverage. A pugmill shall be used to pre-coat the aggregate. Stone having less than 100% total coverage shall not be used. The emulsified asphalt grade CSS-1H shall coat the entire surface of all of the aggregate. The pre-coating process is to take place at a location that the contractor has procured. The County shall approve the pre-coated aggregate before the seal coat process begins.

All costs for the pre-coating and placement of aggregate shall be included in the applicable chip seal or fog seal pay item as identified in the unit price proposal.

Payment shall not be made unless a representative of the County is present to observe the pre-coating process.

Liquid bituminous material for surface treatment: CRS-2P liquid bituminous material conforming to AASHTO M 316-99. When CRS-2P is specified, apply the following modifications:

- a) Distill the CRS-2P at 400°F for 20 min. and
- b) Provide Polymer-Modified Cationic Emulsified Asphalt, CRS-2P produced by using polymer modified base asphalt only. The emulsion shall be pumpable and suitable for application through a distributor truck.

The Cationic mixing grade shall be homogenous and of high quality. The material shall be prepared from straight-run Asphalt of high ductility and shall contain a rubber hydrocarbon additive derived from latex in addition to carefully controlled amounts of selected diluents to promote workability and minimize stripping. Additives that enhance pavement performance are subject to approval by the County. The polymer material shall be co-milled into the asphalt or added to the emulsifier solution prior to the emulsification process. The amount of polymer modifier shall not be less than 3.0% polymer solids based on the asphalt content (by weight) and will be certified by the emulsified asphalt supplier.

Cationic Asphalt Emulsion

Material Designation		
Test on Emulsion:	Minimum	Maximum
Viscosity, Saybolt Furol, 77 degrees F (25 C),	---	---

s		
Viscosity, Saybolt, 122 degrees F (50 C), s	100	400
Demulsibility, 35ml, 0.8 percent DSS, %	70	-
Sieve Test, %	-	0.1
Storage Stability	-	1
Residue by Distillation, 350°F max, %	65	---
Oil distillate, % by volume of emulsion	---	0.5
Residue Test, ASTM D 244 Low Temp	Minimum	Maximum
Penetration, 77°F, 100gr, 5 sec	70	150
Elastic Recovery, ASTM D 6084, method B, 77°F, 5 cm/min, %	50	-
Softening Point, °F	125	-
Solubility in Trichloroethylene, %	97.0	-

Material Samples: The County will require the Contractor to sample and test each emulsion load before delivery. The Contractor will also provide a sample of the emulsion on-site before commencing work. The County will require the Contractor to provide sample containers and a local Independent testing laboratory with no affiliation to the emulsion supplier to analyze the emulsion. The Contractor will be responsible for the cost of the testing. The County reserves the right to test any shipment of emulsion that is believed to be substandard (color, viscosity, non-homogeneous application, etc.). All samples shall be shipped and stored in clean air-tight sealed wide mouth jars or bottles made of plastic.

Equipment:

Distributor: The liquid bituminous material shall be applied with a truck-mounted pressure distributor that has been calibrated within the previous twelve months for transverse and longitudinal application rates. The distributor shall be equipped, maintained, and operated to apply the bituminous material at controlled temperatures and rates from 0.035 to 1.5 gallons per square yard. The distributor shall be capable of applying bituminous material of variable widths up to 16 feet. The distributor shall uniformly apply the bituminous material to the specified rate with a maximum allowed variation of 0.015 gallons per square yard. Distributor equipment shall include a tachometer, an accurate volume measuring device, a calibrated tank, and a thermometer for measuring the tank's contents. Distributors shall be equipped with a heating device, asphalt pump, and full circulating spray bars adjustable laterally and vertically. Distributors and transport trailers shall be equipped with a sampling valve. Distributor trucks shall be of the pressure type with insulated tanks. The use of gravity distributors will not be permitted. The valves shall be operated by levers so that one or all valves may be quickly opened or closed in one operation. The valves that control the flow from nozzles shall act positively to provide a uniform unbroken spread of bituminous material on the surface. The distributor shall be equipped with devices and charts to provide accurate and rapid determination and control of the amount of bituminous material being applied and with a bitumeter on the auxiliary wheel type registering speed in feet per minute and trip and total distance in feet. Two distributor trucks will be required on all projects.

Aggregate Spreader: The aggregate spreader shall be a self-propelled unit capable of uniformly spreading the aggregate at the required rate on a minimum width of six inches wider than the width of the lane to be treated. The spreader shall be calibrated within the

previous twelve months for transverse and longitudinal application. The spreader shall be capable of extending to a width of 22 feet. The spreader shall be equipped with a computer-controlled aggregate/chip spreader to ensure the appropriate aggregate coverage at varying speeds unless approved otherwise by the County.

Rollers: The contractor shall use one ten-ton steel-wheeled roller and two eight to twelve-ton self-propelled pneumatic tire rollers with oscillating wheels and low pressure, smooth tires. Maintain the inflation of the tires such that in no two tires, the air pressure varies more than five psi. The rollers will be equipped with an operating water system and coco pads. A sufficient number of rollers and a sufficient number of passes shall be used to ensure cover aggregate is appropriately rolled.

Self-Propelled Rotary Power Broom: The self-propelled rotary broom shall be designed, equipped, maintained, and operated so the pavement surface can be swept clean. The broom shall have an adjustment to control the downward pressure.

Additional Equipment: Additional equipment will be needed to complete the operations required by this technical provision. All equipment necessary for completing projects governed by this technical provision shall be included in the unit costs associated herein. Availability of quality assurance devices (such as a 10' straight edge) shall be the Contractor's responsibility.

Construction:

Layout: The Contractor will be responsible for the string lining and layout of the roadway before paving.

Weather and Seasonal Limitations: The surface treatment shall not be applied to a wet surface or when rain occurs or the threat of rain is present immediately before placement. The surface treatment shall not be applied when the temperature is less than 50 degrees Fahrenheit in the shade. When applying emulsions, the surface temperature shall be a minimum of 55°F, and no more than 140°F.

Preparation of Surface: The chip seal material shall be placed on a firm, unyielding prepared roadway. The Contractor shall be responsible for clipping back shoulders and removing overburden or any other vegetation or debris to ensure that the road is free of organic and deleterious material. The contractor will be responsible for blowing or sweeping the road immediately ahead of the chip seal operation to ensure the road is free of loose aggregate and other debris.

Application of Bituminous Material: Liquid bituminous material shall be applied using a pressure type distributor in a uniform, continuous spread over the section to be treated. The distributor shall be moving forward at the proper speed when the liquid is discharged onto the pavement to provide an even and consistent application at the rate prescribed. If any areas are deficient, the operation shall be stopped and corrected immediately. The liquid shall not be applied more than two hundred feet before the aggregate spreader when the ambient air temperature exceeds 75 degrees or one hundred feet if the air temperature is between 55 and 75 degrees.

- **Single Chip Seal:** Application of the liquid bituminous material shall be applied at a rate of 0.38 -0.45 gallons per square yard depending on the composition of the existing road bed, surface texture, and the aggregate's size in use.
- **Double Chip Seal:** The second application of liquid bituminous material shall be applied at a rate of 0.38 - 0.42 gallons per square yard depending upon the size of

the first layer of aggregate that the liquid is sprayed upon and the size of the aggregate being placed over the first application of surface treatment.

- **Triple Chip Seal:** The third application of liquid bituminous material shall be applied at a rate of 0.32 - 0.38 gallons per square yard depending upon the size of the first two layers of aggregate that the liquid is sprayed upon and the size of the aggregate being placed over the first and second applications of surface treatment.

Application of Cover Aggregate: Immediately following the spray application of the liquid bituminous material, cover aggregate shall be spread over the liquid material at a rate of 18 – 30 lbs per square yard depending upon the type of road base and the size of the existing aggregate that is being resurfaced.

Rolling: Immediately following the first application of the cover material, roll the entire surface with a pneumatic roller, followed immediately with the steel drum roller. Cover the entire surface one time with the steel drum roller. Then, roll the cover material again with the pneumatic roller. Continue rolling as long as necessary to ensure thorough keying of the cover aggregate into the liquid bituminous material. Eliminate the steel drum when rolling the second application of cover aggregate. Apply the second application of liquid and cover material the same day as the first application, as far as it is practicable and consistent with the setting of the liquid bituminous material.

Sweeping: After rolling the first application of cover aggregate, lightly broom the loose aggregate not to dislodge the aggregate embedded in the liquid. Sweep loose material from the road bed. Following the second application, again, broom loose aggregate from the road bed before applying the fog seal. If temperatures exceed 85 degrees, it may be necessary to wait 24 hours before sweeping the first application of the chip seal.

Fog Seal: Upon direction from the County, the fog seal is to be applied as a separate pay item. When surface treatment has been set, a fog seal is to be applied at a rate of 0.1 to 0.15 gallons per square yard to the entire surface treatment. The liquid for the fog seal shall be a cationic mixing type emulsion diluted forty percent with water. If sanding is needed, the fog seal shall be lightly sanded at a rate of plus or minus two pounds per square yard utilizing a mechanical spreader.

General Performance: Provide completed pavement that performs to the satisfaction of the County without bleeding, rutting, shoving, raveling, stripping, or showing other types of pavement distress or unsatisfactory performance.

Traffic Control: The Contractor shall furnish all necessary traffic control, barricades, signs, and flaggers to ensure the safety of the traveling public and to all working personnel. Traffic shall not travel on the fresh mix until rolling and blotting have been completed. The Contractor shall submit a Maintenance of traffic (MOT) plan indicating all facets of traffic control for the project area. The MOT plan must be accepted in writing by the County before commencing any work. All traffic control shall be following the FDOT Standard Plans, most current edition, and TP-102. MOT and associated devices shall be checked daily and periodically throughout the project for compliance, and where adjustments or corrections are needed, prompt revisions shall be made. In the event that the work requires a special traffic control plan that deviates from FDOT standards, the contractor shall submit a signed and sealed traffic control plan or MOT plan to the County for acceptance. This signed and sealed plan shall be incidental to the construction cost.

Method of Measurement: If a pay item is listed on the unit price proposal for work required in this Technical Provision, the quantity to be paid shall be as specified in the unit price proposal, including all items of work described herein. Any item necessary for Chip Seal and not explicitly

listed in another item in the unit price proposal shall be included in this item. Should the contractor be directed to place Fog Seal as a secondary application to Chip Seal, it shall be measured separately as listed in the Technical Provision for Fog Seal.

Basis of Payment: The quantities to be paid for under this Technical Provision shall be included in the Square Yard price for Chip Seal (single application), chip seal (double application), or chip seal (triple application) as listed in the unit price proposal. The unit price includes all items listed in the contract, including all General Conditions, Special Conditions, and Technical Provisions pertaining to chip seal, including all items of work described herein. No additional payment will be provided for any item necessary to complete this contract as detailed in the specifications, except that at the direction of the County, fog seal shall be applied and paid separately as listed in the Technical Provision for fog seal.

Warranty of Chip Seal: The Contractor shall provide the County upon final acceptance of the cape Seal work a warranty period of three years which shall include all labor, materials, hauling, traffic control, and striping to repair the defective areas. Defective areas shall include debonding/delamination, excessive raveling, and aggregate loss exposing the old roadway surface. The Contractor shall perform all warranty work at no cost to the County. The Contractor shall have been doing business in the State of Florida for at least four years prior to the date of this bid and have full-time, experienced personnel to respond to any warranty issues within 24 hours. The Contractor can be called to perform work or warranty work at any time of the year as needed by the County. The Contractor must have a full-time presence with an office, experienced personnel, and the proper equipment in Florida to respond 365 days a year.

D. CAPE SEAL SPECIFICATIONS

Description: The work specified in this section consists of furnishing and applying a single application of polymer modified bituminous surface treatment followed by a mixture of polymer-modified emulsified asphalt, mineral aggregate, mineral filler, water, and other additives, properly proportioned, mixed, and spread on a paved surface, established by the County and in substantial conformance with the limits established by the County. This two-step process is called a cape seal.

Materials:

Aggregates: for the first coat, surface treatment crushed granite conforming to FDOT specifications section 901, table 1 for #89 gradation for coarse aggregates except as modified herein. The aggregate shall be washed granite obtained from a source approved by the owner. Sampling and testing of aggregate shall be the responsibility of the contractor. Copies of test results from the aggregate supplier shall be furnished to the owner before starting the surface treatment.

All aggregate #89 shall be treated before applying Emulsified Asphalt Grade CSS-1H at the rate of 0.4% to 0.8% residual asphalt. All aggregate, clean broken stone, shall be pre-coated with an asphaltic material before the oil and chip process. All of the stones shall have 100% total coverage. A pugmill shall be used to pre-coat the stone. Stone having less than 100% total coverage shall not be used. The emulsified asphalt grade CSS-1H shall coat the entire surface of all of the aggregate. The pre-coating process is to take place at a location that the contractor procures. The County shall approve the pre-coated aggregate before the seal coat process begins.

All costs for the pre-coating and placement of aggregate shall be included in the cost of the item Cape Seal.

Payment shall not be made for the Cape Seal unless a representative of the County is

present to observe the pre-coating process.

Aggregates: for the final coat, use an aggregate consisting of 100% crushed stone. The aggregate shall be a crushed stone such as granite, slag, limestone, chat, or another high-quality aggregate, or a combination thereof. To assure the material is 100 percent crushed, the parent aggregate will be larger than the largest stone in the gradation used. Use aggregate source(s) from the list of aggregates available on FDOT's website and meet the requirements of this specification.

In addition to the requirements of FDOT Standard Specification Sections 901 and 902, meet the minimum aggregate requirements of Table 62-1.

Table 62-1 Quality Tests for Aggregate		
AASHTO Test No.	Aggregate Property	Specification Requirements
AASHTO T 176	Sand Equivalent	65 Minimum
AASHTO T 104	Soundness	15% Maximum using Na ₂ SO ₄ or 25% Maximum using MgSO ₄
AASHTO T 96	Abrasion Resistance ⁽¹⁾	30% Maximum

(1) The abrasion test will be performed on the parent aggregate.

Gradation Requirements: When tested following FM 1-T 027 and FM 1-T 011, the target (mix design) aggregate gradation, including the mineral filler, shall be within the gradation range for a Type II mixture shown in Table 62-2, Column II.

Table 62-2 Mix Design Gradation Requirements		
Sieve Size	Type II Mix Design Range Percent Passing	Stockpile Tolerance from Mix Design Percent Passing
3/8 inch	100	N/A
No. 4	90 – 100	± 5%
No. 8	65 – 90	± 5%
No. 16	45 – 70	± 5%
No. 30	30 – 50	± 5%
No. 50	18 – 30	± 4%
No. 100	10 – 21	± 3%
No. 200	5 – 15	± 2%

The aggregate will be accepted from the stockpile located at the project. The stockpile will be accepted based on five quality control gradation tests conducted following FM 1-T 002. If the average of the five gradation tests is within the stockpile tolerances shown in Table 62-2, Column III for all of the sieve sizes, then the stockpile is accepted. If the average of the five gradation tests is not within the stockpile tolerances shown in Table 62-2, Column III, for any sieve size, remove the stockpiled material and replace it with new aggregate or blend other aggregate sources with the stockpiled material. Aggregates used in blending must meet the quality tests shown in Table 62-1 before blending and must be blended in a manner to produce a consistent gradation and sand equivalent value. If a new aggregate is obtained or blending of aggregates is performed, resulting in an aggregate that is not represented by the mix design, the contractor shall submit a new mix design to the Engineer for approval before production of the mix.

The Engineer may obtain stockpile samples at any time. If the average of five gradation tests conducted following FM 1-T 002 is not within the gradation tolerances shown in Table 62-2,

Column III for any sieve size, cease production until the problem is corrected to the satisfaction of the Engineer.

Screen all stockpiled aggregates at the stockpile area before delivery to the paving machine to remove oversize material and non-desirable particles.

Mineral Filler: If a mineral filler is utilized in the mix design, use non-air-entrained portland cement or hydrated lime, free from lumps. The Engineer will accept the mineral filler by visual inspection. The type and amount of mineral filler shall be determined by a laboratory mix design and considered part of the aggregate gradation. An increase or decrease of less than one percent mineral filler may be permitted during production if found to result in better consistency or set times. Any changes to the percentage of mineral filler must meet the requirements of Table 62-4.

Water: Utilize potable water that is free of harmful soluble salts, reactive chemicals, or any other contaminants.

Additives: Additives may be added to the mixture or any of the component materials to provide control of quick-trafficking properties. The additives to be used should be indicated on the mix design and be compatible with the other components of the mix.

Mix Design: Before work begins, the Contractor shall submit a mix design to the Engineer. The mix design must have an aggregate source used on five similar projects and developed using the specific materials to be used on the project. The mix design shall be developed by an independent, accredited laboratory with no affiliation to the emulsion supplier and endorsed by the International Slurry Surfacing Association (ISSA) and has experience designing such mixtures.

Submit the proposed mix design with supporting test data indicating compliance with all mix design criteria. Allow the Engineer a maximum of two weeks to either conditionally verify or reject the mix design.

Meet the requirements provided in Table 62-3. After the mix design has been approved, no substitutions to the mix design will be permitted unless approved by the Engineer. The Engineer will consider inadequate field performance of a mix as sufficient evidence that the properties of the mix related to the mix design have changed, and the Engineer will no longer allow the use of the mix design. The project will be stopped until it is demonstrated that those properties, or issues, have been sufficiently addressed.

Table 62-3		
Mix Design Testing Requirements		
ISSA Test No.	Property	Specification Requirements
ISSA TB-139 ⁽¹⁾	Wet Cohesion: @ 30 Minutes Minimum (Set) @ 60 Minutes Minimum (Traffic)	12 kg-cm Minimum 20 kg-cm or Near Spin Minimum
ISSA TB-109	Excess Asphalt by Loaded Wheel Tester (LWT) Sand Adhesion	50 g/ft ² Maximum
ISSA TB-114	Wet Stripping	90% Minimum
ISSA TB-100	Wet-track Abrasion Loss: One-hour Soak Six-day Soak	50 g/ft ² Maximum 75 g/ft ² Maximum
ISSA TB-147	Lateral Displacement Specific Gravity after 1,000 Cycles of 125 lb.	5% Maximum 2.10 Maximum

ISSA TB-113 ⁽¹⁾	Mix Time @ 77°F (25°C)	Controllable to 120 Seconds Minimum
----------------------------	------------------------	-------------------------------------

(1) The Cohesion test and Mixing Time test should be checked and reported for the highest temperatures expected during construction.

The mix design must clearly show the proportions of aggregate, emulsified asphalt, mineral filler, water, and additive usage based on the dry weight of the aggregate. Meet the mix design component material requirements provided in Table 62-4.

Table 62-4

Mix Design Component Material Requirements

Component Materials	Specification Requirements
Residual Asphalt	5.5 to 10.5% (by dry weight of aggregate)
Mineral Filler	0.5 to 3.0% (by dry weight of aggregate)
Polymer-based Modifier	Minimum of 3.0% (solids based on asphalt weight content)
Additives	As needed
Water	As required to produce proper mix consistency

The materials (aggregates, emulsion, mineral filler, and additives) must be from the same source, grade and type used to develop the approved mix design. The Engineer must preapprove any substitutions or alternate supplies. Changes in the aggregate source or emulsion source require re-validating the mix design and the performance properties. Blending, co-mingling, and combining materials from two or more sources, grades or types is strictly prohibited. Aggregate stockpiles and emulsion material should be located at or near the job site in sufficient quantity for the job or designated parts of the job.

Liquid bituminous material for the first coat: CRS-2P liquid bituminous material conforming to AASHTO M 316-99. When CRS-2P is specified, apply the following modifications:

- a.) Distill the CRS-2P at 400°F for 20 min. and
- b.) Provide Polymer-Modified Cationic Emulsified Asphalt, CRS-2P produced by using polymer modified base asphalt only. The emulsion shall be pumpable and suitable for application through a distributor truck.

The Cationic mixing grade shall be homogenous and of high quality. The material shall be prepared from an Asphalt of high ductility and shall contain a rubber hydrocarbon additive derived from latex in addition to carefully controlled amounts of selected diluents to promote workability and minimize stripping. Additives that enhance pavement performance are subject to approval by the County. The polymer material shall be co-milled into the asphalt or added to the emulsifier solution before the emulsification process. The amount of polymer modifier shall not be less than 3.0% polymer solids based on the asphalt content (by weight) and certified by the emulsified asphalt supplier.

Cationic Asphalt Emulsion

Material Designation		
Test on Emulsion:	Minimum	Maximum
Viscosity, Saybolt Furol, 77 degrees F (25 C), s	---	---
Viscosity, Saybolt, 122 degrees F (50 C), s	100	400
Demulsibility, 35ml, 0.8 percent DSS, %	70	-
Sieve Test, %	-	0.1
Storage Stability	-	1
Residue by Distillation, 350°F max, %	65	---

Oil distillate, % by volume of emulsion	---	0.5
Residue Test, ASTM D 244 Low Temp	Minimum	Maximum
Penetration, 77°F, 100gr, 5 sec	70	150
Elastic Recovery, ASTM D 6084, method B, 77°F, 5 cm/min, %	50	-
Softening Point, °F	125	-
Solubility in Trichloroethylene, %	97.0	-

Liquid bituminous material for the final coat: Provide a quick-traffic, polymer-modified emulsified asphalt conforming to the requirements specified in AASHTO M 208 for CSS-1 has listed in Table 62-5. The cement mixing test shall be waived for this product.

The polymer material shall be co-milled into the asphalt or added to the emulsifier solution before the emulsification process. The amount of polymer modifier shall not be less than 3.0% polymer solids based on the asphalt content (by weight) and certified by the emulsified asphalt supplier.

The Engineer may waive the five-day settlement test, provided job-stored emulsified asphalt is used within 36 hours from the time of the shipment or the stored material has had additional emulsified asphalt blended into it before use.

