

CONTRACT

C25-08-900

THIS CONTRACT, made this 19th day of August, 2025, between **ST. LUCIE COUNTY**, a political subdivision of the State of Florida, hereinafter called the "COUNTY", and **BOULDER CONSTRUCTION, LLC**, or his, its or their successors, executors, administrators, and assigns hereinafter called the "CONTRACTOR":

WITNESSETH:

1. **PURPOSE**

That Contractor agrees with County, for the consideration herein mentioned, at his, its or their own proper cost and expense to do all the Work and furnish all the materials, equipment, supplies, and labor necessary to carry out this Contract in the manner and to the full extent as set forth in the Contract Documents, and to the satisfaction of the duly authorized representatives of St. Lucie County, who shall have at all times full opportunity to inspect the materials to be furnished and the Work to be done under this Contract.

2. **GENERAL DESCRIPTION OF WORK**

It is agreed that the Work to be done under this Contract is: **Roadway Surfacing, Reconstruction, and Preservation** as further described in St. Lucie County **Bid No. 25-059**, made a part hereof by this reference.

3. **PROJECT MANAGER**

The Project Manager for the County is Michael Heller at (772) 462-1659. The Project Manager for the Contractor is Joe Sarquis at (561) 404-5050.

The parties shall direct all matters arising in connection with the performance of this Contract, other than invoices and notices, to the attention of the Project Managers for attempted resolution or action. Except as otherwise provided for in this Contract, the Project Managers shall be responsible for overall resolution or action. The Project Managers shall be responsible for overall coordination and oversight relating to the performance of this Contract. The Project Manager, however, has no authority to approve or execute Change Order Work except as set forth in the County Purchasing Manual.

The Contractor shall keep during the term of this Contract a competent Project Manager, any necessary assistants, all satisfactory to the County's Project Manager. The Contractor, as soon as possible after the award of the contract, but prior to the Notice-to-Proceed, shall furnish in writing to the County's Project manager the name and qualifications of the Project Manager who will be in charge of the project, along with the Project Manager's cell phone/direct connect number. The County's Project Manager may reply within fourteen (14) days to the contractor in writing stating whether he/she has an objection to the proposed Project Manager or requires additional time for review. The failure of the County's Project Manager to make objection to the Contractor's Project Manager within the fourteen (14) days of receipt shall constitute an acceptance of such Project Manager.

The Contractor shall not use a Project Manager to whom the County has made reasonable and timely objection. The Contractor shall not change their Project Manager without the County's consent. The County's Project Manager shall be able to reach the Contractor's Project Manager at their cell number at all hours. The Contractor shall give sufficient superintendence to the work using his best skill and attention. At any time the County's Project Manager, with or without cause, may request that the Contractor replace any individual with an individual acceptable to the County.

4. **CONTRACT DOCUMENTS**

The Contract Documents which comprise the Contract between the County and the Contractor are attached hereto and made part hereof and consist of the following:

- A. This Contract, consisting of pages 01 through 15 inclusive.
- B. Contractor's Bid and Bid Bonds, consisting of 13 pages.
- C. Bid Documents, consisting of:
 - Call for Bids, Instructions to bidders, Section 00100
 - Bidder's Checklist and Bid Forms, Section 00110
 - Specifications
 - Bidder's Qualification Questionnaire
 - Confirmation of Drug-Free Workplace, Section 00454
 - Non-Collusion Affidavit, Section 00455
 - Public Construction Bond, Section 00610
 - General Conditions, Section 00700
 - Supplemental Conditions
- D. Addendums No. 1 to 2, inclusive
- E. Insurance Certificates which shall be provided by the Contractor, along with the return of an executed copy of this Contract.
- F. Any Modifications, including change orders, duly delivered after execution of this Contract.

Except for duly authorized and executed Modifications including but not limited to change orders and contract amendments, any conflict between the terms and conditions of this Contract and the terms and conditions of any of the other contract documents shall be interpreted in favor of this Contract.

5. **PERFORMANCE GUARANTY**

That Contractor guarantees to repair, replace or otherwise make good to the satisfaction of the County any defect in workmanship or material appearing in the Work; and further guarantees the successful performance of the Work for the service intended. Neither inspection nor payment, including final payment, by the County shall relieve the Contractor or its Surety from his or its obligations to do and complete the Work in accordance with this Contract. If the County deems it inexpedient to require the Contractor to correct deficient or defective Work, an equitable deduction