Quality Tests: The emulsified asphalt, and emulsified asphalt residue, shall meet the requirements of AASHTO M 208 for CSS-1h, with the following additions:

e 62-5 Quality Tests for Emulsified Asphalt		
AASHTO Test No.	Emulsified Asphalt Property	Specification Requirements
AASHTO T 59	Residue after Distillation ⁽¹⁾	62% Minimum
AASHTO T 59	Cement Mixing	Not Required
Quality Tests for Emulsified Asphalt Residue		
AASHTO T 53	Softening Point	135°F (57°C) Minimum

(1) Maintain the test temperature at 350°F (177°C) for 20 minutes.

Sampling, Certification, and Verification: For the first load of emulsified asphalt produced for the project, the supplier shall submit a sample to the Engineer for testing before use. The Engineer will then assign a pretest number, and the pretest number shall be furnished with all emulsified asphalt delivered to the project.

During application, the Engineer may sample and test all subsequent loads of emulsified asphalt delivered to the project to verify and determine compliance with specification requirements. These tests identify material outside specification requirements; the Engineer may require the supplier to cease shipment of that pre-tested product. A further shipment of that pre-tested product to the owning agency's projects will remain suspended until the cause of the problem is evaluated and corrected by the supplier to the Engineer's satisfaction.

Material Samples: The County will require the Contractor to sample and test each emulsion load before delivery. The Contractor will also provide a sample of the emulsion on-site before commencing work. The County will require the Contractor to provide sample containers and a local Independent testing laboratory with no affiliation to the emulsion supplier to analyze emulsion. The Contractor will be responsible for the cost of the testing. The County reserves the right to test any shipment of emulsion that is believed to be substandard. All samples shall be shipped and stored in clean air-tight sealed wide mouth jars or bottles made of plastic.

Equipment: Maintain all equipment, tools, and machines used in the performance of this work in satisfactory working condition at all times to ensure a high-quality product.

Distributor: The liquid bituminous material shall be applied with a truck-mounted pressure distributor that has been calibrated within the previous twelve months for transverse and longitudinal application rates. The distributor shall be equipped, maintained, and operated to apply the bituminous material at controlled temperatures and rates from 0.035 to 1.5 gallons per square yard. The distributor shall be capable of applying bituminous material of variable widths up to twenty-four feet. The distributor shall uniformly apply the bituminous material to the specified rate with a maximum allowed variation of 0.015 gallons per square yard. Distributor equipment shall include a tachometer, an accurate volume measuring device, a calibrated tank, and a thermometer for measuring the tank's contents. Distributors shall be equipped with a heating device, asphalt pump, and full circulating spray bars adjustable laterally and vertically. Distributors and transport trailers shall be equipped with a sampling valve. Distributor trucks shall be of the pressure type with insulated tanks. The use of gravity distributors will not be permitted. The valves shall be operated by levers so that one or all valves may be quickly opened or closed in one operation. The valves that control the flow from nozzles shall act positively to provide a uniform unbroken spread of bituminous material on the surface. The distributor shall be equipped with devices and charts to provide accurate and rapid determination and control of the amount of bituminous material being applied and with a bitumeter of the auxiliary wheel type registering speed in feet per minute and trip and total distance in feet. Two distributor trucks will be required on all projects.

Aggregate Spreader: The aggregate spreader shall be a self-propelled unit capable of uniformly spreading the aggregate at the required rate on a minimum width of six inches wider than the width of the lane to be treated. The spreader shall be calibrated within the previous twelve months for transverse and longitudinal application. The spreader shall be capable of extending to a width of 24 feet. The spreader shall be equipped with a computer-controlled aggregate/chip spreader to ensure the appropriate aggregate coverage at varying speeds unless approved otherwise by the Engineer.

Rollers: The contractor shall use three eight to twelve-ton self-propelled pneumatic tire rollers with oscillating wheels and low pressure, smooth tires. Maintain the inflation of the tires such that in no two tires, the air pressure varies more than five psi. The rollers will be equipped with an operating water system and coco pads. A sufficient number of rollers and a sufficient number of passes shall be used to ensure cover aggregate is appropriately rolled.

Sweepers: A minimum of two vacuum sweepers shall be used on this project. In rural areas, a self-propelled rotary broom can be used. It shall be equipped, maintained, and operated so the pavement surface can be swept clean. The broom shall have an adjustment to control the downward pressure. A vacuum street sweeper must be used in residential areas, and all excess aggregate shall be swept within 24 to 48 hours after the first application of the Cape Seal has been applied.

Mixing Equipment: Truck mounted and self-loading continuous machines are acceptable. Mix the material with an automatic-sequenced, self-propelled mixing machine. It shall be a continuous-flow mixing unit able to accurately deliver and proportion the mix components through a revolving multi-blade, double-shafted mixer and to discharge the mixed product on a continuous-flow basis. The machine shall have sufficient storage capacity for all mix components to maintain an adequate supply to the proportioning controls. Four truck-mounted machines of 12 cubic yard capacity, or larger, will be required for all projects or roads one-half mile or less in length.

Self-loading continuous machines shall be capable of loading materials while maintaining

micro-surfacing, thereby minimizing construction joints. Two self-loading machines shall be required on all projects or roads greater than one-half mile in length. Self-loading continuous machines shall be equipped to allow the operator to have complete control of the forward and reverse speeds during applications of the material and shall be equipped with opposite-side driver stations to assist in alignment. The self-loading device, opposite-side driver stations, and forward and reverse speed controls shall be original equipment-manufacturer design.

Proportioning Device: Provide and properly mark individual volume or weight controls for proportioning each material to be added to the mix (i.e., aggregate, mineral filler, emulsified asphalt, additives, and water).

Spreading Equipment: Agitate and spread the mixture uniformly in the spreader box using twin-shafted paddles or spiral augers fixed in the spreader box. Provide a front seal to ensure no loss of the mixture at the road contact point. The rear seal shall act as a final strike-off and shall be adjustable. The spreader box and rear strike-off shall be so designed and operated that a uniform consistency is achieved, and a free flow of material is provided to the rear strike-off. The spreader box shall have suitable means to automatically adjust the box width while traveling behind the mixing unit and side shift the box to compensate for variations in the pavement geometry.

Secondary Strike-off: Provide a secondary strike-off to improve surface texture. The secondary strike-off shall have the same adjustments as the spreader box. No burlap drags will be permitted on the final applications.

Auxiliary Equipment: Provide suitable surface preparation equipment, traffic control equipment, hand tools, and any other support and safety equipment necessary to perform the work.

Calibration: Calibrate each mixing unit to be used in the performance of the work in the presence of the Engineer before the start of construction. Previous calibration documentation covering the exact materials to be used may be acceptable, provided that no more than 60 days have elapsed.

Document the individual calibration of each material at various settings, which can be related to the machine metering devices. Do not utilize any mixing unit on the project until the calibration has been completed and approved by the Engineer. Any component replacement affecting material proportioning requires that the machine be recalibrated. No machine will be allowed to work on the project until the calibration has been completed and accepted.

Additional Equipment: Additional equipment will be needed to complete the operations required by this technical provision. All equipment necessary for the successful completion of projects governed by this technical provision shall be included in the unit costs associated herein. Availability of quality assurance devices (such as a 10-foot straight edge) shall be the Contractor's responsibility.

Experience: All contractors and subcontractors shall be FDOT prequalified in the work classes of drainage, flexible paving, grading, and hot plant-mixed bituminous courses. Bidders must submit with the bid a minimum of five Cape Seal project references from a City or County in the State of Florida that have been completed within the past three years. Bidders may be required to submit detailed information regarding the staff that they propose for this project. The Contractor shall be capable of meeting all the requirements of this specification at the time of the bid. The Contractor shall have in their possession, in the State of Florida at the time of bidding, two or more aggregate spreaders, two distributors, four truck-mounted machines, and two self-loading machines as described in the equipment section of the specification. Staff shall have the option to inspect the Contractor's equipment, and if found deficient, it shall be

the basis for rejection of Contractor's bid.

Construction:

Layout: The Contractor will be responsible for the string lining and layout of the roadway before paving.

Weather and Seasonal limitations: The cape seal treatment shall not be applied to a wet surface or when rain occurs or the threat of rain is present immediately before placement. The surface treatment shall not be applied when the temperature is less than 50 degrees Fahrenheit in the shade. When applying emulsions, the surface temperature shall be a minimum of 55°F, and no more than 140°F.

Preparation of Surface: The cape seal material shall be placed on a firm, unyielding prepared roadway. The Contractor shall be responsible for clipping back shoulders and removing overburden or any other vegetation or debris to ensure that the road is free of organic and deleterious material. The contractor will be responsible for blowing or sweeping the road immediately ahead of the chip seal operation to ensure the road is free of loose aggregate and other debris. Remove any thermoplastic striping materials and retro-reflective pavement markers in the areas to be cape sealed. Provide temporary striping as necessary to comply with Contract Documents. If water is used for cleaning, allow any unsealed cracks to dry thoroughly before applying a cape seal. Protect maintenance holes, valve boxes, drop inlets, and other service entrances from the cape seal mixture by a suitable method. The Engineer will approve the surface preparation before the cape seal. No loose aggregate, either spilled from the lay-down machine or existing on the road, will be permitted on the final application.

Application of bituminous material: Liquid bituminous material shall be applied using a pressure type distributor in a uniform, continuous spread over the section to be treated. The distributor shall be moving forward at the proper speed when the liquid is discharged onto the pavement to provide an even and consistent application at the rate prescribed. If any areas are deficient, the operation shall be stopped and corrected immediately. The liquid shall not be applied more than two hundred feet before the aggregate spreader when the ambient air temperature exceeds 75 degrees or one hundred feet if the air temperature is below 75 degrees.

- **Single Chip Seal:** The liquid bituminous material shall be applied at a rate of 0.32 - 0.38 gallons per square yard depending on the composition of the existing roadbed, surface texture, and the aggregate's size in use.

Application of cover Aggregate: Immediately following the spray application of the liquid bituminous material, cover aggregate shall be spread over the liquid material at a rate of 22 – 28 lbs square yard depending upon the type of road that is being resurfaced.

Rolling: Immediately following the first application of the cover material, roll the entire surface with pneumatic rollers. Continue rolling as long as necessary to ensure thorough keying of the cover aggregate into the liquid bituminous material and as far as it is practicable and consistent with the setting of the liquid bituminous material.

Sweeping: After rolling the first application of cover aggregate, lightly broom the loose aggregate not to dislodge the aggregate embedded in the liquid. Before the final lift is applied, sweep loose material within 24 to 48 hours after the first application.

Application of Final Lift: Pre-wet the surface by fogging ahead of the spreader box with

water. Adjust the application rate of the fog spray to suit temperatures, surface texture, humidity, and dryness of the pavement.

The material shall be of the desired consistency upon leaving the mixer. Carry a sufficient amount of material in all parts of the spreader box at all times so that complete coverage is obtained. Avoid overloading of the spreader box. Do not allow lumping, balling, or unmixed aggregate in the micro surfacing mixture.

Do not leave streaks, such as those caused by oversized aggregate, in the finished surface. If excess streaking develops, stop production until the situation has been corrected. Excessive streaking is defined as more than four drag marks greater than 1/2 inch wide and 4 inches long, or 1 inch wide and 3 inches long, in any 30 yd² areas. Do not permit transverse ripples or longitudinal streaks of 1/4 inch in depth or greater when measured by placing a 10-foot straight edge over the surface.

Rate of Application:

The average application rate shall be following Table 62-6 unless otherwise specified in the Contract Documents. Full-width application rates must be maintained within ± 2 lbs/yd² of the specified rate. Application rates are based upon the weight of dry aggregate in the mixture. The maximum thickness of any single layer of micro-surfacing at the edge of the pavement shall be 1/4 inch.

Table 62-6 Final Application Rates			
AGGREGATE TYPE	LOCATION	APPLICATION RATE⁽¹⁾	
Type II	Collectors, Local Roads, and Airport Runways	Single Application: 26-30 lbs/yd ²	

(1) Application rates are based upon the weight of dry aggregate in the mixture.

Joints: Prevent excessive buildup, uncovered areas, or unsightly appearance on longitudinal and transverse joints. Provide suitable-width spreading equipment to produce a minimum number of longitudinal joints throughout the project. Place longitudinal joints on lane lines, where possible. Use half passes and odd-width passes only when absolutely necessary. Do not apply a half pass as the last pass of any area. Do not overlap longitudinal lane line joints by more than three inches. Do not construct joints having more than a 1/4 inch difference in elevation when measured by placing a 10-foot straight edge over the joint and measuring the elevation drop-off. Construct longitudinal joints so that water is not held at the joint. Construct transverse joints at the beginning and end project limits so that the elevation difference does not exceed 1/4 inch.

Mix Stability: Produce a mixture that possesses sufficient stability, so that premature breaking of the material in the spreader box does not occur. The mixture shall be homogeneous during and following mixing and spreading. The mixture shall be free of excess water or emulsified asphalt and free of segregation of the emulsified asphalt and aggregate fines from the coarser aggregate. Do not spray water directly into the spreader box while applying material under any circumstances.

Handwork: Utilize hand squeegees to provide complete and uniform coverage of cape-sealed areas that cannot be reached with the mixing machine. Lightly dampen the area to be hand-worked before mix placement, if necessary. Care shall be exercised to leave no

unsightly appearance from handwork. When performing handwork, provide the same type of finish as that applied by the spreader box.

Lines: Construct straight lines along curbs and shoulders. Do not permit runoff in these areas. Keep lines at intersections straight to provide a good appearance. If necessary, utilize a suitable material to mask off the end of streets to provide straight lines. Edge lines shall not vary by more than 2 inches horizontally.

Cleanup: Remove cape seal material from all areas such as manholes, gutters, drainage structures, rumble strips, and as otherwise specified by the Engineer. Daily, remove any debris resulting from the performance of the work.

Quality Assurance:

Material Monitoring: Provide a computerized material monitoring system with integrated material control devices that are readily accessible and positioned so the amount of each material used can be determined at any time. Ensure the computer system is functional at the beginning of work and during each calibration. Provide a backup electronic materials counter that is capable of recording running count totals for each material being monitored. Equip the mixer with a radar ground measuring device. The computer system shall have the capability to record, display and print the following information:

1. Individual sensor counts for emulsion, aggregate, cement, water, and additive.
2. Aggregate, emulsion, and cement output in pounds per minute.
3. Ground travel distance.
4. Spread rate in pounds per square yard.
5. Percentages of emulsion, cement, water, and additive.
6. Cumulative totals of aggregate, emulsion, cement, water, and Additive.
7. Scale factor for all materials.

Sampling and Testing: The Engineer shall obtain one sample of micro-surfacing mixture each day of production. The Engineer shall test each sample following FM 5-563 and FM 1-T 030 to determine the residual asphalt content and the gradation of the sample. Evaporate all water from the sample before testing. Determine the deviation of the test results for each sample from the mix design target values. Compare the deviation from the mix design to the mixture control tolerances shown in Table 62-7.

Table 62-7 Aggregate and Emulsified Asphalt - Acceptance Limits	
Aggregate	Tolerance from Mix Design Target Values
Percent Passing No. 4 Sieve	± 6 percent
Percent Passing No. 8 Sieve	± 7 percent
Percent Passing No. 50 Sieve	± 6 percent
Percent Passing No. 200 Sieve	± 3.0 percent
Emulsified Asphalt	
Residual Asphalt Content of Mixture	± 0.6 percent

Application Rate: Control the application rate for micro surfacing on a lot basis to within the "Total" range specified in 62-6. A lot will be considered as 0.10 lane miles. No additional compensation will be paid for application rates placed in excess of the "Total" specified

range. The unit price for each deficient lot will be reduced by ten percent for each lb/yd² rate less than the "Total" specified range. For application rates outside the "Total" specified range, stop production of the mixture and make adjustments to correct the problem to the Engineer's satisfaction before resuming production. Accept a pay reduction for deficient lot production or overlay the deficient area at full plan width and depth at no additional cost.

Traffic Control: The **Contractor** The Contractor shall furnish all necessary traffic control, barricades, signs, and flagmen to ensure the safety of the traveling public and to all working personnel. Traffic shall not travel on the fresh mix until rolling and blotting have been completed. The Contractor shall submit an MOT plan indicating all facets of traffic control for the project area. The MOT plan must be accepted in writing by the County before commencing any work. All traffic control shall be following the FDOT Roadway Design Standards, most current edition, and TP-102. MOT and associated devices shall be checked daily and periodically throughout the project for compliance, and where adjustments or corrections are needed, prompt revisions shall be made. In the event that the work requires a special traffic control plan that deviates from FDOT standards, the contractor shall submit a signed and sealed traffic control to the County for acceptance. This signed and sealed plan shall be incidental to the construction cost.

Method of Measurement: If a pay item is listed on the unit price proposal for work required in this Technical Provision, the quantity to be paid shall be as specified in the unit price proposal, including all items of work described herein. Any item necessary for Cape Seal, not specifically listed in another item in the unit price proposal, shall be included. The prime contractor must perform at least 51% or more of the project that includes Cape Seal.

Basis of Payment: The quantities to be paid for under this Technical Provision shall be included in the Square Yard price for Cape Seal as listed in the unit price proposal. The Unit price includes all items listed in the contract, including all General Conditions, Special Conditions, and Technical Provisions pertaining to Cape Seal, including all items of work described herein. No additional payment will be provided for any item necessary to complete this contract as detailed in the specifications, except that at the direction of the County.

Warranty: The Contractor shall provide the County upon final acceptance of the Cape Seal work a warranty period of three (3) years which shall include all labor, materials, hauling, traffic control, and striping to repair the defective areas. Defective areas shall include debonding/delamination, excessive raveling, and aggregate loss exposing the old roadway surface. The Contractor shall perform all warranty work at no cost to the County. The Contractor shall have been doing business in the State of Florida for at least four years from the date of this bid and have full-time, experienced personnel to respond to any warranty issues within 24 hours. The Contractor can be called to perform work or warranty work at any time of the year as needed by the County. The Contractor must have a full-time presence with an office, experienced personnel, and the proper equipment in Florida to respond 365 days a year.

E. MICRO-SURFACING

Micro-Surfacing shall be performed following FDOT Specification Section 335, provided as follows for reference. Any reference to the "Engineer" shall mean "Engineer or Sumter County." All payment terms shall be following Contract Terms contained in the Contract Documents.

SECTION 335

MICRO-SURFACING

335-1 Description.

Construct a micro-surfacing pavement with the type of mixture specified in the Contract Documents. Micro-surfacing is a mixture of polymer-modified emulsified asphalt, mineral aggregate, mineral filler, water, and other additives, properly proportioned, mixed, and spread on a paved surface.

The mix shall be capable of being spread in variable thickness cross-sections (wedges, ruts, scratch courses, and surfaces), which, after curing and initial traffic consolidation, resists compaction throughout the entire design tolerance range of asphalt binder content and variable thickness to be encountered. The end product shall maintain a skid-resistant surface in variable thick sections throughout the service life of the micro-surfacing.

The mix shall be a quick-traffic system that will accept straight rolling traffic one hour after application.

335-2 Materials.

335-2.1 Emulsified Asphalt:

335-2.1.1 General Requirements:

Provide a quick-traffic, polymer-modified emulsified asphalt conforming to the requirements specified in AASHTO M 208 for CSS-1h, as listed in Table 335-1. The cement mixing test shall be waived for this product.

The polymer material shall be co-milled into the asphalt or added to the emulsifier solution before the emulsification process. The amount of polymer modifier shall not be less than 3.0% polymer solids based on the asphalt content (by weight) and certified by the emulsified asphalt supplier.

The Contractor's Engineer and County representative may waive the five-day settlement test, provided job-stored emulsified asphalt is used within 36 hours from the time of the shipment or the stored material has had additional emulsified asphalt blended into it before use.

335-2.1.2 Quality Tests:

The emulsified asphalt, and emulsified asphalt residue, shall meet the requirements of AASHTO M 208 for CSS-1h, with the following additions:

e 335-1 Quality Tests for Emulsified Asphalt		
AASHTO Test No.	Emulsified Asphalt Property	Specification Requirements
AASHTO T 59	Residue after Distillation ⁽¹⁾	62% Minimum
AASHTO T 59	Cement Mixing	Not Required
Quality Tests for Emulsified Asphalt Residue		
AASHTO T 53	Softening Point	135°F (57°C) Minimum

(1) Maintain the test temperature at 350°F (177°C) for 20 minutes.

335-2.1.3 Sampling, Certification, and Verification:

For the first load of emulsified asphalt produced for the project, the supplier shall submit a sample to the Contractor's Engineer for testing before use. A pretest number will then be assigned by the Contractor's Engineer, and the pretest number shall be furnished with all

emulsified asphalt delivered to the project.

At any time during application, the Contractor's Engineer may sample and test all subsequent loads of emulsified asphalt delivered to the project to verify and determine compliance with specification requirements. Where these tests identify material outside specification requirements, the Contractor's Engineer may require the supplier to cease shipment of that pre-tested product. A further shipment of that pre-tested product to the owning agency's projects will remain suspended until the cause of the problem is evaluated and corrected by the supplier to the satisfaction of the Contractor's Engineer and County representative.

335-2.2 Aggregate:

335-2.2.1 General:

Use an aggregate consisting of 100% crushed stone. The aggregate shall be a crushed stone such as granite, slag, limestone, chat, or other high-quality aggregate, or a combination thereof. To assure the material is 100 percent crushed, the parent aggregate will be larger than the largest stone in the gradation used. Use aggregate source(s) from the list of aggregates available on FDOT's website and meet the requirements of this specification.

335-2.2.2 Aggregate Quality Tests:

In addition to the requirements of FDOT Standard Specification Sections 901 and 902, meet the minimum aggregate requirements of Table 335-2.

Table 335-2 Quality Tests for Aggregate		
AASHTO Test No.	Aggregate Property	Specification Requirements
AASHTO T 176	Sand Equivalent	65 Minimum
AASHTO T 104	Soundness	15% Maximum using Na ₂ SO ₄ or 25% Maximum using MgSO ₄
AASHTO T 96	Abrasion Resistance ⁽¹⁾	30% Maximum

(1) The abrasion test will be performed on the parent aggregate.

335-2.2.3 Gradation Requirements:

When tested following FM 1-T 027 and FM 1-T 011, the target (mix design) aggregate gradation, including the mineral filler, shall be within the gradation range for a Type II mixture shown in Table 335-3, Column II.

e 335-3 Mix Design Gradation Requirements		
Sieve Size	Type II Mix Design Range Percent Passing	Stockpile Tolerance from Mix Design Percent Passing
3/8 inch	100	N/A
No. 4	90 – 100	± 5%
No. 8	65 – 90	± 5%
No. 16	45 – 70	± 5%
No. 30	30 – 50	± 5%
No. 50	18 – 30	± 4%
No. 100	10 – 21	± 3%

No. 200	5 – 15	± 2%
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The aggregate will be accepted from the stockpile located at the project. The stockpile will be accepted based on five quality control gradation tests conducted following FM 1-T 002. If the average of the five gradation tests is within the stockpile tolerances shown in Table 335-3, Column III for all of the sieve sizes, then the stockpile is accepted. If the average of the five gradation tests is not within the stockpile tolerances shown in Table 335-3, Column III, for any sieve size, remove the stockpiled material and replace it with new aggregate or blend other aggregate sources with the stockpiled material. Aggregates used in blending must meet the quality tests shown in Table 335-2 before blending and must be blended in a manner to produce a consistent gradation and sand equivalent value. If new aggregate is obtained or blending of aggregates is performed resulting in an aggregate that is not represented by the mix design, submit a new mix design to the Contractor's Engineer for approval prior to production of the mix.

The Contractor's Engineer may obtain stockpile samples at any time. If the average of five gradation tests conducted in accordance with FM 1-T 002 is not within the gradation tolerances shown in Table 335-3, Column III for any sieve size, cease production until the problem is corrected to the satisfaction of the Engineer.

Screen all stockpiled aggregates at the stockpile area prior to delivery to the paving machine to remove oversize material and non-desirable particles.

335-2.3 Mineral Filler:

If mineral filler is utilized in the mix design, use non air-entrained Portland cement or hydrated lime that is free from lumps. The Engineer will accept the mineral filler by visual inspection. The type and amount of mineral filler shall be determined by a laboratory mix design and will be considered as part of the aggregate gradation. An increase or decrease of less than one percent mineral filler may be permitted during production if it is found to result in better consistency or set times. Any changes to the percentage of mineral filler must meet the requirements of Table 335-5.

335-2.4 Water:

Utilize water that is potable and free of harmful soluble salts, reactive chemicals, or any other contaminants.

335-2.5 Additives:

Additives may be added to the mixture or any of the component materials to provide control of quick-trafficking properties. The additives to be used should be indicated on the mix design and be compatible with the other components of the mix.

335-2.6 Crack Filler:

Utilize a crack filler meeting the material requirements of Developmental Specification Section 305.

335-3 Mix Design.

Before work begins, the Contractor shall submit a mix design to the Engineer. The mix design must have an aggregate source used on five similar projects and developed using the specific materials to be used on the project. The mix design shall be developed by an

independent, accredited laboratory with no affiliation to the emulsion supplier and is endorsed by the International Slurry Surfacing Association (ISSA) and has experience in designing micro surfacing mixtures.

Submit the proposed mix design with supporting test data indicating compliance with all mix design criteria. Allow the Engineer a maximum of two weeks to either conditionally verify or reject the mix design.

Meet the requirements provided in Table 335-4. After the mix design has been approved, no substitutions to the mix design will be permitted, unless approved by the Engineer. The Engineer will consider inadequate field performance of a mix as sufficient evidence that the properties of the mix related to the mix design have changed, and the Engineer will no longer allow the use of the mix design. The project will be stopped until it is demonstrated that those properties, or issues, have been sufficiently addressed.

Table 335-4 Mix Design Testing Requirements		
ISSA Test No.	Property	Specification Requirements
ISSA TB-139 ⁽¹⁾	Wet Cohesion: @ 30 Minutes Minimum (Set) @ 60 Minutes Minimum (Traffic)	12 kg-cm Minimum 20 kg-cm or Near Spin Minimum
ISSA TB-109	Excess Asphalt by Loaded Wheel Tester (LWT) Sand Adhesion	50 g/ft ² Maximum
ISSA TB-114	Wet Stripping	90% Minimum
ISSA TB-100	Wet-track Abrasion Loss: One-hour Soak Six-day Soak	50 g/ft ² Maximum 75 g/ft ² Maximum
ISSA TB-147	Lateral Displacement Specific Gravity after 1,000 Cycles of 125 lb.	5% Maximum 2.10 Maximum
ISSA TB-113 ⁽¹⁾	Mix Time @ 77°F (25°C)	Controllable to 120 Seconds Minimum

(1) The Cohesion test and Mixing Time test should be checked and reported for the highest temperatures expected during construction.

The mix design must clearly show the proportions of aggregate, emulsified asphalt, mineral filler, water, and additive usage based on the dry weight of the aggregate. Meet the mix design component material requirements provided in Table 335-5.

Table 335-5 Mix Design Component Material Requirements	
Component Materials	Specification Requirements
Residual Asphalt	5.5 to 10.5% (by dry weight of aggregate)
Mineral Filler	0.5 to 3.0% (by dry weight of aggregate)
Polymer-based Modifier	Minimum of 3.0% (solids based on asphalt weight content)
Additives	As needed
Water	As required to produce proper mix consistency

The materials (aggregates, emulsion, mineral filler, and additives) must be from the same

source, grade, and type used to develop the approved mix design. Any substitutions or alternate supplies must be preapproved by the Contractor's Engineer. Changes in the aggregate source or emulsion source require re-validating the mix design and the performance properties. Blending, co-mingling and otherwise combining materials from two or more sources, grades or types is strictly prohibited. Aggregate stockpiles and emulsion material should be located at or near the job site in sufficient quantity for the job or designated parts of the job.

335-4 Equipment.

335-4.1 General:

Maintain all equipment, tools, and machines used in the performance of this work in satisfactory working condition at all times to ensure a high-quality product.

335-4.2 Mixing Equipment:

Use a machine specifically designed and manufactured to place micro-surfacing. Truck-mounted and self-loading continuous machines are acceptable. Mix the material with an automatic-sequenced, self-propelled micro surfacing mixing machine. It shall be a continuous-flow mixing unit able to accurately deliver and proportion the mix components through a revolving multi-blade, double-shafted mixer and to discharge the mixed product on a continuous-flow basis. The machine shall have sufficient storage capacity for all mix components to maintain an adequate supply to the proportioning controls. Four truck-mounted machines will be required for all projects or roads one-half mile or less in length.

Self-loading continuous machines shall be capable of loading materials while continuing to lay micro surfacing, thereby minimizing construction joints. Two self-loading machines will be required on all projects or roads greater than one half mile in length. Self-loading continuous machines shall be equipped to allow the operator to have full control of the forward and reverse speeds during applications of the micro surfacing material and shall be equipped with opposite-side driver stations to assist in alignment. The self-loading device, opposite-side driver stations, and forward and reverse speed controls shall be original equipment-manufacturer design.

335-4.3 Proportioning Device:

Provide and properly mark individual volume or weight controls for proportioning each material to be added to the mix (i.e., aggregate, mineral filler, emulsified asphalt, additives, and water).

335-4.4 Spreading Equipment:

Agitate and spread the mixture uniformly in the spreader box by means of twin-shafted paddles or spiral augers fixed in the spreader box. Provide a front seal to ensure no loss of the mixture at the road contact point. The rear seal shall act as a final strike-off and shall be adjustable. The spreader box and rear strike-off shall be so designed and operated that a uniform consistency is achieved and a free flow of material is provided to the rear strike-off. The spreader box shall have suitable means to hydraulically adjust the box width automatically while traveling behind the mixing unit, and be able to side shift the box to compensate for variations in the pavement geometry.

335-4.4.1 Secondary Strike-off:

Provide a secondary strike-off to improve surface texture. The secondary strike-off shall have the same adjustments as the spreader box. No burlap drags will be permitted on the final applications.

335-4.4.2 Rut-filling Equipment:

When required by the Contract Documents, micro surfacing material may be used to fill ruts, utility cuts, depressions in the existing surface, etc. When rutting or deformation is less than 1/2 inch, a full-width scratch course may be applied with the spreader box using a metal or stiff rubber strike-off. Ruts of 1/2 inch or greater in-depth shall be filled independently with a rut-filling box, either five or six feet in width. Ruts that are in excess of 1 1/2 inches in depth may require multiple applications with the rut-filling box to restore the cross-section.

When a rut box is used, emulsified asphalt content may be reduced by 0.5% of the mix design target. Any reduction of emulsified asphalt content must be within the tolerance of the job mix formulation listed in the mix design. Material placed with the rut-filling box shall have a 1/4 inch crown to allow for traffic consolidation. Before placing subsequent lifts, allow all rut-filling material to cure under traffic for at least 24 hours.

335-4.5 Auxiliary Equipment:

Provide suitable surface preparation equipment, traffic control equipment, hand tools, and any other support and safety equipment necessary to perform the work.

335-5 Calibration.

Calibrate each mixing unit to be used in the performance of the work in the presence of the Engineer before the start of construction. Previous calibration documentation covering the exact materials to be used may be acceptable, provided that no more than 60 days have lapsed. Document the individual calibration of each material at various settings, which can be related to the machine metering devices. Do not utilize any mixing unit on the project until the calibration has been completed and approved by the Engineer. Any component replacement affecting material proportioning requires that the machine be recalibrated. No machine will be allowed to work on the project until the calibration has been completed and accepted.

335-6 Weather Limitations.

Do not apply micro surfacing if either the pavement or air temperature is below 50°F. Do not apply micro surfacing when there is the possibility that the finished product will freeze within 24 hours. Do not apply micro-surfacing in the rain or when there is standing water on the pavement. The mixture shall not be applied when weather conditions prevent opening to traffic within a reasonable amount of time, as determined by the Engineer.

335-7 Surface Preparation.

335-7.1 General:

Remove any thermoplastic striping materials and retro-reflective pavement markers in the areas to be micro surfaced. Provide temporary striping as necessary to comply with Contract Documents. Immediately before applying the micro-surfacing, clear the surface of all loose material, silt spots, vegetation, and other material that will negatively affect the quality of the micro-surfacing, utilizing any standard cleaning method. If water is used for cleaning, allow any unsealed cracks to dry thoroughly before applying micro-surfacing.

Protect manholes, valve boxes, drop inlets, and other service entrances from the micro-surfacing mixture by a suitable method. The Engineer will approve the surface preparation before micro-surfacing. No loose aggregate, either spilled from the lay-down machine or existing on the road, will be permitted.

335-7.2 Cracks:

Pre-treat any cracks in the pavement's surface with a crack filler meeting the requirements of FDOT Developmental Specification Section 305 prior to the application of the micro-surfacing. Fill any cracks with a width greater than 1/4 inch. Do not overfill the cracks. Crack filling material must cure for a minimum of 30 days prior to application of the micro surfacing.

335-7.3 Rumble Strips:

Where shoulders are not to be micro surfaced, prevent material from being applied to or entering any rumble strip depressions. If necessary, remove any material that enters the depressions. When rumble strips are to be micro surfaced, place a scratch course to fill the depressions prior to placing the final surface course.

335-7.4 Tack Coat:

Place a tack coat on all collector roads prior to constructing a micro-surfacing course. A tack coat is not required on residential roads or between the leveling (scratch) course and the surface course provided the surface course is placed within 30 days of the leveling (scratch) course. If required, the tack coat should be type SS, type CSS, or the micro-surfacing emulsified asphalt. It may consist of one part emulsified asphalt to three parts water and should be applied with a standard distributor. The distributor shall be capable of applying the tack evenly at a rate of 0.05-0.15 gal/yd².

335-8 Application.

335-8.1 General:

Pre-wet the surface by fogging ahead of the spreader box with water. Adjust the rate of application of the fog spray to suit temperatures, surface texture, humidity, and dryness of the pavement.

The micro surfacing shall be of the desired consistency upon leaving the mixer. Carry a sufficient amount of material in all parts of the spreader box at all times so that complete coverage is obtained. Avoid overloading of the spreader box. Do not allow lumping, balling, or unmixed aggregate in the micro surfacing mixture.

Do not leave streaks, such as those caused by oversized aggregate, in the finished surface. If excess streaking develops, stop production until the situation has been corrected. Excessive streaking is defined as more than four drag marks greater than 1/2 inch wide and 4 inches long, or 1 inch wide and 3 inches long, in any 30 yd² area. Do not permit transverse ripples or longitudinal streaks of 1/4 inch in depth or greater, when measured by placing a 10-foot straight edge over the surface.

335-8.2 Rate of Application.

The average application rate shall be in accordance with Table 335-6, unless otherwise specified in the Contract Documents. Full width application rates must be maintained within

± 2 lbs/yd² of the specified rate. Application rates are based upon the weight of dry aggregate in the mixture. The maximum thickness of any single layer of micro-surfacing at the edge of the pavement shall be 1/4 inch.

AGGREGATE TYPE	LOCATION	APPLICATION RATE ⁽¹⁾	
Type II	Collectors, Local Roads, and Airport Runways	Single Application: 20-24 lbs/yd ²	Double Application (two lifts): Bottom: 14-18 lbs/yd ² Top: 16-20 lbs/yd ² Total: 30-34 lbs/yd ²
	Scratch or Leveling Course	As Required --- 12 lbs/yd ² (minimum)	

(1) Application rates are based upon the weight of dry aggregate in the mixture.

335-8.3 Joints:

Prevent excessive buildup, uncovered areas, or unsightly appearance on longitudinal and transverse joints. Provide suitable-width spreading equipment to produce a minimum number of longitudinal joints throughout the project. Place longitudinal joints on lane lines, where possible. Use half passes and odd-width passes only when absolutely necessary. Do not apply a half pass as the last pass of any area. Do not overlap longitudinal lane line joints by more than three inches. Do not construct joints having more than a 1/4 inch difference in elevation when measured by placing a 10-foot straight edge over the joint and measuring the elevation drop-off. Construct longitudinal joints so that water is not held at the joint. Construct transverse joints at the beginning and end project limits so that the elevation difference between the micro-surfacing and the adjacent pavement does not exceed 1/4 inch.

335-8.4 Mix Stability:

Produce a micro-surfacing mixture that possesses sufficient stability so that premature breaking of the material in the spreader box does not occur. The mixture shall be homogeneous during and following mixing and spreading. The mixture shall be free of excess water or emulsified asphalt and free of segregation of the emulsified asphalt and aggregate fines from the coarser aggregate. Do not spray water directly into the spreader box while applying micro surfacing material under any circumstances.

335-8.5 Handwork:

Utilize hand squeegees to provide complete and uniform coverage of micro-surfaced areas that cannot be reached with the mixing machine. Lightly dampen the area to be hand worked prior to mix placement, if necessary. Care shall be exercised to leave no unsightly appearance from handwork. When performing handwork, provide the same type of finish as that applied by the spreader box.

335-8.6 Lines:

Construct straight lines along curbs and shoulders. Do not permit runoff on these areas. Keep lines at intersections straight to provide a good appearance. If necessary, utilize a suitable material to mask off the end of streets to provide straight lines. Edge lines shall not vary by more than 2 inches horizontally.

335-8.7 Cleanup:

Remove micro surfacing mixture from all areas such as manholes, gutters, drainage structures, rumble strips, and as otherwise specified by the Engineer. On a daily basis, remove any debris resulting from the performance of the work.

335-8.8 Post Sweeping:

If required by the Engineer, broom the surface of any loose material within 48 hours after the completion of the micro surfacing. If directed by the Engineer, perform this operation again approximately seven to ten days after completion of the micro surfacing as needed. Additionally, clean the surface, as necessary, prior to application of the final pavement markings.

335-9 Quality Assurance.

335-9.1 Material Monitoring:

Provide a computerized material monitoring system with integrated material control devices that are readily accessible and positioned so the amount of each material used can be determined at any time. Ensure the computer system is functional at the beginning of work and during each calibration. Provide a backup electronic materials counter that is capable of recording running count totals for each material being monitored. Equip the mixer with a radar ground measuring device. The computer system shall have the capability to record, display and print the following information:

1. Individual sensor counts for emulsion, aggregate, cement, water, and additive.
2. Aggregate, emulsion, and cement output in pounds per minute.
3. Ground travel distance.
4. Spread rate in pounds per square yard.
5. Percentages of emulsion, cement, water, and additive.
6. Cumulative totals of aggregate, emulsion, cement, water, and Additive.
7. Scale factor for all materials.

335-9.2 Sampling and Testing:

The Engineer shall obtain one sample of micro-surfacing mixture each day of production. The Engineer shall test each sample in accordance with FM 5-563 and FM 1-T 030 to determine the residual asphalt content and the gradation of the sample. Evaporate all water from the sample prior to testing. Determine the deviation of the test results for each sample from the mix design target values. Compare the deviation from the mix design to the mixture control tolerances shown in Table 335-7.

Table 335-7 Aggregate and Emulsified Asphalt - Acceptance Limits	
Aggregate	Tolerance from Mix Design Target Values
Percent Passing No. 4 Sieve	± 6 percent
Percent Passing No. 8 Sieve	± 7 percent
Percent Passing No. 50 Sieve	± 6 percent

Percent Passing No. 200 Sieve	± 3.0 percent
Emulsified Asphalt	
Residual Asphalt Content of Mixture	± 0.6 percent

335-9.3 Application Rate:

Control the application rate for micro surfacing on a lot basis to within the "Total" range specified in 335-6. A lot will be considered as 0.10 lane miles. No additional compensation will be paid for micro surfacing application rates placed in excess of the "Total" specified range. The unit price for each deficient lot will be reduced by ten percent for each lb/yd² rate less than the "Total" specified range. For application rates outside the "Total" specified range, stop production of the mixture and make adjustments to correct the problem to the satisfaction of the Contractor's Engineer before resuming production. Accept a pay reduction for deficient lot production or overlay the deficient area at full plan width and depth at no additional cost.

335-10 Basis of Payment.

335-10.1 General:

The micro surfacing shall be paid for at the Contract unit price per square yard, completed, and accepted. Such price and payment shall be full compensation for performing all micro-surfacing work included in this section, and shall include the cost of all materials, including the cost of the emulsified asphalt and aggregate. Crack sealing, if required, shall be paid for under the appropriate pay item.

335-10.2 Payment Items:

Payment will be made under:

Double Micro	Per square yard
Single Micro	Per square yard
Crack Sealant	Per Gallon
Rut Filling (Leveling)	Per Ton

Public Outreach:

The contractor shall distribute by hand, a typed notice to all residences and businesses on the street to be treated two weeks before and 24 hours before. The notice will be delivered no more than 24 hours prior to the treatment of the road. The notice will have a local phone number that residents may call to ask questions. The notice shall be of the door hanger type, which secures to the door handle of each dwelling. Unsecured notices will not be allowed. The contractor shall also place the notice on the windshield of any parked cars on the street. A hand distribution of this notice will be considered incidental to the contract.

F. IN-PLACE RECYCLING - RECONSTRUCTION WITH ASPHALT EMULSION AND CEMENT BLEND SPECIFICATION (FULL DEPTH RECLAMATION)

This work shall consist of the preparation of a stabilized base course composed of a mixture of the existing bituminous concrete pavement, existing base course material, emulsified asphalt, Portland cement and other additives per the mix design. The manufacturing of the stabilized base course shall be done by in-place pulverizing and blending of the existing pavement and

base materials, and the introduction of asphalt emulsion, cement, and additives if called for in the Special Conditions or design mix formula. The process, which results in a stabilized base course, shall be accomplished in accordance with these specifications and conform to the lines and grades established by the engineer.

Existing asphalt pavement shall be pulverized by a method that does not damage the material below the plan depth as shown on the appropriate roadway section.

Materials:

RAP: Materials must meet all requirements specified in the 2017 Florida Department of Transportation Standard Specifications for Road and Bridge Construction 283-2, except that 98% of all material is required to pass through a 50 mm (2 inch) sieve.

Additional Base Materials: Additional base materials may be needed to meet the mix design parameter for adjusting grade elevations, as directed by the engineer, or for widening. When such additional material is required it shall be among those bases listed in FDOT Design Standards as General Use Optional Base Materials and meet applicable FDOT requirements for such. Section 285, Table 285-1 FDOT.

Asphalt Emulsion: When the mix design calls for stabilization with asphalt emulsion, utilize CSS-1h or CMS-2h, meeting the requirements of AASHTO M 208-01 (2009) and approved by the State Materials Office prior to use.

Foamed Asphalt: If the mix design calls for stabilization with foamed asphalt utilize an asphalt binder meeting the requirements of Section 916 FDOT and listed on the FDOT Department's Approved Products List.

Portland Cement: When a blend of asphalt emulsion and Portland cement is specified the Portland cement shall be type I or II and conform to the latest standard requirements of ASTM C150 and AASHTO M85. When cement is added with the emulsion no more than 2.5% shall be used on the project, unless approved by the Engineer.

Water: The water for the base course compaction and foaming additive shall be clean and free from sewage, oil, acid, strong alkalis, or vegetable matter and it shall be in sufficient supply for mixing and curing. Water of questionable quality shall be tested in accordance with the requirements of AASHTO T 26.

Soil: The soil base to be reclaimed shall be evaluated by a professional geotechnical engineering laboratory to determine suitability in the stabilization process. The soil shall be free of roots, sod, weeds and deleterious materials.

Equipment:

Road Reclaimer: Shall be originally designed for pavement reclaiming of a size equal to or larger than a Wirtgen WR 240i with comparable specifications including but not limited to: horsepower, rotor size, and injection system. The reclaimer shall be capable of pulverizing and mixing pavement, base materials, and subgrade soil to a depth of 20 inches. It shall have the capability of introducing and metering additives uniformly and accurately and that positive displacement pumps accurately meter the planned amount of asphalt emulsion into the mixture. The reclaiming machine shall mix the emulsified asphalt and cement additive thoroughly with the RAP and soil materials. The pump shall be mechanically or electronically interlocked with the ground speed of the machine. The asphalt metering system and water metering system shall be capable of continuously monitoring (GPM) flow,

and totaling the quantity of water and asphalt applied into the mixing chamber. Additives shall be uniformly distributed and mixed with the pulverized material, any existing underlying material as specified.

Milling Machine: A 10 foot and a 12 foot mill, self-propelled, bi-directional, down-cutting, lateral/horizontal mixing, cold milling machine capable of pulverizing the existing asphalt (and base material as needed to a maximum depth of 14 inches) in a single pass to the depth shown on the plans will be required. The machine shall have automatic depth controls to maintain the cutting depth to within $\frac{1}{4}$ in (6 mm) of that shown on the plans and shall have a positive means for controlling cross slope elevations. A 30 foot non-contact averaging beam must be used on the mill. The use of a heating device to soften the pavement will not be permitted. Up-cutting machines shall not be permitted. Machines that only provide vertical mixing will not be permitted.

The milling machine must be equipped with a liquid metering device capable of adjusting the flow of asphalt emulsion to compensate for any variation in the speed of the machine. The metering device shall deliver the amount of asphalt emulsion to within 0.2 percent of the required design amount by weight of pulverized bituminous material (for example, if the design requires 3.0 percent, the metering device shall maintain the emulsion amount between 2.8 percent and 3.2 percent). The asphalt emulsion pump should be of sufficient capacity to allow emulsion contents up to 3.5% by weight of pulverized bituminous material. Also, automatic digital readings will be displayed for both the flow rate and total amount of pulverized bituminous material and asphalt emulsion in appropriate units of weight and time.

Bituminous Paver: A self-propelled high density paver having tamper bar compaction, electronic grade and cross slope control for the screed shall be utilized. The equipment shall be of sufficient size and power to spread and lay the reclaimed base mixture in one smooth continuous pass to the specified section and according to the plans. A 30 foot non-contact averaging beam must be used on the bituminous paver. To reduce material segregation, the bituminous paver must utilize a hopper insert.

Motor Grader: Shall be of sufficient size and horsepower to adequately rough grade the pulverized base and rough and finish grade the mixed and compacted base. The equipment shall be in good working order free from leaks and capable of maintaining an accurate grade and cross-slope.

Rollers: Shall be in good working order free from leaks and capable of compacting the mix to the requirements of this specification: Vibratory rollers shall be a minimum of 10 tons and capable of rolling in either vibratory or static mode. Three wheel static rollers shall be a minimum of 11 tons. Pneumatic tire rollers shall have a minimum of 9 oscillating wheels with smooth, low pressure tires (pressure shall be equally matched in all tires within 5 PSI) and weigh at least 28 tons. Initial compaction shall be accomplished by either single or dual drum vibratory or three wheel roller static rollers.

Additional Equipment: Additional equipment will be needed to complete the operations required by this technical provision. All equipment necessary for the successful completion of projects governed by this technical provision shall be included in the unit costs associated herein. Availability of quality assurance devices (such as a 10' straight edge) shall be the responsibility of the Contractor.

Cement Delivery Equipment: Ensure cement is spread uniformly and accurately during the recycling process with an Integrated binder spreader system, capable of spreading in various widths by opening or closing panels and micro processer-controlled metering cells for precise metering of the cement. The spreader shall be mounted on the Road Reclaimer,

have digital and automated controls and be dust free. Minimize the amount of airborne cement dust to the satisfaction of the Engineer and in accordance with OSHA regulations.

A cement spreader can only be used if milling machines are required. The cement spreader shall be equipped with a bag house and curtains and be capable of spreading 25 tons at one time before being reloaded. Cement will not be allowed to be spread with spreader bars from a tanker.

Experience: All contractors and their subcontractors shall be FDOT prequalified in the work classes of drainage, flexible paving, grading, and hot plant-mixed bituminous courses. Bidders must submit with the bid a minimum of five In-Place Recycling-Reconstruction (with emulsion and cement blend stabilization) project references from a City or County in the State of Florida, that have been completed within the past two years. Minimum experience requirement must be met by the Prime Bidder and not the proposed sub-contractor for this project. Bidders are required to submit detailed information: indicating the project date, number of square yards treated in each and phone number of the government official in charge of each project. Contractor shall be capable of meeting all the requirements of this specification at the time of the bid. The contractor shall have in their possession at the time of bidding, three or more Road Reclaimers and two or more Milling Machines as described in the equipment section of the specification. Staff shall have the option to inspect the Contractor's equipment and if found deficient, it shall be the basis for rejection of Contractor's bid.

Construction:

Layout: The Contractor will be responsible for the string lining and lay out of the roadway prior to paving. Elevations of the existing road must be referenced at sufficient intervals to ensure the reclaimed roadway elevation, template and cross slope are as previously planned after the final wearing surface is placed. Method for layout and line and elevation reference must be approved by the engineer prior to beginning work.

Weather and Seasonal limitations: The base shall not be mixed or placed while the atmospheric temperature is below 40 deg F (2 deg C) or when conditions indicate that the temperature may fall below 35 deg F (2 deg C) within 24 hours, or when the weather is foggy or rainy, or when the soil or sub grade is frozen.

Mix Design: Prior to construction, obtain an adequate number of core samples to develop the mix design(s). Representative samples of the asphalt pavement material, underlying base material, and virgin materials, where applicable, shall be supplied to an independent, nationally accredited laboratory with no partnership with the emulsion supplier, for testing to determine the proportions of asphalt emulsion and cement needed to produce a mix design meeting the requirements of Table 198-1. The optimum binder content shall be the binder content that results in the highest wet tensile strength while also having 70% retained tensile strength compared to the dry strength and additionally has a minimum 3500 pounds Marshall stability. Cement shall be used at a minimum dosage rate of 1% and at a maximum dosage rate of 2.5% by dry weight of reclaimed material. Cement amounts greater than 2.5% will only be allowed if approved by the engineer. The mix design shall be signed and sealed by a professional engineer and submitted to the Engineer prior to use for approval.

Table 198-1 Mix Design Criteria		
Test	Test Method Number	Criteria
Gradation of reclaimed material	AASHTO T 27-11	Report

Determination of optimum binder content		
Compaction effort at optimum fluids content. Marshall Compactor; 50 blows/side or Superpave Gyratory Compactor, 100 mm diameter specimens, 30 gyrations. Density determination.	Asphalt Institute MS 14, Appendix F. ASTM D6926-10 AASHTO T 312-12 FM 1-T 166	Report
Marshall stability Cure at 60°C to constant weight. Test at 40°C.	ASTM D6927-06	2,500 2500 lbs. minimum stability
Resistance of compacted bituminous mixture to moisture induced damage. 55 to 75% vacuum saturation, water bath at 25°C for 23 hours, last hour in water bath at 40°C.	AASHTO T 283-07 (2011)	70% minimum retained tensile strength

Widening: When the existing base is to be widened, the Contractor shall excavate the shoulder from the edge of the existing pavement to at least 6 inches beyond the planned new width of the base prior to pulverization. All costs involved in collecting, hauling, and disposing of these materials shall be borne by the Contractor.

The bottom of the trench shall be kept free of loose soil and vegetation. Reclaimed existing roadway parent materials or approved base material (those bases listed in FDOT Design Standards as General Use Optional Base Materials) shall be placed in the excavation uniformly and without loss or contamination. The Contractor shall correct all areas of irregular grade or deficient thickness and shall remove and replace material contaminated with soil, organic material, or debris.

After the final pass of the recycler, soil shall be drawn up against the widening material to close the excavation, and the shoulder shall be graded and compacted to produce a firm, even surface.

Additional Material: When additional material is to be added to correct cross slope deficiencies or change elevation as directed by the engineer, approved base material (those bases listed in FDOT Design Standards as General Use Optional Base Materials) shall be placed on the roadway prior to final pass for pulverization and mixed uniformly with the existing material.

Pulverization: The existing pavement and base material shall be pulverized and blended to the depth required so the entire mass of material shall be uniformly graded to the following gradation:

Table 198-2

SIEVE SIZE	PERCENT PASSING
2"	98 - 100
1-1/2"	95

Material gradation may vary due to local aggregates and conditions. Multiple passes of the reclaimer may be necessary to achieve the required gradation.

The asphalt emulsion or asphalt and water (to produce a foamed asphalt) shall be

introduced into the mix through the reclaimer uniformly and accurately and metered such that areas are of equal consistency and moisture content. The reclaimed material and additives shall be combined in place to meet the requirements specified in such proportions that the reclaimed mixture is of acceptable composition and stability. Before the start and at the end of each day's work and at any time requested, the engineer must be permitted access to the mixing equipment in order to read the meter to verify the quantity of asphalt emulsion applied during the day's work. Field adjustments shall be made as necessary to the recommended mix design under the guidance of a knowledgeable and competent technician or superintendent to obtain a satisfactory reclaimed mixture of consistent composition and stability throughout the Project.

After the material has been processed, it shall be compacted to the lines, grades, and depth required. Water may be applied to ensure optimum moisture content at the time of mixing and compaction.

Compaction: Commence rolling with self-propelled rollers as required by this technical provision at the low side of the course, except leave 3 to 6 inches from any unsupported edge or edges unrolled initially to prevent distortion. Density readings shall be taken by Contractor's licensed nuclear gauge operator and witnessed by the Engineer/inspector.

Rollers shall move at a uniform speed that shall not exceed 8 km/hour (5 miles/hour). For static rollers, the drive drum normally shall be in the forward position or nearest to the paver. Vibratory rollers shall be operated at the speed, frequency and amplitude required to obtain the required density and prevent defects in the mat.

The number, weight and type of rollers furnished shall be sufficient to obtain the required compaction of the reclaimed material. The field density of the compacted mixture shall be at least 94 percent of the maximum density of laboratory specimens prepared from samples of the base material taken from the material in place. The specimens shall be compacted in accordance with AASHTO T-180. The in-place field density shall be determined in accordance with ASTM D 2922.

Any pavement shoving or other unacceptable displacement shall be corrected. The cause of the displacement shall be determined and corrective action taken immediately and before continuing rolling. Care shall be exercised in rolling the edges of the reclaimed mixture so the line and grade of the edge are maintained.

At the end of each day's production, a transverse construction joint shall be formed by a header or by cutting back into the compacted material to form a true vertical face free of loose material. The protection provided for construction joints shall permit the placing, spreading, and compacting of base material without injury to the work previously laid. Where it is necessary to operate or turn any equipment on the completed base course, sufficient protection and cover shall be provided to prevent damage to the finished surface. A supply of mats or wooden planks shall be maintained and used as approved and directed by the Engineer.

Finishing: Finishing operations shall be completed and the base course shall conform to the required lines, grades, and cross section. If necessary, the surface shall be lightly scarified to eliminate any imprints made by the compacting or shaping equipment. The surface shall then be recompacted to the required density. Correct all irregularities greater than ½" over ten feet to the satisfaction of the engineer.

Protection and Curing: After the base course has been finished as specified herein, it shall be protected against drying for a period of 2 to 3 days by the application of a prime

coat as specified in FDOT Standard Specifications section 300 at a rate of not less than 0.15 gal/sy or a sacrificial HMA paving 4.75 mix as per Dev 337 on collector & arterial roads with over 10,000 ADT. Both are incidental and will be included in the In-Place Recycling price. The curing method shall begin as soon as possible, but no later than 24 hours after the completion of finishing operations. The finished base course shall be kept moist continuously until the curing material is placed.

If performed, micro fracturing will be performed within 48 to 72 hours after the chemical admixtures have been introduced into the reclaimed base.

At the time the prime coat or 4.75 mix is applied, the surface shall be dense, free of all loose and extraneous material, and shall contain sufficient moisture to promote adhesion of the bituminous material.

To prevent equipment from marring or damaging the completed work, protect finished portions of base used by equipment.

Do not allow traffic on the reclaimed base until it is assured the reclaimed base surface will not distort, shove, or ravel under the anticipated vehicular loading.

Thickness: The average thickness of the base constructed during one day shall be within 1/2 inch (12 mm) of the thickness required, except that the thickness of any one point may be within 3/4 inch (19 mm) of that required. Where the average thickness shown by the measurements made in one day's construction is not within the tolerance given, the Engineer shall evaluate the area and determine if, in his/her opinion, it shall be reconstructed at the Contractor's expense or the deficiency deducted from the total material in place.

Sampling and Testing:

Quality Control: Perform the following quality control tests at the prescribed frequency. Randomly determine sample locations in accordance with ASTM D 3665-12 or equivalent. Reclaimed material gradation: Determine the percent passing the following sieve sizes: 3 inches and 2 inches. Obtain a sample at a frequency of one sample per 5,000 SY. Meet the requirements of Table 198-2. If the requirements of Table 198-2 are not met, adjust the pulverization operation so that the resultant material will meet specification requirements or to the satisfaction of the Engineer.

Moisture/density relationship of reclaimed base: Establish a wet/dry density relationship for density specification compliance by obtaining a sample at a frequency of once per 5000 square yards for Modified Proctor (AASHTO T-180) determination. Determine the moisture content in accordance with AASHTO T 110-03 (2011), AASHTO T 265-12, or ASTM D 4643-08.

In-place field density: Perform one nuclear density test per 1000 square yards. The dry field density (i.e. corrected gauge wet density) of the compacted mixture shall average at least 96.0 percent of the maximum laboratory dry density as determined by modified proctor. No individual density test shall be lower than 94.0 percent of the maximum laboratory dry density. If one density test is below 94.0 percent or two consecutive density tests are below 96.0 percent of the maximum laboratory dry density, cease production and resolve the issue to the satisfaction of the Engineer before resuming production.

Marshall stability: Perform Marshall stability testing twice per day or once per day if less than 1500 square yards is reclaimed. Meet the requirements of Table 198-1. If the Marshall

stability does not meet the requirements of Table 198-1, cease production and resolve the issue to the satisfaction of the Engineer before resuming production. Retained tensile strength: Perform retained tensile strength testing twice per day or once per day if less than 1500 square yards is reclaimed. Meet the requirements of Table 198-1. If the retained tensile strength does not meet the requirements of Table 198-1, cease production and resolve the issue to the satisfaction of the Engineer before resuming production.

Depth of mixing: Determine the depth of mixing at least once per 250 square yards. Meet the requirements of **Thickness**.

Cross slope measurement: Meet the requirements of Table 330-4 FDOT 2017.

Additional sampling and testing may be required if significant changes in the characteristics of the reclaimed material are observed, such as a much coarser or finer gradation or a noticeable difference in asphalt content, or when there is considerable variability in the field test results.

All delivery tickets and notes regarding any materials brought to the project site to complete this Contract must be given to the Engineer/Inspector upon delivery to the project site.

Method of Measurement: If a pay item is listed on the unit price proposal for work required in this Technical Provision, the quantity to be paid shall be as specified in the unit price proposal, including all items of work described herein. Any item necessary for In-Place Recycling-Reconstruction with Asphalt Emulsion and Cement, and not specifically listed in another item in the unit price proposal, shall be included in the SY Price for Pulverization including but not limited to shaping, compacting, finish grading, sacrificial 4.75 mix, prime coat, sanding prime coat, etc. Cost for introduction of asphaltic cement into the mixture shall be included in the per GL cost for Asphalt Emulsion. Cost for excavation for widening will be included in the CY Price for Excavation. Cost for additional materials needed for widening or adjustment of grade as directed by the engineer shall be included in the per TON Price for General Use Optional Base Material.

Basis of Payment: The quantities to be paid for under this Technical Provision shall be included in the Square Yard price for In-Place Recycling-Reconstruction, (Pulverization), the per Gallon price for Asphalt Emulsion, the per ton price for Portland Cement, the per Cubic Yard price for Excavation and the per TON price for General Use Optional Base Material. The Unit prices include all items listed in the contract, including all General Conditions, Special Conditions and Technical Provisions pertaining to In-Place Recycling-Reconstruction with Asphalt Emulsion and Cement, including all items of work described herein. No additional payment will be provided for any item necessary for the completion of this contract as detailed in the specifications.

Warranty: The Contractor shall provide the City or County upon final acceptance of the In-Place Recycling-Reconstruction with Asphalt Emulsion and Cement work, a warranty period of three years (36 months) which shall include all materials and workmanship.

The Contractor shall have been doing business in the State of Florida for at least four years from the date of this bid and have full time experienced personal to respond to any warranty issues within 24 hours. The Contractor can be called to preform work or warranty work at any time of the year as needed by the City or County. The Contractor must have a full-time presence with an office, experienced personal and the proper equipment in Florida to respond 365 days a year.

G. ASPHALT REJUVENATION

Description: The work specified in this section shall consist of furnishing all labor, material, and equipment necessary to perform all operations for the application of an asphalt rejuvenating agent to asphaltic concrete surface courses.

The rejuvenation of surface courses shall be by spray application of a maltene-based cationic rejuvenating agent composed of petroleum oils and resins emulsified with water. All work shall be following the specifications, the applicable drawings, and subject to the terms and conditions of this contract.

Materials: The asphalt rejuvenating agent shall be an emulsion composed of a petroleum resin oil base uniformly emulsified with water. Each bidder must submit a bid with a certified statement from the asphalt rejuvenator manufacturer showing that the asphalt rejuvenating emulsion conforms to the required physical and chemical requirements.

	Test Methods		Requirements	
	ASTM	AASHTO	Min	Max
Tests on Emulsion				
Viscosity @ 25°C, SFS	D-244	T-59	15	40
Residue, % W ¹	D-244(Mod.)	T-59(Mod)	60	65
Miscibility Test ²	D-244(Mod.)	T-59(Mod)	No Coagulation	
Sieve Test, %W ³	D-244(Mod.)	T-59(Mod)		0.1
Particle Charge Test	D-244	T-59	Positive	
Percent Light Transmittance ⁴				30
Tests on Residue from Distillation:				
Flash Point, COC, °C	D-92	T-48	196	
Viscosity @ 60°C, cSt	D-445	-	100	200
Asphaltenes, %w	D-2006-70	-		1.00
Maltene Dist. Ratio ⁵	D-2006-70	-	0.3	0.6
PC/S Ratio ⁵	D-2006-70	-	0.5	
Saturated Hydrocarbons, S ⁵	D-2006-70	-	21	28

1. ASTM D-244 Modified Evaporation Test for percent of residue is made by heating 50 gram sample to 149°C (300°F) until foaming ceases, then cool immediately and calculate results.
2. Test procedure identical with ASTM D-244-60 except that .02 Normal Calcium Chloride solution shall be used in place of distilled water.
3. Test procedure identical with ASTM D-244 except that distilled water shall be used in place of two percent sodium oleate solution.
4. Procedure for Determining Percent Light Transmittance on Asphalt Rejuvenating Agent:
 - a. Scope: This procedure covers the determination of percent light transmittance of the asphalt rejuvenating agent.
 - b. Apparatus:
 1. Container may be glass, plastic or metal having a capacity of 6,000 ml.
 2. Graduated cylinder, 1,000 ml, or greater
 3. Light transmittance measuring apparatus, such as Bausch and Lomb or Lumberton spectrophotometer
 4. Graduated pipette having 1 ml capacity to 0.01 ml accuracy
 5. Suction bulb for use with pipette
 6. Test tubes compatible with spectrophotometer, 3/4" X 6, Bausch and Lomb, Catalog No. 33-17-81, (B&L)
 - c. Calibration of spectrophotometer:
 1. Calibrate spectrophotometer as follows:

- a. Set wavelength at 580 mμ,
- b. Allow spectrophotometer to warm-up thirty minutes,
- c. Zero percent light transmittance (%LT) scale,
- d. Rinse test tube three times with tap water and fill to top of circle marking on B&L test tube or approximately 2/3 full,
- e. Place tube in spectrophotometer and set %LT scale at 100, and,
- f. repeat steps (c) and (e) two times or until no further adjustments are necessary.

d. Procedure:

1. Shake, stir or otherwise thoroughly mix emulsion to be tested. Place sample of emulsion in beaker and allow to stand one minute.
2. Place 2,000 ml tap water in container.
3. Suck 1.00 ml emulsion into pipette using suction bulb. Wipe off outside of pipette.
4. Using suction bulb, blow emulsion into container.
5. Rinse pipette by sucking in diluted emulsion solution and blowing out.
6. Clean pipette with soap or solvent and water. Rinse with acetone.
7. Stir diluted emulsion thoroughly.
8. Rinse out tube to be used with the diluted emulsion three times and fill to top of circle.
9. Calibrate spectrophotometer.
10. Place diluted emulsion sample tube in spectrophotometer, cover and read %LT to nearest tenth.
11. Repeat steps 9 and 10 until three identical consecutive readings are achieved.
12. The elapsed time between addition of emulsion to dilution of water and final %LT reading should not exceed 5 minutes.

5. Chemical Composition by ASTM Method D-2006-70:

$$\frac{PC + A_1}{S + A_2}$$

$$S + A_2$$

PC = Polar Compounds, A_1 = First Acidaffins

A_2 = Second Acidaffins, S = Saturated Hydrocarbons

The rejuvenating agent shall have a record of satisfactory service as an asphalt rejuvenating agent and in depth sealer. Satisfactory service shall be based on the capability of the material to decrease the viscosity of the asphalt binder and provide an in-depth seal.

The bidder must submit with his bid the manufacturer's certification that the material proposed for use is in compliance with the specification requirements. The bidder must submit with his bid previous use documentation and test data conclusively demonstrating that; the rejuvenating agent has been used successfully and that the asphalt rejuvenating agent has been proven to perform, as heretofore required, through field testing as to the required change in asphalt binder viscosity. Testing data shall be submitted indicating such product performance on a sufficient number of projects to insure product consistency and reasonable life expectancy.

Material Performance: The asphalt rejuvenating agent shall have the capability to penetrate the asphalt pavement surface. The asphalt rejuvenating agent shall be absorbed and incorporated into the asphalt binder. Verification that said incorporation of the asphalt

rejuvenating agent into the asphalt binder has been effected shall be by analysis of the chemical properties the asphalt binder.

The viscosity shall be reduced by a minimum of 25% for a pavement two years or less in age, and reduced by a minimum of 40% for a pavement greater than two years in age as determined by dynamic shear rheometer (DSR) method for asphalt testing in accord with AASHTO T315-05. This analysis shall apply to extracted asphalt binder, taken from cores extracted fifteen to thirty days following application, in the upper 3/8 inch of pavement. In addition, the treated areas shall be sealed in-depth to the intrusion of air and water.

The Engineer will require that untreated and treated core samples, a minimum of six inches in diameter, be removed by the Contractor at locations indicated by the Engineer. The treated core sample shall be taken in the same lane in close proximity to each untreated sample. A minimum of one untreated and treated core sample shall be taken for each pavement group or one per 50,000 square yards of treated pavement in each pavement group.

Equipment:

Distributor: The distributor for spreading the emulsion shall be self-propelled, and shall have pneumatic tires. The distributor shall be designed and equipped to distribute the asphalt rejuvenating agent uniformly on variable widths of surface at readily determined and controlled rates from 0.04 to 0.5 gallons per square yard of surface, and with an allowable variation from any specified rate not to exceed 5% of the specified rate.

Distributor equipment shall include full circulation spray bars, pump tachometer, volume measuring device and a hand hose attachment suitable for application of the emulsion manually to cover areas inaccessible to the distributor. The distributor shall be equipped to circulate and agitate the emulsion within the tank.

The rate of application shall be controlled by an onboard computer control system designed to uniformly and consistently control the selected application rate in gallons per square yard regardless of the forward speed of the distributor truck.

A check of distributor equipment as well as application rate accuracy and uniformity of distribution shall be made when directed by the Engineer.

Sand Truck: The truck used for sanding shall be equipped with a spreader that allows the sand to be uniformly distributed onto the pavement. The spreader shall be able to apply 1/2 pound to 3 pounds of sand per square yard in a single pass. The spreader shall be adjustable so as not to broadcast sand onto driveways or to lawns.

The sand to be used shall be manufactured sand free flowing, without any leaves, dirt, stones, etc. Any wet sand shall be rejected from the job site.

Any equipment that is not maintained in full working order, or is proven inadequate to obtain the results prescribed, shall be repaired or replaced at the direction of the Engineer.

Calibration: Distributor-Prior to construction, calibrate the distributor in accordance with ASTM D2995-99 in the presence of the Engineer. The distributor shall be moving forward at the proper application speed at the time the spray bar is opened. If at any time a nozzle becomes clogged or not spraying a proper pattern, the operation shall be immediately halted until repairs are made.

Sand Spreader- Prior to construction, calibrate the spreader in accordance with ASTM

D5624-02, in the presence of the Engineer. The allowable deviation in the amount of manufactured sand spread on each of the rubber mats shall not exceed plus or minus 1 pound per square yard in the transverse direction, or plus or minus 1 pound per square yard in the longitudinal direction, from the design application rate.

Construction:

Layout: The Contractor will be responsible for the lay out of the roadway and project planning and sequencing to meet traffic control requirements prior to paving.

Weather and Seasonal Limitations: The asphalt-rejuvenating agent shall not be applied to a wet surface or when rain is occurring or the threat of rain is present immediately before placement. The surface treatment shall not be applied when the temperature is less than 40° in the shade. When applying emulsions, the temperature of the surface shall be a minimum of 59°F, and no more than 140°F.

If unexpected rain occurs prior to material penetration and sanding, the agent shall be reapplied at no cost to the county. Further, the contractor's traffic control and project monitoring shall continue until the application has penetrated, area has been sanded and the resultant surface is not slippery or dangerous to vehicular travel.

Preparation of Surface: The contractor will be responsible for blowing or sweeping the road immediately ahead of the application operation to make sure the road is free of standing water, dirt, loose aggregate and other debris. The surface shall be clean and dry prior to the application.

Application of asphalt rejuvenating emulsion: The asphalt-rejuvenating agent shall be applied by a distributor truck at the temperature recommended by the manufacturer and at the pressure required for the proper distribution. The emulsion shall be so applied that uniform distribution is obtained at all points of the areas to be treated. Distribution shall be commenced with a running start to insure full rate of spread over the entire area to be treated. Areas inadvertently missed shall receive additional treatment as may be required by hand sprayer application.

Material Placement: Application of asphalt rejuvenating agent shall be on one-half width of the pavement at a time. When the second half of the surface is treated, the distributor nozzle nearest the center of the road shall overlap the previous application by at least one-half the width of the nozzle spray. In any event the centerline construction joint of the pavement shall be treated in both application passes of the distributor truck.

Before spreading, the asphalt rejuvenating agent shall be blended with water at the rate of two parts rejuvenating agent to one part water, by volume or as specified by the manufacturer. The combined mixture of asphalt rejuvenating agent and water shall be spread at the rate of 0.04 to 0.10 gallons per square yard, or as approved by the Engineer following field testing.

Where more than one application is to be made, succeeding applications shall be made as soon as penetration of the preceding application has been completed and the Engineer grants approval for additional applications. Grades or super elevations of surfaces that may cause excessive runoff, in the opinion of the Engineer, shall have the required amounts applied in two or more applications as directed. After the street has been treated, the area within one foot of the curb line on both sides of the road, when directed shall receive an additional uniformly applied treatment of the asphalt rejuvenating emulsion as directed by the engineer.

The Contractor shall furnish a quality inspection report showing the source, manufacturer, and the date shipped, for each load of asphalt rejuvenating agent. When directed by the Engineer, the Contractor shall take representative samples of material for testing.

Test Strip for Application Rate: Prior to start of the project, the contractor shall perform test strip applications as directed by the engineer. Test strips shall be performed for each pavement group of similar age and type within the project area.

The test strips shall be applied at a minimum width of 6 feet and for a length of 50 feet. A total of three test strips shall be applied at application rates of 0.04, 0.08 and 0.10 gallons per square yard, respectively. The time, in minutes, for essentially complete absorption of the asphalt rejuvenating emulsion shall be recorded for each test strip. The optimal rate to be used in a given area shall be that rate essentially absorbed within 30 minutes.

In the event that all three of the standard test rates are absorbed completely within the 30 minute timeframe, then the Contractor and the Engineer shall agree on a fourth test strip application rate.

Upon completion of the test strips for each pavement group, the Engineer will determine the final application rate to be applied to each pavement group.

Sanding/Blotting: After the rejuvenating emulsion has penetrated, and when recommended by the Contractor and approved by the Engineer, a coating of dry manufacture sand shall be applied to the surface in sufficient amount to protect the traveling public as required.

All manufactured sand used during the treatment must be removed no later than 24 hours after treatment of a roadway. This shall be accomplished by a combination of hand and mechanical sweeping. All turnouts, cul-de-sacs, etc. must be cleaned of any material to the satisfaction of the Engineer. Street sweeping will be included in the price bid per square yard for asphalt rejuvenating emulsion.

If, after manufactured sand is swept and in the opinion of the Engineer a hazardous condition exists on the roadway, the contractor must apply additional manufactured sand and sweep same no later than 24 hours following reapplication. No additional compensation will be allowed for reapplication and removal of materials.

Handling of Asphalt Rejuvenating Agent: Contents in tank cars or storage tanks shall be circulated at least 45 minutes before withdrawing any material for application. When loading the distributor, the asphalt rejuvenating agent concentrate shall be loaded first and then the required amount of water shall be added. The water shall be added into the distributor with enough force to cause agitation and thorough mixing of the two materials. To prevent foaming, the discharge end of the water hose or pipe shall be kept below the surface of the material in the distributor that shall be used as a spreader. The distributor truck will be cleaned of all of its asphalt materials, and washed out to the extent that no discoloration of the emulsion may be perceptible. Cleanliness of the spreading equipment shall be subject to the approval and satisfaction of the Engineer.

Street Sweeping: The Contractor shall be responsible for sweeping and cleaning of the streets after treatment. All sand used during the treatment must be removed no later than 48 hours after treatment of the street. This shall be accomplished by a combination of hand and mechanical sweeping. All turnouts, cul-de-sacs, etc. must be cleaned of any material to the satisfaction of the Engineer.

If, after sand is swept and in the opinion of the Engineer a hazardous condition exists on the roadway, the contractor must apply additional sand and sweep same no later than 24 hours following reapplication. No additional compensation will be allowed for reapplication and removal of sand.

Resident Notification: The contractor shall distribute by hand, a typed notice to all residences and businesses on the street to be treated two weeks before and 24 hours before beginning work. The notice will be delivered no more than 24 hours prior to the treatment of the road. The notice will have a local phone number that residents may call to ask questions. The notice shall be of the door hanger type, which secures to the door handle of each dwelling. Unsecured notices will not be allowed. The contractor shall also place the notice on the windshield of any parked cars on the street. Hand distribution of this notice will be considered incidental to the contract.

Traffic Control: The Contractor shall furnish all necessary traffic control, barricades, signs and flagmen, to ensure the safety of the traveling public and to all working personnel. Traffic shall not travel on fresh Asphalt Rejuvenator until penetration, in the opinion of the Engineer, has become complete and the area is suitable for traffic. The Contractor shall submit an MOT plan indicating all facets of traffic control for the project area. The MOT plan must be approved in writing by the Engineer prior to commencing any work. All traffic control shall be in accordance with the FDOT Roadway Design Standards, most current edition and TP-102. MOT and associated devices shall be checked daily and periodically throughout the project for compliance; and where adjustments or corrections are needed, prompt revisions shall be made. Traffic control is incidental to the contract work.

Method of Measurement: Asphalt rejuvenating emulsion at the Contract bid unit prices of measure is compensation in full for all costs of furnishing and applying the material as specified, including cleaning the existing pavement, stationing, purchase of aggregate, delivery of aggregate, all labor, equipment, and materials necessary for the placement of the asphalt rejuvenating emulsion, sweeping of any loose material after construction and other requirements as specified. Traffic control for maintaining traffic for constructing asphalt rejuvenating emulsion, removal and repair of test cores shall be considered incidental to the work unless specified elsewhere in the plans or proposal.

Payment for removal of untreated and treated cores shall be paid for as each at the unit price bid for Test Core Removal.

Payment for laboratory analysis of untreated and/or treated test cores shall be paid for as each at the unit price bid for Test Core Laboratory Analysis.

Basis of Payment:

Payment will be made under:

Asphalt Rejuvenating Emulsion	Per Square Yard
Test Core Removal	Each
Test Core Laboratory Analysis- Viscosity	Each

H. Asphalt Rejuvenation including Titanium Dioxide- TiO2 Enhanced Asphalt Rejuvenating Agent

The work specified in this section shall consist of furnishing all labor, material, and equipment

necessary to perform all operations for the application of a penetrating polymerized asphalt rejuvenating agent to asphaltic concrete surface courses. The asphalt binder rejuvenation shall be affected through the petroleum Maltene Replacement Technology method. In addition, and with the same penetrating carrier liquid, apply photocatalytic-grade Titanium Dioxide (TiO₂) to create a pollution reducing pavement surface. The rejuvenation of surface courses shall be by spray application of a polymerized maltene based cationic rejuvenating agent composed of petroleum oils and resins emulsified with water and containing photocatalytic titanium dioxide in a minimum parts per million at a minimum depth as hereafter specified.

All work shall be in accordance with the specifications, the applicable drawings, and subject to the contractual terms and conditions.

Materials and Performance: TiO₂ Enhanced Asphalt Rejuvenating Agent

The TiO₂ Enhanced Asphalt Rejuvenating Agent shall be an emulsion composed of a petroleum resin oil base uniformly emulsified with water. Each bidder must submit a bid with a certified statement from the TiO₂ enhanced asphalt rejuvenating agent manufacturer showing that the asphalt rejuvenating emulsion conforms to the required physical and chemical requirements:

Table 1 Test of Emulsion and on Residue

	Test Methods		Requirements	
	ASTM	AASHTO	Min	Max
Tests on Emulsion				
Viscosity @ 25°C, SFS	D-244	T-59	15	40
Residue, %W1	D-244(Mod.)	T-59(Mod)	60	65
Miscibility Test2	D-244(Mod.)	T-59(Mod)	No Coagulation	
Sieve Test, %W3	D-244(Mod.)	T-59(Mod)		0.1
Particle Charge Test	D-244	T-59	Positive	
Percent Light Transmittance4				30
Flash Point, COC, °C	D-92	T-48	196	
Viscosity @ 60°C, cSt	D-445	-	100	200
Asphaltenes, %w	D-2006-70	-		1.00
Maltene Dist. Ratio5	D-2006-70	-	0.3	0.6
PC/S Ratio5	D-2006-70	-	0.5	
Saturated Hydrocarbons, S5	D-2006-70	-	21	28

1 ASTM D-244 Modified Evaporation Test for percent of residue is made by heating 50-gram sample to 149°C (300°F) until foaming ceases, then cool immediately and calculate results.

2 Test procedure identical with ASTM D-244-60 except that .02 Normal Calcium Chloride solution shall be used in place of distilled water.

3 Test procedure identical with ASTM D-244 except that distilled water shall be used in place of two percent sodium oleate solution.

4 Procedure for Determining Percent Light Transmittance on Asphalt Rejuvenating Agent:

Scope: This procedure covers the determination of percent light transmittance of the asphalt rejuvenating agent.

b. Apparatus:

1. Container may be glass, plastic or metal having a capacity of 6,000 ml.

2. Graduated cylinder, 1,000 ml, or greater
 3. Light transmittance measuring apparatus, such as Bausch and Lomb or Lumberton spectrophotometer
 4. Graduated pipette having 1 ml capacity to 0.01 ml accuracy
 5. Suction bulb for use with pipette
 6. Test tubes compatible with spectrophotometer, 3/4" X 6, Bausch and Lomb, Catalog No. 33-17-81, (B&L)
- c. Calibration of spectrophotometer:
1. Calibrate spectrophotometer as follows:
 - a. Set wavelength at 580 mu,
 - b. Allow spectrophotometer to warm-up thirty minutes,
 - c. Zero percent light transmittance (%LT) scale,
 - d. Rinse test tube three times with tap water and fill to top of circle marking on B&L test tube or approximately 2/3 full,
 - e. Place tube in spectrophotometer and set %LT scale at 100, and,
 - f. Repeat steps (c) (e) two times or until no further adjustments necessary.
- d. Procedure:
1. Shake, stir or otherwise thoroughly mix emulsion to be tested. Place sample of emulsion in beaker and allow to stand one minute.
 2. Place 2,000 ml tap water in container.
 3. Suck 1.00 ml emulsion into pipette using suction bulb. Wipe off outside of pipette.
 4. Using suction bulb, blow emulsion into container.
 5. Rinse pipette by sucking in diluted emulsion solution and blowing out.
 6. Clean pipette with soap or solvent and water. Rinse with acetone.
 7. Stir diluted emulsion thoroughly.
 8. Rinse out tube to be used with the diluted emulsion three times and fill to top of circle.
 9. Calibrate spectrophotometer.
 10. Place diluted emulsion sample tube in spectrophotometer, cover and read %LT to nearest tenth.
 11. Repeat steps 9 and 10 until three identical consecutive readings are achieved.
 12. The elapsed time between addition of emulsion to dilution of water and final %LT reading should not exceed 5 minutes.

5 Chemical Composition by ASTM Method D-2006-70 -- (Free) Maltene Distribution Ratio (MDR) can be defined as:

PC + A1

S + A2

Where:

PC = Polar Compounds A1 = First Acidaffins

A2 = Second Acidaffins S = Saturated Hydrocarbons

Maltene Replacement (“Rejuvenation”) Test

The TiO₂ Enhanced Asphalt Rejuvenating Agent shall have the capability to penetrate the asphalt pavement surface and shall be absorbed and incorporated into the asphalt binder. Verification that said incorporation of the TiO₂ Enhanced Asphalt Rejuvenating Agent into the asphalt binder has been effected shall be by the petroleum maltene fraction replacement method and analysis of the chemical properties of said asphalt binder therein i.e., viscosity shall be reduced by said method.

For pavements receiving the first or original application of TiO₂ Enhanced Asphalt Rejuvenating Agent, the viscosity shall be reduced by a minimum of thirty (30%) percent as determined by the dynamic shear rheometer (DSR) method for asphalt testing in accord with AASHTO T315-05. For treatments of pavements after an initial treatment with a petroleum maltene asphalt rejuvenator, the viscosity shall be reduced by petroleum maltene replacement method a minimum of twenty percent (20%) in accord with same. This analysis shall apply to extracted asphalt binder, taken from cores extracted fifteen to thirty days following application, in the upper 3/8” of pavement. In addition, the treated areas shall be sealed in-depth to the intrusion of air and water.

The TiO₂ Enhanced Asphalt Rejuvenating Agent shall have a record of at least two years of satisfactory service as a TiO₂ enhanced petroleum maltene based emulsion asphalt rejuvenating agent and in-depth sealer. Satisfactory service shall be based on the capability of the material to decrease the viscosity of the asphalt binder by the petroleum maltene replacement method and provide an in-depth seal.

The bidder must submit with his bid the manufacturer's certification that the material proposed for use is following the specification requirements. The bidder must submit with his bid previous use documentation and test data conclusively demonstrating that; the TiO₂ Enhanced Asphalt Rejuvenating Agent has been used successfully for a period of two years by government agencies such as state, county and municipal governments or “SCMs”, etc.; and that the enhanced rejuvenating agent has been proven to perform, as heretofore required, through field testing by government agencies as to the required change in asphalt binder viscosity. Testing data shall be submitted indicating such product performance on a sufficient number of projects to ensure product consistency. In addition, field testing data shall be submitted to indicate said product performance over a testing period of two years to ensure reasonable life expectancy.

The Engineer will require that untreated and treated core samples, a minimum of four inches (4”) in diameter, be removed by the Contractor at locations indicated by the Engineer. The treated core sample shall be taken in the same lane in close proximity to each untreated sample. A minimum of one untreated and treated core sample shall be taken for each pavement group or one per 50,000 square yards of treated pavement in each pavement group.

Photocatalytic Properties Testing

TiO₂ Penetration Test:

The TiO₂ Enhanced Asphalt Rejuvenating Agent shall have a non-destructive analytical procedure applied to determine the percent of Titanium Dioxide nanoparticles present in each two-millimeter (2mm) layer of the field core sample

matrix for a minimum depth of six millimeters (6mm) from the top of the treated sample core. The method of measurement shall be by fluorescent X-ray emitted from the surface when excited by a principal X-ray source that is exceptional for the given element. A hand-held XRF analyzer may be accepted for this testing.

The minimum required concentration of Titanium Dioxide nanoparticles per each two-millimeter (2mm) section up to the minimum depth (6mm) shall be 2000 parts per million.

NO₂ Reduction Effectiveness:

The TiO₂ Enhanced Asphalt Rejuvenating Agent shall be verified for the effectiveness of the air pollution remediation of the Titanium Dioxide nano-particle portion of by laboratory analysis of core samples extracted from the treated pavement as directed and required by the Engineer. The cores shall be a minimum of four inches (4") in diameter and in pairs at each location directed by the Engineer. The cores shall be tested by an accredited laboratory or university with the equipment and capability to perform the following test procedures.

NO₂ Reduction Test:

A photo reactor test chamber shall be employed that allow for the evaluation of the efficient photocatalytic reduction of introduced NO_x gas of a known and controlled concentration within the chambers volume. The chamber light source shall be a UV lamp having a wavelength of 375 nanometers. The interior chamber environment shall be at 77°F with a constant humidity of 55% ±5%. The test total duration shall be five hours. The analysis test system shall be based on a Japanese Industrial Standard (JIS) TR Z0018 "Photocatalytic Materials-Air purification test procedure". NO removal efficiency shall be measured using a Model 42i Chemiluminescence NO-NO₂-NO_x Analyzer (Thermo Fisher Scientific Inc.).

The minimum NO reduction following the heretofore outlined test procedure evaluating field core samples shall average 25% for all cores tested.

Equipment

Distributor: The distributor for spreading the emulsion shall be self-propelled and shall have pneumatic tires. The distributor shall be designed and equipped to distribute the asphalt rejuvenating agent uniformly on variable widths of surface at readily determined and controlled rates from 0.04 to 0.10 gallons per square yard of surface, and with an allowable variation from any specified rate not to exceed 5% of the specified rate.

Distributor equipment shall include full circulation spray bars, pump tachometer, volume measuring device and a hand hose attachment suitable for application of the emulsion manually to cover areas inaccessible to the distributor. The distributor shall be equipped to circulate and agitate the emulsion within the tank.

The rate of application shall be controlled by an onboard computer control system designed to uniformly and consistently control the selected application rate in gallons per square yard regardless of the forward speed of the distributor truck.

A check of distributor equipment as well as application rate accuracy and uniformity of distribution shall be made when directed by the Engineer.

Aggregate Cover Truck:

The truck used for cover aggregate application shall be equipped with a spreader that allows the aggregate to be uniformly distributed onto the pavement. The spreader shall be able to apply 1/2 pound to 3 pounds of cover aggregate per square yard in a single pass. The spreader shall be adjustable so as not to broadcast cover aggregate onto driveways or to lawns.

The cover aggregate to be used shall be free flowing, without any leaves, dirt, stones, etc. Any wet aggregate shall be rejected from the job site.

Any equipment that is not maintained in full working order, or is proven inadequate to obtain the results prescribed, shall be repaired or replaced at the direction of the Engineer.

Calibration:

Distributor- prior to construction, calibrate the distributor in accordance with ASTM D2995-99 in the presence of the Engineer. The distributor shall be moving forward at the proper application speed at the time the spray bar is opened. If at any time a nozzle becomes clogged or not spraying a proper pattern, the operation shall be immediately halted until repairs are made.

Aggregate Spreader- prior to construction, calibrate the spreader in accordance with ASTM D5624-02, in the presence of the Engineer. The allowable deviation in the amount of manufactured cover aggregate on each of the rubber mats shall not exceed plus or minus 1 pound per square yard in the transverse direction, or plus or minus 1 pound per square yard in the longitudinal direction, from the design application rate.

Construction:

Layout:

The Contractor will be responsible for the lay out of the roadway and project planning and sequencing to meet traffic control requirements prior to paving.

Weather and Seasonal limitations:

The TiO₂ Enhanced Asphalt Rejuvenating Agent shall not be applied to a wet surface or when rain is occurring, or the threat of rain is present immediately before placement. The surface treatment shall not be applied when the temperature is less than 40° in the shade. When applying emulsions, the temperature of the surface shall be a minimum of 45°F, and no more than 150°F.

If unexpected rain occurs prior to material penetration and sanding, the agent shall be reapplied at no cost to the agency. Further, the contractor's traffic control and project monitoring shall continue until the application has penetrated, area has been sanded and the resultant surface is not slippery or dangerous to vehicular travel.

Preparation of Surface:

The contractor will be responsible for blowing or sweeping the road immediately ahead of the application operation to make sure the road is free of standing water, dirt, loose aggregate and other debris. The surface shall be clean and dry prior to the application.

Application of TiO₂ Enhanced Asphalt Rejuvenating Agent:

The TiO₂ Enhanced Asphalt Rejuvenating Agent shall be applied by a distributor truck at the temperature recommended by the manufacturer and at the pressure required for the proper distribution. The emulsion shall be so applied that uniform distribution is obtained at all points of the areas to be treated. Distribution shall be commenced with a running start to ensure full rate of spread over the entire area to be treated. Areas inadvertently missed shall receive additional treatment as may be required by hand sprayer application.

Material Placement of TiO₂ Enhanced Asphalt Rejuvenating Agent:

Application of TiO₂ Enhanced Asphalt Rejuvenating Agent shall be on one-half width of the pavement at a time. When the second half of the surface is treated, the distributor nozzle nearest the center of the road shall overlap the previous application by at least one-half the width of the nozzle spray. In any event the centerline construction joint of the pavement shall be treated in both application passes of the distributor truck.

Before spreading, the TiO₂ Enhanced Asphalt Rejuvenating Agent shall be blended with water at the rate of two parts rejuvenating agent to one-part water, by volume or as specified by the manufacturer. The combined mixture of asphalt rejuvenating agent and water shall be spread at the rate of 0.04 to 0.10 gallons per square yard, or as approved by the Engineer following field testing.

Where more than one application is to be made, succeeding applications shall be made as soon as penetration of the preceding application has been completed and the Engineer grants approval for additional applications. Grades or super elevations of surfaces that may cause excessive runoff, in the opinion of the Engineer, shall have the required amounts applied in two or more applications as directed. After the street has been treated, the area within one foot of the curb line on both sides of the road, when directed shall receive an additional uniformly applied treatment of the TiO₂ Enhanced Asphalt Rejuvenating Agent emulsion as directed by the engineer.

The Contractor shall furnish a quality inspection report showing the source, manufacturer, and the date shipped, for each load of TiO₂ Enhanced Asphalt Rejuvenating Agent. When directed by the Engineer, the Contractor shall take representative samples of material for testing.

Test Strip for Application Rate:

Prior to start of the project, the contractor shall perform test strip applications as directed by the engineer. Test strips shall be performed for each pavement group of similar age and type within the project area.

The test strips shall be applied at a minimum width of 6 feet and for a length of 50 feet. A total of three test strips shall be applied at application rates of 0.04, 0.08 and 0.10 gallons per square yard, respectively. The time, in minutes, for essentially complete absorption of the asphalt rejuvenating emulsion shall be recorded for each test strip. The optimal rate to be used in a given area shall be that rate essentially absorbed within 20 minutes.

In the event that all three of the standard test rates are absorbed completely within the 20-minute timeframe, then the Contractor and the Engineer shall agree on a fourth test strip application rate.

Upon completion of the test strips for each pavement group, the Engineer will determine the final application rate to be applied to each pavement group.

Aggregate Application:

After the TiO₂ Enhanced Asphalt Rejuvenating Agent emulsion has penetrated, and when recommended by the Contractor and approved by the Engineer, a coating of dry aggregate shall be applied to the surface in sufficient amount to protect the traveling public as required.

All aggregate used during the treatment must be removed no later than 24 hours after treatment of a roadway. This shall be accomplished by a combination of hand and mechanical sweeping. All turnouts, cul-de-sacs, etc. must be cleaned of any material to the satisfaction of the Engineer. Street sweeping will be included in the price bid per square yard for asphalt rejuvenating emulsion.

If, after the aggregate is swept and in the opinion of the Engineer a hazardous condition exists on the roadway, the contractor must apply additional aggregate and sweep same no later than 24 hours following reapplication. No additional compensation will be allowed for reapplication and removal of materials.

Handling of TiO₂ Enhanced Asphalt Rejuvenating Agent:

Contents in tank cars or storage tanks shall be circulated at least 45 minutes before withdrawing any material for application. When loading the distributor, the TiO₂ Enhanced Asphalt Rejuvenating Agent concentrate shall be loaded first and then the required amount of water shall be added. The water shall be added into the distributor with enough force to cause agitation and thorough mixing of the two materials. To prevent foaming, the discharge end of the water hose or pipe shall be kept below the surface of the material in the distributor that shall be used as a spreader. The distributor truck will be cleaned of all of its asphalt materials and washed out to the extent that no discoloration of the emulsion may be perceptible. Cleanliness of the spreading equipment shall be subject to the approval and satisfaction of the Engineer.

Street Sweeping:

The Contractor shall be responsible for sweeping and cleaning of the streets after treatment. All aggregate used during the treatment must be removed no later than 48 hours after treatment of the street. This shall be accomplished by a combination of hand and mechanical sweeping. All turnouts, cul-de-sacs, etc. must be cleaned

of any material to the satisfaction of the Engineer.

If, after aggregate is swept and in the opinion of the Engineer a hazardous condition exists on the roadway, the contractor must apply additional aggregate and sweep same no later than 24 hours following reapplication. No additional compensation will be allowed for reapplication and removal of aggregate.

Resident Notification:

The contractor shall distribute by hand, a typed notice to all residences and businesses on the street to be treated two weeks before and 24 hours before treatment. The notice will be delivered no more than 24 hours prior to the treatment of the road. The notice will have a local phone number that residents may call to ask questions. The notice shall be of the door hanger type, which secures to the door handle of each dwelling. Unsecured notices will not be allowed. The contractor shall also place the notice on the windshield of any parked cars on the street. Hand distribution of this notice will be considered incidental to the contract.

Traffic Control:

The Contractor shall furnish all necessary traffic control, barricades, signs and flagmen, to ensure the safety of the traveling public and to all working personnel. Traffic shall not travel on fresh TiO₂ Enhanced Asphalt Rejuvenating Agent until penetration, in the opinion of the Engineer, has become complete and the area is suitable for traffic. The Contractor shall submit an MOT plan indicating all facets of traffic control for the project area. The MOT plan must be accepted in writing by the Engineer prior to commencing any work. All traffic control shall be in accordance with the DOT Roadway Design Standards, most current edition and TP-102. MOT and associated devices shall be checked daily and periodically throughout the project for compliance, and where adjustments or corrections are needed, prompt revisions shall be made. Traffic control is incidental to the contract work.

Method of Measurement:

If a pay item is listed on the unit price proposal for work required in this Technical Provision, the quantity to be paid shall be as specified in the unit price proposal, including all items of work described herein. Any item necessary for The TiO₂ Enhanced Asphalt Rejuvenating Agent emulsion shall be paid at the Contract unit price proposal prices for the actual square yards of pavement treated as field measured. Said payment is compensation in full for all costs of mobilizing, furnishing and applying the material as specified, including cleaning the existing pavement, purchase of aggregate, delivery of aggregate, all labor, equipment, and materials necessary for the placement of the TiO₂ Enhanced Asphalt Rejuvenating Agent emulsion, sweeping of any loose material after construction and other requirements as specified. Traffic control for maintaining traffic for constructing TiO₂ Enhanced Asphalt Rejuvenating Agent emulsion shall be considered incidental.

Payment for removal of untreated and treated cores shall be paid for as each at the unit price proposal for Test Core Removal.

Basis of Payment:

Pay Item	Pay Unit
TiO2 Enhanced Asphalt Rejuvenating Agent	Per Square Yard
Field Core Removal	Each
Field Core Laboratory Analysis - Viscosity	Each
Field Core Laboratory Analysis -Titanium Dioxide Penetration	Each
Field Core Laboratory Analysis - Titanium Dioxide NO2 Reduction	Each
Field Core Laboratory Analysis - Titanium Dioxide Solar Reflectance Index (SRI)	Each

I. CRACK SEALING

Description: The work covered by these specifications consists of furnishing all labor, equipment, and materials necessary to perform all operations connected with the cleaning and sealing of construction and random cracks.

Material: Utilize Rubberized Joint Sealing Material meeting the requirements of Modified AASHTO M 173. Utilize Asphalt Rubber Sealing Compound meeting the requirements of ASTM D 5078.

Equipment:

Kettle: The kettle shall be an oil-jacketed double wall kettle equipped with agitator and 2 inch hot asphalt pump. Provide separate thermometers for oil bath and melting chamber. Provide a pump for circulating the transfer oil bath. Do not allow the operating temperature in the kettle to exceed the melting point of the sealing material.

Compressor: Utilize an air compressor capable of maintaining a minimum of 100 PSI at 150 CFM, measured at the source and equipped with traps that shall maintain the compressed air free of oil and water.

Extruder: Provide an extruder capable of providing variable width overband from 2 to 4 inches.

Construction: No crack sealing material shall be applied in wet cracks or when ambient temperature is below 25C F, unless a heat lance is utilized to adequately dry the crack.

All cracks shall be cleaned of loose dirt and debris with a compressor. Any

vegetation shall be removed prior to sealing utilizing a motorized wire brush.

Fill joints and cracks in such a manner to provide a 2" band centered over the joint. The thickness of the material shall not exceed 1/8" to 1/16". Material shall be leveled by means of a squeegee or a dish mounted on the delivery wand.

When traffic requires immediate use of the roadway, a boiler slag aggregate shall be broadcast over cracks to prevent sealer pickup.

All workmanship shall be of the highest quality, and excess spilled sealer shall be removed from the pavement surface by approved methods and discarded. Any workmanship determined to be below standards of the particular craft involved will not be accepted, and will be corrected and /or replaced as required by the County.

Traffic Control: The Contractor shall furnish all necessary traffic control, barricades, signs and flagmen, to ensure the safety of the traveling public and to all working personnel. Traffic shall not travel on freshly reclaimed base until all operations have been completed and the sealer has dried such that tire pickup will not occur. The Contractor shall submit an MOT plan indicating all facets of traffic control for the project area. The MOT plan shall be approved in writing by the County prior to commencing any work. All traffic control shall be in accordance with the FDOT Roadway Design Standards, latest edition. MOT and associated devices shall be checked daily and periodically throughout the project for compliance; and where adjustments or corrections are needed, prompt revisions shall be made.

Method of Measurement: If a pay item is listed on the unit price proposal for work required in this Technical Provision, the quantity to be paid shall be per gallon or as specified in the unit price proposal including all items of work described herein. Any item necessary for Crack Sealing and not specifically listed in another item in the unit price proposal, shall be included in this item.

Basis of Payment: The quantities to be paid for under this Technical Provision shall be included in the per gallon unit price for Crack Sealing. The Unit price includes all items listed in the contract, including all General Conditions, Special Conditions and Technical Provisions pertaining to Crack Sealing and all items of work described herein. No additional payment shall be provided for any item necessary for the completion of this contract as detailed in the specifications.

J. TRAFFIC LOOP REPLACEMENT

This work shall require the Contractor to provide for the installation, testing and acceptance of Inductive Loop Detectors and shall meet the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, Section 660.

K. SODDING

This work shall require the Contractor to provide for the installation and acceptance of sod along the shoulder of the road. The sod shall meet the Florida Department

of Transportation Standard Specifications for Road and Bridge Construction, Section 981. The sod type (e.g., Argentine Bahia) shall be similar to existing sod in the area or at the direction of the County.

L. VARIABLE MESSAGE BOARDS

This work shall require the Contractor to provide a Variable Message Board(s) (VMB(s)) in accordance with FDOT Standard Specifications for Road and Bridge Construction. The locations and dates of the VMB(s) shall be agreed upon prior to the start of construction.

M. STRIPING/PAVEMENT MARKINGS

Scope: This work shall include, but is not limited to materials, labor, equipment, traffic control, placement of signs and any construction and application procedures required for the placement of striping/pavement markings. This work includes temporary and permanent reflective paint, thermoplastic, reflective pavement markings, removal of existing pavement markings through hydroblasting or grinding, and miscellaneous related activities. Contractor shall complete temporary paint striping application immediately after paving completion.

Reference and Material Standards: All work and material shall conform to Section 706, 710, and 711 of the FDOT Standard Specifications for Road and Bridge Construction, latest edition. Coordination for the striping with the pavement maintenance shall be the responsibility of the Contractor.

Daily Work Schedule: Shall follow the special provisions of the EJCDC unless directed otherwise by Sumter County staff.

Safety: Work shall be completed in accordance with all local, state and federal safety requirements and regulations. Contractor shall take the necessary steps to provide protection against injury to all personnel (County and Contractor) for the duration of the work.

Maintenance of Traffic: The Contractor shall provide Maintenance of Traffic in accordance with FDOT Maintenance of Traffic Standards.

Supervision: Contractor shall have competent supervisory personnel on site at all times that work is in progress and shall be responsible for ensuring the quality and completeness of the work and safety of all personnel.

Inspection/Quality Assurance: All work will be subject to in-process and final inspection by an authorized County representative. Full compliance with job specifications will be verified. All testing shall be in accordance with *Florida Department of Transportation Standard Specifications for Road and Bridge Construction*, latest edition, unless stated otherwise in the EJCDC special provisions.

Schedule: The work performance schedule shall be established on a task order by task order basis and each task order shall be approved by all parties.

Debris/Housekeeping: The contractor shall make a substantial effort to keep the job-site clean while work is in progress and shall have all debris cleaned up at the end of each work-day. Contractor shall remove all work related debris, equipment and surplus materials from the premises at the completion of work. All construction debris shall be disposed of at an appropriate solid waste receiving facility.

Close-out Documentation: Upon each task order completion and as a condition of final acceptance, an authorized County representative and the contractor shall inspect and approve the quality and completeness of the work performed. All workmanship and materials used in the performance of each task order shall be warranted for a period of one year from the date of acceptance by the authorized County representative or in accordance with special provisions of the EJCDC (whichever is more stringent). The Contractor shall submit all retroreflectivity requirements in accordance with *Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition*.

N. Mobilization

Project Staging Areas: Upon being assigned a project, the Contractor shall identify potential staging areas. County ROW if approved, or properties that allow staging. Should the Contractor identify a private property as a staging area, they should provide the County with written documentation evidencing the property owner's permission to use said property as a staging area, and any required conditions for said usage. Upon completion, the staging areas should be returned to their original condition unless specifically instructed by the County or private owner to do otherwise.

O. Maintenance of Traffic

The terms Traffic Control Plan (TCP) and Maintenance of Traffic Plan (MOT Plan) are intended to be synonymous. The term Maintenance of Traffic (MOT) is the function presented in the TCP.

The Contractor shall provide, install and maintain traffic devices for any assigned work according to the FDOT Design Standards Index 600 series, latest edition, and applicable laws and ordinances. The traffic control shall provide a safe work zone and safe flow of traffic in and through the project site.

When needed, temporary striping will be considered as part of Maintenance of Traffic.

Depending on the project complexity, the County may require the Contractor submit an MOT plan showing all phases of construction in advance for approval.

The Contractor shall have a designated Worksite Traffic Supervisor who shall be adequately certified per FDOT requirements, and responsible for initiating, installing and maintaining all temporary traffic control devices. When needed, the Contractor shall provide dedicated flaggers, adequately certified per FDOT requirements. The

Contractor shall provide Inspection with the name and contact information of the Worksite Traffic Supervisor prior to beginning any project, and should be able to provide evidence of the MOT personnel certification upon request.

If the construction method being employed requires a lane closure longer than a day, it shall not be considered as a moving operation and the Contractor should submit a Lane Closure Request to the County for approval.

If the construction method being employed requires a road closure, the Contractor should submit Road Closure Request at least ten (10) working days prior to the anticipated start date of the closure. Both the Lane Closure and Road Closure Fillable Forms can be found on the County's website or provided by the Project Manager upon request.

INCIDENTAL SERVICES

MANHOLE RING AND COVER AND VALVE BOX TOP AND LID ADJUSTMENTS

This work shall require the Contractor to be responsible for all necessary adjustments to manhole rings and covers and water valve box tops and lids as needed to accommodate the transition of new roadway surface areas resulting from this construction.

EROSION AND SEDIMENTATION CONTROL

The Contractor shall furnish and maintain all necessary erosion and sedimentation control measures as per FDEP Rule 62-621.300 F.A.C. and as directed by the County. Silt Fence will be compensated and not considered incidental to any work, see unit price proposal sheet.

RAILROAD CROSSINGS

This work shall require the Contractor to be responsible for notifying the applicable Railway in advance of any work to be conducted adjacent to any railroad crossings and coordinating all efforts as needed with railway personnel.

DRIVEWAY SAW CUT AND REMOVAL

The Contractor shall sawcut and remove any concrete or asphalt driveways as required for road construction or road widening. The concrete, asphalt, and any other material associated with the work shall be disposed of in a legal manner.

ASPHALT MILLINGS AND PROFILE MILLINGS

The Contractor shall dispose of asphalt and profile millings in a legal manner at a location determined by the Contractor. However, the Contractor shall haul the first 25 truckloads of asphalt millings per calendar year to the Sumter County milling stockpile at 319 E. Anderson Avenue, Bushnell, FL 33513, or other County locations as deemed appropriate by the County Representative. The contractor shall provide cubic yard unit pricing (including delivery within Sumter County) for additional asphalt millings requested by the County beyond 25 truckloads per year (see unit price proposal). Compensation for hauling to and from the site for the first 25 loads will be provided per the unit price proposal

SCHEDULE

PRE-CONSTRUCTION MEETING

The Contractor and County shall hold a pre-construction meeting at County offices or on-site once a task order has been fully executed. The County may elect to hold a pre-construction meeting that includes multiple task orders.

CONSTRUCTION SCHEDULE

The schedule for completion shall be designated on a project-by-project basis and shall not exceed the number of days allowed without prior written consent of the Sumter County Project Manager or an authorized County representative.

DAILY WORK SCHEDULE

All work shall be coordinated with the Sumter County Project Manager or an authorized County representative. The Contractor shall notify the County at least 48 hours prior to performing any work. If any work commences prior to the required notification, the work will be stopped until such time that the Contractor is given an authorization to proceed by an appropriate County representative. All work shall be performed according to the special provisions of the EJCDC, unless directed otherwise by a County representative.

SAFETY & INSPECTION

SAFETY STANDARDS

The Contractor shall comply with all safety standards and regulations as required by the Sumter County Land Development Code, Florida Department of Transportation (FDOT), OSHA and any other Local, State or Federal Agency . The Contractor shall submit a safety plan to owner upon request.

EMPLOYEE SAFETY

The Contractor shall take all necessary steps to provide protection against injury to County staff and contractor employees throughout the duration of the project. Work areas shall be blocked off from access by the public with the use of tape and barricades as required.

SUPERVISOR FOR EMERGENCIES

The Contractor shall have a responsible person available at or reasonably near the work site on a 24-hour basis, 7 days a week; in order that he may be contacted in emergencies and in cases where immediate action must be taken to maintain traffic or to handle any other problem that might arise. The Contractor's responsible person for supervision during emergencies shall speak and understand English. The Contractor shall submit, by certified mail, phone numbers and names of personnel designated to be contacted in cases of emergencies.

DAMAGES

Incidental damage to public and/or private property will be the responsibility of the Contractor. Any damage to items including, but not limited to inlets, manholes, junction boxes, culverts, under drains, curb and gutter, sidewalks, fencing, grassed areas, roadway shoulders, signing and guardrail will be corrected in strict conformance with applicable sections of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition. The Contractor shall also be responsible for any damages to driveways during the course of construction. The Contractor shall repair or replace, at the Contractor's sole expense, any driveway damaged at as deemed necessary by the authorized Sumter County representative.

INSPECTION/QUALITY ASSURANCE

Full compliance with project specifications will be verified and shall be subject to in-process and final inspection by an authorized County representative and all deficiencies shall be corrected to the satisfaction of the County prior to approval of final payment.

SUPERVISION/PERSONNEL

SUPERVISOR

The Contractor shall have competent supervisory personnel on site at all times that work is in progress.

WORKSITE TRAFFIC SUPERVISOR

The Contractor shall have a Worksite Traffic Supervisor who will be responsible for installing and maintaining all traffic control devices as described in FDOT Specifications Section 102. This includes keeping traffic cones and other traffic control devices upright and cleaned for high visibility. The Worksite Traffic Supervisor shall have at least one year of experience directly related to worksite traffic control in a supervisory or responsible capacity and shall be certified by International Municipal Signal Association, (IMSA), Certification Program or an equal approved by the County. Approved alternate Worksite Traffic Supervisors may be used when necessary.

The Worksite Traffic Supervisor shall be available on a 24-hour per day basis and shall review the project on a day to day basis as well as being involved in all changes to traffic control. The Worksite Traffic Supervisor shall have access to all equipment and materials needed to maintain traffic control and handle traffic related situations. The Worksite Traffic Supervisor shall ensure the safety deficiencies are corrected immediately. In no case shall minor deficiencies, which are not immediate safety hazards, remain uncorrected for more than 24 hours. The Worksite Traffic Supervisor shall be present to direct the initial setup of the traffic control plan and any changes to it. The Job Superintendent, in the event of an emergency, shall be prepared to immediately respond to repair the work zone traffic control or to provide alternate traffic arrangements. Failure to maintain a designated Worksite Traffic Supervisor or failure to comply with these provisions will result in temporary suspension of all activities

except traffic and erosion control and such other activities deemed to be necessary for project maintenance and safety.

TESTING

In general, all independent lab and field testing required, as identified in the EJCDC special provisions, for each project shall be provided by the Contractor. The Contractor shall submit the name and qualifications of the firm they will be using for testing.

DEBRIS / HOUSEKEEPING

The contractor shall make a substantial effort to keep the job site clean while work is in process and shall have all debris cleaned up at the end of each day's work. Contractor to remove all work-related debris, equipment and surplus materials from the premises at the completion of work. All construction debris shall be disposed of at an appropriate solid waste landfill facility.

PROJECT ADMINISTRATION

WORK AUTHORIZATION

Project work shall be authorized under the terms and conditions of the Agreement and will be released on a Project by Project basis. No work shall begin until the applicable Contract is fully executed by all parties and the Public Construction Bond (if required) is recorded by the Clerk of Courts office and the recorded bond is received by the Sumter County Purchasing Department.

ADDITIONAL SERVICES

The Contractor shall submit a written proposal to the authorized County representative for all additional services or change in scope to the original Task Order prior to performing proposed change. Approved proposals shall be added to the applicable Task Order by change order. Any work performed by the Contractor without written authorization in the form of a fully executed change order shall be done so at the Contractor's own risk.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Upon completion of each Task Order the Contractor shall submit all documentation including tests, measurements, etc. and providing evidence of actual quantities utilized in the performance of the scope of work and all quantities shall be verified and approved by the authorized County representative prior to payment.

FUEL AND ASPHALT INDEX ADJUSTMENTS

Adjustments will not be allowed through this contract outside of the renewal period. Prices are fixed for all items between contract renewals.

DAILY REPORTS

The Contractor shall submit Daily Status Reports to the authorized County representative on a weekly basis or upon final completion of the Task Order for projects of 30 days or less in duration. The Report shall include incidents, names of streets/roads, quantity completed per street/road and cumulative totals reflecting actual quantities of materials used.

CLOSE-OUT DOCUMENTATION

Upon project completion and as a condition of Final Acceptance and final payment by Sumter County, the Contractor shall have supplied all documentation required during the performance of the scope of work including, photos/video, test reports (if applicable), daily status reports, and any other applicable documentation as requested by the County.

BID NOTES

Acceptance of Bid (Award):

The County has established the following Guidelines, Criteria, Goals, Objectives, Constraints, Schedule, Budget and/or Requirements which shall serve as a guide to the bidder(s) in conforming to the provision of goods and/or services to be provided pursuant to this bid.

- No amount of work is guaranteed upon the execution of an Agreement/Contract.
- Rates will remain in effect throughout the duration of the Agreement/Contract period.
- In reference to vehicle travel, mileage, and staff-hours spent in travel time, all considered incidental to the work and not an extra compensable expense.
- Sumter County reserves, through amendment, the right to add or delete tasks or services associated with this Agreement/Contract.
- Any Single Large Project: The County, in its sole discretion, reserves the right to separately solicit any project that is outside the scope of this solicitation, whether through size, complexity or dollar value.

Qualification of Contractors

Minimum Qualifications:

- Prime Bidder must be fully licensed to do business in the State of Florida.
- The prime or proposed sub-contractor performing the work in the following work classes are desired to be Florida Department of Transportation (FDOT) pre-qualified: (10) Flexible Paving, (15) Hot Plant-Mixed Bituminous Courses, and (28) Pavement Marking.

SUB-CONTRACTORS

- Each awarded bidder shall submit to the County a list of Subcontractors and major materials suppliers to be used at the onset of each individual task order being developed.
- Subcontractors and other persons and organizations proposed by the Bidder and accepted by the County, must be used on the work for which they were proposed and accepted and shall not be changed except with the written approval of the County.

Contract Duration & Renewal

- Reference the master agreement

Task Orders

- Sumter County staff shall be responsible for determining estimated quantities of items for each project/scope of work. Award of a task order shall be determined by the Planning and Design Division, or other Public Works Division, based upon cost comparison between vendor(s) under contract, schedule and current workload of the vendor(s), and relative capability of the vendor(s) for the individual task order.
- Task orders will be reviewed and approved/disapproved by the Sumter County BOCC. If approved, the Contractor shall be required to have an authorized representative sign all copies of the task order and send them back to the Sumter County project manager overseeing construction. The task order is not considered effective until executed by all parties and until a purchase order is provided. Once the task order is fully executed and the purchase order is provided, the Contractor shall receive a copy, which shall serve as Notice to Proceed (NTP) for the project. There may be some cases where a project requires a formal NTP after the task order is fully executed. This will be handled on a task by task basis.
- Each task order shall include all of the following information: Master Contract Name and Number, Contractor Name and Address, Task Order Number, Project Name, Scope of Work, Cost of Project, Schedule for Completion, and any and all terms and conditions associated with the project.
- Any and all changes to a project shall be authorized through a contract change order or amendment as applicable to the change being authorized.

Pricing

- The pricing under this Bid shall remain firm throughout the duration of the initial term of this agreement/contract. No pricing increases will be permitted during the initial term, or as approved by the BOCC through contract amendment.

SAMPLE AGREEMENT FOR SERVICES

THIS AGREEMENT (hereinafter referred to as "Agreement") is made and entered into this ____th day of _____, 2023, by and between **Board of Sumter County Commissioners** (hereinafter referred to as "Board," or "County"), whose address is 7375 Powell Road, Wildwood, Florida 34785, and _____ (hereafter referred to as "Vendor"), whose address is _____.

RECITALS

WHEREAS, the Board has need of professional services for ITB 045-0-2023/RS; and

WHEREAS, the parties desire to enter into a written agreement outlining the duties, responsibilities and compensation of Vendor, based on the Vendor's response to ITB 045-0-2023/RS Countywide Pavement Maintenance and Rehabilitation Services.

NOW, THEREFORE, in consideration of the mutual promises, covenants and agreements contained herein, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. The relationship of the Vendor to the Board will be that of a professional Vendor and the Vendor will provide the professional and technical services required under this Agreement in accordance with acceptable professional practices and ethical standards applicable to Vendor's profession, and Vendor will endeavor to provide to the Board prompt and efficient services to the best of its ability.
2. Vendor is hereby retained and employed as a Sumter County Contactor, and will work with the Board to provide services in accordance with the scope of work outlined in ITB 045-0-2023/RS.
3. The term of this Agreement shall commence on November 14, 2023 and will include 90 calendar days of lead time for material procurement and 60 calendar days from the start of construction to final completion. The Contractor may begin construction before the 90 days' procurement period is over, however, no additional compensation will be provided for delays caused by undelivered county procured materials. The 60 calendar day construction time will begin when construction begins. The Contractor shall send a formal letter to the County identifying the day construction is to begin if the entire 90 calendar day lead time is not required. The selected Contractor shall be aware that the Intersection Control Beacon Controller Assembly (pay item 670-4-1), may be received 30 days after the 90-day procurement lead time has ended. Final completion means all contract items have been completed, including but not limited to; items dependent on curing periods, testing, and inspections, unless otherwise terminated as provided in paragraph four (4) of this Agreement. The term of this Agreement does not relieve the Vendor of any future responsibility as described in paragraph six (6) of this Agreement.
4. This Agreement may be terminated by either party upon thirty (30) days prior written notice to the other party at the address designated in this Agreement for receiving such

notice. If this Agreement is terminated, Vendor shall be authorized to receive payment for all work performed up to the date of termination.

1. With regard to compensation paid to Contractor, Contractor shall furnish to the Board an itemized invoice detailing all of Contractor's hours, services, expenses and any other services utilized by the Board. The invoice shall be itemized pursuant to and in accordance with the Fee Schedule, attached hereto as Exhibit , and incorporated herein *in haec verba*. Contractor shall submit all invoices pursuant to the Local Government Prompt Payment Act, F.S. 218. Contractor acknowledges and agrees that the rates set forth in the Fee Schedule shall remain fixed throughout the duration of this Agreement, including both the Initial Term and any Renewal Term, and thereafter shall only be adjusted by mutual written agreement of both parties.

- a. For construction services progress payments, 5 percent (5%) of the payment will be withheld.

2. General Considerations.

- a. All reports, drawings, designs, specifications, notebooks, computations, details, and calculation documents prepared by Vendor and presented to the Board pursuant to this Agreement are and remain the property of the Board as instruments of service.
 - b. All analyses, data, documents, models, modeling, reports and tests performed or utilized by Vendor shall be made available to the Board upon request and shall be considered public records.
 - c. Vendor is required to: (i) keep and maintain public records required by Board; (ii) upon request from Board's custodian of public records, provide Board with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a reasonable or as otherwise provided by law; (iii) ensure that public records that are exempt or, confidential and exempt, from public records disclosure requirements are not disclosed except as authorized by law for the duration of this Agreement and following completion of this Agreement if Vendor does not transfer the records to Board; (iv) upon completion of this Agreement, transfer, at no cost, to Board all public records in possession of Vendor or keep and maintain public records required by Board.
 - d. If Vendor transfers all public records to Board upon completion of this Agreement, Vendor shall destroy any duplicate public records that are exempt or, confidential and exempt, from public records disclosure requirements. If Vendor keeps and maintains public records upon completion of this Agreement, Vendor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to Board, upon request from Board's custodian of public records, in a format that is compatible with the information technology systems of Board.
 - e. Vendor shall keep all books, records, files, drawings, plans and other documentation, including all electronically stored items, which concern or relate to the services required hereunder (the "Records"), for a minimum of five (5) years from the date of expiration or termination of this Agreement, or as otherwise required by any applicable law, whichever date is later. The Board shall have the right to order, inspect, and copy all the Records as often as it deems necessary

- during any such period-of-time. The right to audit, inspect, and copy Records shall include all of the records of sub-Vendors (if any).
- f. Vendor shall, at all times, comply with the Florida Public Records Law, the Florida Open Meeting Law and all other applicable laws, rules and regulations of the State of Florida.
 - g. **IF THE VENDOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE VENDORS' DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT 352-689-4400, Sumter County Board of County Commissioners, 7375 Powell Road, Wildwood, Florida 34785 or via email at Records@sumtercountyfl.gov.**
 - h. Vendor shall, at all times, carry General Liability, Automobile and Worker's Compensation Insurance pursuant to the insurance requirements in ITB 045-0-2023/RS, naming Board as both a certificate holder and an additional insured in each such policy.
 - i. Upon Vendor's written request, the Board will furnish, or cause to be furnished, such reports, studies, instruments, documents, and other information as Vendor and Board mutually deem necessary, and Vendor may rely upon same in performing the services required under this Agreement.
 - j. Vendor is obligated by this agreement to comply with Section 20.055(5), Florida Statutes.
 - k. Any entity or affiliate who has had its Certificate of Qualification suspended, revoked, denied or have further been determined by the Department to be a non-responsive contractor may not submit a bid.
3. The Vendor may be required to provide additional services to the Board on challenges, public protests, administrative hearings or similar matters. The Vendor shall be available to represent the Board, serve as an expert witness, and provide supporting documentation as necessary. Should any other professional services be called for by the Board that are not otherwise set forth in this Agreement or any of its attachments or exhibits, charges for these services shall be agreed upon in advance by the parties hereto.
 4. The Contract Documents, which comprise the entire Contract between Board and Vendor and which are further incorporated herein by reference, consist of the following:
 - a. ITB 045-0-2023/RS
 - b. Vendor's Bid in Response to ITB 045-0-2023/RS
 - c. This Agreement
 - d. Permits / Licenses
 - e. All Bid Addenda Issued Prior to Opening Date
 - f. All Modifications and Change Orders Issued
 5. Vendor shall be solely and entirely responsible for its tortious acts and for the tortious acts of its agents, employees, or servants during the performance of this Agreement.

Vendor shall indemnify and save harmless the Board, its agents, employees and officers from and against all liabilities, claims, demands, or actions at law and equity including court costs and attorney's fees that may hereafter at any time be made or brought by anyone for the purposes of enforcing a claim on account of any injury or damage allegedly caused or occurring to any person or property in which was caused in whole or in part by any tortious, wrongful, or intentional acts or omissions of Vendor, its agents, or employees during performance under this Agreement. The foregoing is not intended, and shall not be construed, as a waiver by Board of the benefits of Section 768.28, *Florida Statutes*.

6. Vendor is, and shall be, in the performance of all services and activities under this Agreement, an independent contractor, and not an employee, agent, or servant of Board; and no provisions of Board's personnel policies shall apply to this Agreement. None of the benefits provided by Board to its employees including, but not limited to, worker's compensation insurance and unemployment insurance, are available from Board to Vendor, or its employees, agents or servants. Vendor assumes responsibility for payment of all federal, state and local taxes imposed or required of Vendor including but not limited to FICA, FUTA, unemployment insurance, Social Security and income tax laws for which Vendor as employer is responsible. Vendor shall be solely responsible for any worker's compensation insurance required by law and shall provide the Board with proof of insurance upon demand. The parties agree that Board shall not: (a) pay dues, licenses or membership fees for Vendor; (b) require attendance by Vendor, except as otherwise specified herein; (c) control the method, manner or means of performing under this Agreement, except as otherwise specified herein; or (d) restrict or prevent Vendor from working for any other party.
7. **Force Majeure.** No party shall be liable or responsible to the other party, nor be deemed to have defaulted under or breached this Agreement, for any failure or delay in fulfilling or performing any term of this Agreement (except for any obligations to make payments to the other party hereunder)], when and to the extent such failure or delay is caused by or results from the following force majeure events ("**Force Majeure Events**"): (a) acts of God; (b) flood, fire, earthquake or explosion; (c) war, invasion, hostilities (whether war is declared or not), terrorist threats or acts, riot, warlike operation, insurrection, rebellion, revolution, military or usurped power, sabotage or other civil unrest; (d) strikes, embargoes, blockades, labor stoppages, lockouts or slowdowns or other industrial disturbances or inability to obtain necessary materials or services (e) governmental delay regarding permits or approvals; (f) action by any governmental authority; (g) national or regional emergency; (h) shortage of adequate power or transportation facilities; or (j) other similar events beyond the reasonable control of the party impacted by the Force Majeure Event (the "**Impacted Party**") and provided further, however, that such performance shall be resumed and completed with due diligence and reasonable dispatch as soon as the contingency causing the delay or impossibility shall abate.
8. **Attorney's Fees; and Costs of Enforcement.** In the event suit is commenced to enforce this Agreement, costs of said suit including reasonable attorneys' fees in all proceedings, trials, investigations, appearances, appeals and in any bankruptcy proceeding or administrative proceeding shall be paid to the prevailing party by the non-prevailing party. In the event of default by either party hereto, the defaulting party shall be liable for all costs and expenses, including reasonable attorney's fees and costs

incurred by the other party in enforcing its rights hereunder, whether litigation be instituted or not, at the trial court and appellate court level.

9. **Law of the Agreement; Jurisdiction and Venue.** The Parties agree that the laws of the State of Florida shall govern any dispute arising from or related to this Agreement. The Parties to this Agreement agree that venue and jurisdiction is mandated to lie only in the state courts located in Sumter County, Florida. Removal of this case to federal court is not permitted. Litigation in federal court is precluded by agreement of the parties hereto. If, even though precluded by agreement of the Parties hereto, litigation arising from or based upon this contract should be mandated by a court of competent jurisdiction issued pursuant to a duly noticed hearing giving Sumter County adequate time to respond and all of the benefits of due process to lie in the proper venue or jurisdiction of a federal court, that federal court shall only be in the Middle District of Florida, Ocala Division. The Parties further agree that entry into this agreement constitutes irrevocable consent that the exclusive venue for any such dispute shall lie solely in the state or county courts in and for Sumter County, Florida. The Parties expressly and irrevocably waive any right(s) to removal of any such dispute to any federal court, unless the federal court has exclusive jurisdiction; in such cases, the parties agree that the exclusive venue for any such disputes shall be the United States District Court, in and for the Middle District of Florida, Ocala Division. Process in any action or proceeding referred to in this paragraph may be served on any party anywhere in the world, such party waives any argument that said party is not subject to the jurisdiction of the state courts located in Sumter County, Florida and that the laws of the state of Florida.
10. **Entire Agreement.** This Agreement contains the entire agreement of the Parties and may not be changed except by written agreement duly executed by the Parties hereto. This Agreement supersedes any prior understandings or agreements between the Parties, and there are no representations, warranties, or oral agreements other than those expressly set forth herein.
11. **Assignment.** This Agreement shall not be assigned nor may any portion of the obligations contemplated in this Agreement be subcontracted to another party without prior written approval of County. No such approval by County of any assignment or subcontract shall be deemed in any event or in any manner to provide for the incurrence of any obligation of County. All such assignments and subcontracts shall be subject to the terms and conditions of this Agreement and to any conditions of approval that County shall deem necessary.
12. **Compliance with Licenses, Permits, and Applicable Laws.** In performing services hereunder, Vendor shall comply with all federal, state and local laws and regulations. Vendor shall be responsible for identifying and obtaining all permits necessary to complete the scope of services. Vendor shall be responsible for obtaining, at its sole cost and expense, all necessary license licenses and other governmental approvals required in order for Vendor to provide the type of services required hereunder.
13. **E-Verify:** system established by the U.S. Department of Homeland Security to determine the immigration and work-eligibility status of prospective employees.

14. The Vendor agrees to certify to the Board that Vendor is in compliance with the federal E-Verify program, including obtaining written certification from all sub-Vendors who will participate in the performance of scope of services contemplated in this Agreement. All sub-Vendor certifications must be kept on file by the Vendor and made available to the state and/or the Board upon request. The Board reserves the right to take action against any Vendor deemed to be non-compliant; potential actions may include, but are not limited to, cancellation of this Agreement and/or suspending or debarring the Vendor from performing services for the County.
15. **Conflict of Interest.** Vendor shall notify Board in writing of any commitments during the term of this Agreement which may constitute a potential or actual conflict of interest with respect to the scope of services to be performed for the Board.
16. **Corporate Status; Change of Ownership.** If Vendor is a non-governmental, corporate entity:
- a. *Corporate Status.* Vendor shall ensure that the corporate status shall continuously be in good standing and active and current with the state of its incorporation and the State of Florida and at all times throughout the Term, and any renewal or extension hereof. Failure of the Vendor to keep its corporate status active and current shall constitute a material breach under the terms of this Agreement.
 - b. *Change of Ownership.* Vendor shall notify County immediately upon any change in corporate ownership or any substitution of the key professional assigned (the "Key Person") to perform under this Agreement ("Change of Ownership"). County shall have the option of cancelling this Agreement if a Change of Ownership is not suitable to it, provided however, no cancellation shall relieve the Vendor of its obligations to perform the work described herein or for liability for breach of same. A Change of Ownership means the occurrence of any one or more of the following: a sale, lease, or other disposition of 50% or more of the interest or assets of the company or corporation; a merger, reverse merger or consolidation with another entity; a transaction wherein a third-party becomes the beneficial owner having fifty (50%) percent or more interest in the corporation or company; or fifty (50%) percent or more of the total number of votes that may be cast for any act of the entity.
21. **Default.** Neither Party shall declare the other party in default of any provision of this Agreement without giving the other party at least ten (10) days advance written notice of intention to do so, during which time the other party shall have the opportunity to remedy the default. The notice shall specify the default with particularity.
22. **Dispute Resolution.** All disputes arising out of or in connection with this Agreement shall be attempted to be settled through good-faith negotiation between the Parties, followed if necessary within thirty (30) days by professionally-assisted mediation. Any mediator so designated must be acceptable to each Party. The mediation will be conducted as specified by the mediator and agreed upon by the Parties. The Parties agree to discuss their differences in good faith and to attempt, with the assistance of

the mediator, to reach an amicable resolution of the dispute. The mediation will be treated as a settlement discussion and therefore will be confidential. The mediator may not testify for either Party in any later proceeding relating to the dispute. No recording or transcript shall be made of the mediation proceedings. Each Party will bear its own costs in the mediation. The fees and expenses of the mediator will be shared equally by the Parties. Failing resolution through negotiation or mediation, either Party may file an action in a court of competent jurisdiction or other appropriate remedy available in law or equity as defined herein below.

23. **Jointly Drafted.** The Parties agree that this Agreement is entered into knowingly and voluntarily, after having the opportunity to fully discuss it with an attorney. Having had the opportunity to obtain the advice of legal counsel to review, comment upon, and redraft this Agreement, the Parties agree that this Agreement shall be construed as if the parties jointly prepared it so that any uncertainty or ambiguity shall not be interpreted against any one party and in favor of the other.
24. **Parties Acknowledgement; Parties Bound.** The Parties acknowledge that they have read this Agreement, and that they understand the terms and conditions herein and that the terms have been fully and completely explained to the Parties prior to the execution thereof. Each party acknowledges that the other party has made no warranties, representations, covenants, or agreements, express or implied, except as expressly contained in this Agreement. Further, the Parties have caused this Agreement to be executed on their respective behalf by the authorized officer whose signature appears below under their respective name, to be effective as of the date first written above. This Agreement shall inure to the benefit of and be binding upon the Parties, their successors, heirs, and personal representatives.
25. **Waiver.** The waiver by any party hereto of a breach of any provision of this Agreement shall not operate or be construed as a waiver of any subsequent breach by any party.
26. **Time is of the Essence.** Time shall be of the essence of this Agreement.
27. **Survivability.** Any provision of this Agreement, which obligates any of the Parties to perform an obligation either before the commencement of the Term or after the expiration of the Term, or any renewal or extension thereof, shall be binding and enforceable notwithstanding that performance is not within the Term, and the same shall survive.
28. **Severability.** Whenever possible each provision and term of this Agreement will be interpreted in a manner to be effective and valid but if any provision or term of this Agreement is held to be prohibited or invalid, then such provision or term will be ineffective only to the extent of such prohibition or invalidity, without invalidating or affecting in any manner whatsoever the remainder of such provision or term or the remaining provisions or terms of this Agreement.
29. **Counterparts.** This Agreement may be executed in a number of identical counterparts and a facsimile or electronic/digital copy shall be treated as an original. If so executed, each of such counterparts is to be deemed an original for all purposes, and all such counterparts shall, collectively, constitute one agreement. In making proof of this

Agreement, it shall not be necessary to produce or account for more than one such counterpart.

30. **Initiation of Litigation.** The Parties hereto understand and agree that Sumter County, a political subdivision of the state of Florida, and party hereto, is a governmental entity of limited funds that is dependent upon the income derived from taxpayers. Therefore, the Vendor entering into this agreement with Sumter County agrees that it will deposit, prior to initiating litigation (by filing a complaint or other pleading with a court of competent jurisdiction as described above herein, that requires a responsive pleading or other action by Sumter County) the irrevocable, nonrefundable sum of \$25,000 to the control of the Clerk of the Court in and for Sumter County, Florida or such other designated account as maybe designated by Sumter County. Said funds shall be used by Sumter County in any manner that Sumter County deems appropriate in its sole and absolute discretion.
31. **Section and Paragraph Headings.** Captions or paragraph headings herein contained are for organizational convenience only and shall not be constructed as material provisions of this agreement or to limit any provisions hereunder.
32. **Cooperation; Supplementary Actions.** All Parties agree to cooperate fully and to execute any supplementary documents, and to take any additional actions that may be necessary or appropriate to give full force and effect to the basic terms and intent of this Agreement, and which are not inconsistent with its terms.
33. **Miscellaneous.** Whenever the context shall so require, all words in this Agreement of one gender shall be deemed to include the other gender.
34. **Incorporation of Recitals.** Each of the WHEREAS clauses listed above are hereby re-alleged and incorporated into this Agreement as if otherwise fully stated herein.
35. **Notice.** Whenever any notice, demand or request is required or permitted hereunder, such notice, demand or request shall be made in writing and shall be personally delivered to the individuals listed below, sent via prepaid courier or overnight courier, or deposited in the United States mail, registered or certified, return receipt requested, postage prepaid, addressed to the addresses (and individuals) set forth below. No other form of electronic communications (Facebook, Twitter, Text) will be deemed Notice.

FOR THE BOARD _____ FOR THE VENDOR _____

Name: Bradley S. Arnold Name: _____

=

Address: 7375 Powell Road, Wildwood, FL 34785 Address: _____

Title: County Administrator Title: _____

Date: _____ Date: _____

IN WITNESS WHEREOF, the parties have signed this agreement the day and year first above written.

ATTEST:

SUMTER COUNTY
BOARD OF COUNTY COMMISSIONERS

By: _____

By: Chairman

Date Signed: _____

ATTEST:

Vendor

By: _____

By: _____

Date Signed: _____

NOTICE OF AWARD

TO: _____

PROJECT DESCRIPTION: RFP# 045-0-2023/RS Countywide Pavement Maintenance and Rehabilitation Services.

In response to the Request for Qualifications dated _____ the Sumter County Board of County Commissioners (BOCC) is providing notice of acceptance of your proposal representing the base bid amount of _____ and 00/100 (\$0.00).

You are required by the RFQ to execute the Agreement and furnish the required certificates of insurance within fourteen (14) calendar days from the date of this Notice.

If you fail to execute the Agreement and to furnish said certificates of insurance within 14 days from the date of this Notice, the BOCC will be entitled to consider all your rights arising out of BOCC acceptance of your bid. The BOCC will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the BOCC.

Dated this th day of , 2023;

Sumter County Board of County Commissioners

By:_____
Chairman
Title**ACCEPTANCE OF NOTICE**

Receipt of the above NOTICE OF AWARD is hereby acknowledged.

VENDORDated this day of , 20 ;_____
By:

NOTICE TO PROCEED**Company:**_____**Date:****Project: RFP# 045-0-2023/RS Countywide Pavement Maintenance and Rehabilitation Services**

You are hereby notified to commence Work in accordance with the Agreement dated _____. The Contract Time is hereby established as two hundred thirty (230) calendar days from the date of this Notice until Final Completion.

OWNER: SUMTER COUNTY BOARD OF COUNTY COMMISSIONERS

By: _____

County Administrator

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED is hereby acknowledged by:

VENDOR:

this the _____ day
of _____, 2023.

By: _____
Authorized Representative

Title: _____

Company: _____

EXHIBIT A Bid Form

Telephone: (352) 689-4400
Fax: (352) 689-4401

**Re: ITB 045-0-2023/RS COUNTYWIDE PAVEMENT MAINTENANCE AND
REHABILITATION SERVICES**

1. Having carefully examined the ITB for the project listed above:

And being familiar with the premises affecting the work, the undersigned proposes and hereby agrees to furnish all labor and material and to perform all work in accordance with said documents for:

ITB 045-0-2023/RS

2. In submitting this Bid, it is understood that the right is reserved by the Board of Sumter County Commissioners to reject any, and all bids.
3. The Vendor hereby acknowledges the receipt of _____ Addenda issued during the bid period and certifies their inclusion in the bid. (Indicate "NONE" if no addendums were received).
4. All Requests for Information (RFI's) will be sent to Jackie Valdez for response.

Date: _____

Vendor

By: _____
Title: _____
Telephone: _____
Address: _____

Countywide Pavement Maintenance and Rehabilitation Services Unit Price Bid

The following unit costs shall include all material, labor, equipment, and any other additional charges required to accomplish the work of the unit cost.

Bid award will be based on the total unit pricing for each category listed in the unit price proposal. Bidders are **NOT** required to bid each category, but must provide pricing for **ALL** line items listed in those categories they are capable of producing and have prior applicable experience. Sumter County reserves the right to award a contract to one or more vendors.

CATEGORY A – MILLING PER TASK ORDER	UNIT	0 - 1,000	1,001 - 5,000	5,001 - 10,000	10,001 - 25,000	Over 25,000
1"	Sq. Yd.	\$	\$	\$	\$	\$
1.5"	Sq. Yd.	\$	\$	\$	\$	\$
2"	Sq. Yd.	\$	\$	\$	\$	\$
2.5"	Sq. Yd.	\$	\$	\$	\$	\$
3"	Sq. Yd.	\$	\$	\$	\$	\$
4"	Sq. Yd.	\$	\$	\$	\$	\$
5"	Sq. Yd.	\$	\$	\$	\$	\$
6"	Sq. Yd.	\$	\$	\$	\$	\$
Asphalt and/or profile millings deductive alternate for Contractor to deliver and transport (Beyond first 25 truck loads)	Cu. Yd.	\$	\$	\$	\$	\$
	UNIT	0 – 10 (Miles)	<10 – 20 (Miles)	<20 – 30 (Miles)	Over 30 (Miles)	

First 25 Truck Loads of Millings to be delivered to County Facility	Hauling Compensation/Mile From Work Site Location to County Facility back to Work site location					
CATEGORY A SUB-TOTAL UNIT PRICING: (Instructions: Enter Total of line item unit pricing for each column of Category A)		\$	\$	\$	\$	\$
CATEGORY A TOTAL UNIT PRICING: (Instructions: Add together the total unit pricing of each column for Category A)				\$		

CATEGORY B – STRUCTURAL OVERLAY - ASPHALT TYPES PER TASK ORDER	UNIT	0-100	101-500	501– 1,000	1,001–5,000	Over 5,000
9.5 S.P. Traffic Level C	Ton	\$	\$	\$	\$	\$
12.5 S.P. Traffic Level C	Ton	\$	\$	\$	\$	\$
9.5 F.C. Traffic Level C	Ton	\$	\$	\$	\$	\$
12.5 F.C. Traffic Level C	Ton	\$	\$	\$	\$	\$
CATEGORY B SUB-TOTAL UNIT PRICING: (Instructions: Enter Total of line item unit pricing for each column of Category B)		\$	\$	\$	\$	\$
CATEGORY B TOTAL UNIT PRICING: (Instructions: Add together the total unit pricing of each column for Category B)				\$		

CATEGORY C - CHIP SEAL / FOG SEAL PER TASK ORDER	UNIT	0 - 25,000	25,001 - 50,000	50,001 - 100,000	Over 100,000	
Single Chip (Number 89 Stone)	Sq. Yd.	\$	\$	\$	\$	
Double Chip (Number 57 & 89 Stone)	Sq. Yd.	\$	\$	\$	\$	
Triple Chip Seal	Sq. Yd.	\$	\$	\$	\$	
Fog Seal	Sq. Yd.	\$	\$	\$	\$	
CATEGORY C SUB-TOTAL UNIT PRICING: (Instructions: Enter Total of line item unit pricing for each column of Category C)		\$	\$	\$	\$	
CATEGORY C TOTAL UNIT PRICING: (Instructions: Add together the total unit pricing of each column for Category C)				\$		

CATEGORY D - CAPE SEAL PER TASK ORDER	UNIT	0 - 25,000	25,001 - 50,000	50,001 - 100,000	Over 100,000	
Cape Seal	Sq. Yd.	\$	\$	\$	\$	
CATEGORY D SUB-TOTAL UNIT PRICING: (Instructions: Enter Total of line item unit pricing for each column of Category D)		\$	\$	\$	\$	
CATEGORY D TOTAL UNIT PRICING: (Instructions: Add together the total unit pricing of each column for Category D)				\$		

CATEGORY E - MICRO-SURFACING PER TASK ORDER	UNIT	0 - 25,000	25,001 - 50,000	50,001 - 100,000	Over 100,000	
Double Micro	Sq. Yd.	\$	\$	\$	\$	
Single Micro	Sq. Yd.	\$	\$	\$	\$	
Rut Filling (Leveling)	Ton	\$	\$	\$	\$	
CATEGORY E SUB-TOTAL UNIT PRICING: (Instructions: Enter Total of line item unit pricing for each column of Category E)		\$	\$	\$	\$	
CATEGORY E TOTAL UNIT PRICING: (Instructions: Add together the total unit pricing of each column for Category E)				\$		
CATEGORY F – IN-PLACE RECYCLING – RECONSTRUCTION (FULL DEPTH RECLAMATION) PER TASK ORDER	UNIT	0 - 25,000	25,001 - 50,000	50,001 - 100,000	Over 100,000	
Pulverization	Sq. Yd.	\$	\$	\$	\$	
Cement - Cement Treated Base	Ton	\$	\$	\$	\$	
Asphaltic Cement - Foamed Asphalt Base	Gallon	\$	\$	\$	\$	
Asphaltic Emulsion - Emulsion Treated Base	Gallon	\$	\$	\$	\$	
Added Rap or Aggregates	Ton	\$				
Excavation for Widening/Unsuitable Materials	Cu. Yd.	\$				
General Use Optional Base Material	Cu. Yd.	\$				
	UNIT	0' – 4' (width)	<4' to 6' (width)	<6' to 10' (width)	<10' (width)	
Shoulder Rework	LF	\$	\$	\$	\$	
CATEGORY F SUB-TOTAL UNIT PRICING: (Instructions: Enter Total of line item unit pricing for each column of Category F)		\$	\$	\$	\$	
CATEGORY F TOTAL UNIT PRICING: (Instructions: Add together the total unit pricing of each column for Category F)				\$		

CATEGORY G – ASPHALT REJUVENATION PER TASK ORDER	UNIT	0 - 1,000	1,001 - 5,000	5,001 - 25,000	25,001 - 50,000	Over 50,000
Rejuvenation	Sq. Yd.	\$	\$	\$	\$	\$
Test Core Removal	Each	\$	\$	\$	\$	\$
Test Core Laboratory Analysis-	Each	\$	\$	\$	\$	\$
Rejuvenation (Including Titanium Dioxide)	Sq. Yd.	\$	\$	\$	\$	\$
Field Core Removal	Each	\$	\$	\$	\$	\$
Field Core Laboratory Analysis - Viscosity	Each	\$	\$	\$	\$	\$
Field Core Laboratory Analysis – Titanium Dioxide Penetration	Each	\$	\$	\$	\$	\$
Field Core Laboratory Analysis – Titanium Dioxide NO2 Reduction	Each	\$	\$	\$	\$	\$
Field Core Laboratory Analysis – Titanium Dioxide Solar Reflectance Index (SRI)	Each	\$	\$	\$	\$	\$
CATEGORY G SUB-TOTAL UNIT PRICING: (Instructions: Enter Total of line item unit pricing for each column of Category G)		\$	\$	\$	\$	\$
CATEGORY G TOTAL UNIT PRICING: (Instructions: Add together the total unit pricing of each column for Category G)				\$		
CATEGORY H - CRACK SEALING PER TASK ORDER	UNIT	0 - 500	500 -1,000	1,001 - 5,000	5,001 - 10,000	Over 10,000
Crack Sealant	Gallon	\$	\$	\$	\$	\$
CATEGORY H SUB-TOTAL UNIT PRICING: (Instructions: Enter Total of line item unit pricing for each column of Category H)		\$	\$	\$	\$	\$
CATEGORY H TOTAL UNIT PRICING: (Instructions: Add together the total unit pricing of each column for Category H)				\$		

CATEGORY I - TRAFFIC LOOP REPLACEMENT	UNIT					
Type A (FDOT Item # 660-2-101)	Each	\$				
Type B (FDOT Item # 660-2-102)	Each	\$				
Type F (FDOT Item # 660-2-106)	Each	\$				
Type F (FDOT Item #660-2-106 modified to 30 Ft)	Each	\$				
CATEGORY I TOTAL UNIT PRICING: (Instructions: Enter Total of line item unit pricing for Category I)		\$				
CATEGORY J - SODDING PER TASK ORDER	UNIT					
Performance Turf Sod	Sq. Yd.	\$				
CATEGORY J SUB-TOTAL UNIT PRICING: (Instructions: Enter Total line item unit pricing for Category J)		\$				
CATEGORY K – VARIABLE MESSAGE BOARDS PER TASK ORDER	UNIT					
Variable Message Board	PER BOARD PER DAY	\$				
CATEGORY K SUB-TOTAL UNIT PRICING: (Instructions: Enter Total line item unit pricing for Category K)		\$				

CATEGORY L –PAVEMENT MARKINGS PER TASK ORDER					
Item:	Product Type:	Unit:	Painted	Thermoplastic	Misc.
L-1	White – Solid				
	4"	GM	\$	\$	
	6"	GM	\$	\$	
	8"	LF	\$	\$	
	12"	LF	\$	\$	
	18"	LF	\$	\$	
	24"	LF	\$	\$	
L-2	White – Skip				
	4"	GM	\$	\$	
	6"	GM	\$	\$	
L-3	Yellow – Solid				
	4"	GM	\$	\$	
	6"	GM	\$	\$	
	8"	LF	\$	\$	
	12"	LF	\$	\$	
	18"	LF	\$	\$	
L-4	Yellow – Skip				
	4"	GM	\$	\$	
	6"	GM	\$	\$	
L-5	Yellow – Double				
	4"	GM	\$	\$	
	6"	GM	\$	\$	

L-6	Audible and Vibratory Pavement Markings				
	Yellow – Skip 4"	GM	\$	\$	
	Yellow – Skip 6"	GM	\$	\$	
	White – Solid 4"	GM	\$	\$	
	White – Solid 6"	GM	\$	\$	
L-7	Legends				
	"STOP"	EA	\$	\$	
	"R X R" (Includes 6" white)	EA	\$	\$	
	"ONLY"	EA	\$	\$	
	"LANE"				
	"MERGE"	EA	\$	\$	
	"SCHOOL"	EA	\$	\$	
	"AHEAD"	EA	\$	\$	
	" Visitor"	EA	\$	\$	
	"Resident"	EA	\$	\$	
	"Path"	EA	\$	\$	
L-7	Markings				
	TURN AND THROUGH LANE TURN ARROW	EA	\$	\$	
	THROUGH LANE USE ARROW	EA	\$	\$	
	TURN LANE USE ARROW	EA	\$	\$	
	BIKE OR CART	EA	\$	\$	
	BIKE ARROW	EA	\$	\$	
	YIELD TRIANGLES	EA	\$	\$	
L-8	Reflective Pavement Markers				
	Bi-Directional, Amber	EA	\$	\$	
	Mono-Directional Colorless	EA	\$	\$	

	Bi-Directional, White/Red	EA	\$	\$	
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L-9	Miscellaneous				
	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF	AS			
	SINGLE POST SIGN, F&I GROUND MOUNT, 12-20 SF	AS			
	SINGLE POST SIGN, F&I GROUND MOUNT, 21-30 SF	AS			
	MAILBOX (REMOVE AND REPLACE)	EA			
	Silt Fence Type III	LF			\$
	Removal of Existing Marking	SF			\$
	Preform Thermoplastic 12"	LF			\$
	Preform Thermoplastic 24"	LF			\$
	Off Duty Law Enforcement Officer	HR			\$
CATEGORY L SUB-TOTAL UNIT PRICING: (Instructions: Enter Total of line item unit pricing for each column of Category L)			\$	\$	\$
CATEGORY L TOTAL UNIT PRICING: (Instructions: Add together the total unit pricing of each column for Category L)				\$	

SHADED NOT APPLICABLE

CATEGORY M – Mobilization	UNIT	\$0.00 - \$50,000	\$50,001 - \$100,000	\$100,001 - \$500,000	Over \$500,000	
Work Order Total	LS	\$	\$	\$	\$	
CATEGORY M SUB-TOTAL UNIT PRICING: (Instructions: Enter Total of line item unit pricing for each column of Category M)		\$	\$	\$	\$	
CATEGORY M TOTAL UNIT PRICING: (Instructions: Add together the total unit pricing of each column for Category M)				\$		
CATEGORY N – Maintenance of Traffic	UNIT	0 - 7	8 - 14	15 - 21	22-31	Over 31
Standard Index 600 Series MOT TWO-LANE AND MULTILANE, WORK ON SHOULDER	Day	\$	\$	\$	\$	\$
Standard Index 600 Series MOT TWO-LANE, TWO-WAY WORK WITHIN THE TRAVEL WAY	Day	\$	\$	\$	\$	\$

Standard Index 600 Series MOT TWO-LANE, TWO-WAY, INTERSECTION WORK	Day	\$	\$	\$	\$	\$
Standard Index 600 Series MOT Multilane Roadway, Lane Closures	Day	\$	\$	\$	\$	\$
Standard Index 600 Series MOT Multilane Roadway, Intersection Work	Day	\$	\$	\$	\$	\$
Standard Index 600 Series MOT Temporary Road Closure	Day	\$	\$	\$	\$	\$
Standard Index 600 Series MOT Two-Way Left-Turn Lanes	Day	\$	\$	\$	\$	\$
Standard Index 600 Series MOT Sidewalk Closure	Day	\$	\$	\$	\$	\$
Standard Index 600 Series MOT Work Within the Roundabout	Day	\$	\$	\$	\$	\$
CATEGORY N SUB-TOTAL UNIT PRICING: (Instructions: Enter Total of line item unit pricing for each column of Category N)		\$	\$	\$	\$	\$
CATEGORY N TOTAL UNIT PRICING: (Instructions: Add together the total unit pricing of each column for Category N)				\$		

SHADED NOT APPLICABLE

Countywide Pavement Maintenance and Rehabilitation Services Bid Form

BID OF

Full Legal Company Name

Mailing Address

Telephone Number

Fax Number

Bidders: Having become familiar with requirements of the project, and having carefully examined the Bidding Documents and Specifications entitled Countywide Pavement Maintenance and Rehabilitation Services in Sumter County, Florida, the undersigned proposes to furnish all materials, labor and equipment, supervision and all other requirements necessary to comply with the Contract Documents to submit the following Bid summarized as follows:

The following total unit costs (from the unit price) shall include all material, labor, equipment, and any other additional charges required to accomplish the work of the unit cost for any locations within Sumter County. Partial bids will be accepted on a per category basis. Bidders are **NOT** required to bid each category, but must provide pricing for **ALL** line items listed in those categories on the unit price for which the bidder is capable of producing and have prior applicable experience.

FOR: Countywide Pavement Management and Rehabilitation Services

CATEGORY A TOTAL UNIT PRICING: \$ _____
(From the unit price) Amount Written in Numerals

/100 Amount Written in Words

CATEGORY B TOTAL UNIT PRICING: \$ _____
(From the unit price) Amount Written in Numerals

/100 Amount Written in Words

CATEGORY C TOTAL UNIT PRICING: \$ _____
(From the unit price) Amount Written in Numerals

/100 Amount Written in Words

CATEGORY D TOTAL UNIT PRICING: \$ _____
 (From the unit price) Amount Written in Numerals

 /100 Amount Written in Words

CATEGORY E TOTAL UNIT PRICING: \$ _____
 (From the unit price) Amount Written in Numerals

 /100 Amount Written in Words

CATEGORY F TOTAL UNIT PRICING: \$ _____
 (From the unit price) Amount Written in Numerals

 /100 Amount Written in Words

CATEGORY G TOTAL UNIT PRICING: \$ _____
 (From the unit price) Amount Written in Numerals

 /100 Amount Written in Words

CATEGORY H TOTAL UNIT PRICING: \$ _____
 (From the unit price) Amount Written in Numerals

 /100 Amount Written in Words

CATEGORY I TOTAL UNIT PRICING: \$ _____
 (From the unit price) Amount Written in Numerals

 /100
 Amount Written in Words

CATEGORY J TOTAL UNIT PRICING: \$ _____
 (From the unit price) Amount Written in Numerals

 /100 Amount Written in Words

CATEGORY K TOTAL UNIT PRICING: \$ _____
 (From the unit price) Amount Written in Numerals

 /100 Amount Written in Words

CATEGORY L TOTAL UNIT PRICING: \$ _____
 (From the unit price) Amount Written in Numerals

 /100 Amount Written in Words

CATEGORY M TOTAL UNIT PRICING: \$ _____
 (From the unit price) Amount Written in Numerals

 /100 Amount Written in Words

CATEGORY N TOTAL UNIT PRICING: \$ _____
 (From the unit price) Amount Written in Numerals

 /100 Amount Written in Words

Each Bidder shall print legibly, in blue or black ink, the amount written in numerals and the amount written in words for the items shown above. In the event an amount submitted is not legible, the County reserves the right to consider it a "No Bid", and deem the Bidder nonresponsive to the requirements of the Bid.

All Unit Prices shall be established at the beginning of the contract and may be adjusted (+ or -) annually upon approval of both the Contractor and County and only at the beginning of each renewal period.

Any approved annual rate adjustments shall take effect with the first task order issued after the

renewal period. Additional Unit Price items not included on the official bid form will be submitted to the County's authorized representative for prior approval and will be added to the Standard Agreement through a Contract Amendment and must be accepted by both the Contractor and the County. Price adjustments for fuel and bituminous products will not be allowed on a task order basis.

Note: The listing order of bid items reflects a construction sequence in general terms for bidding purposes only and is not a specific construction schedule.

Sumter County reserves the right to award a contract to more than one bidder.

EXHIBIT B

Drawings and Specifications

Plans and specification attachments:

- Attachment A: Standard General Conditions of the Construction Contract (prepared by EJCDC 2018)
- Attachment B: Supplemental Conditions to the General Conditions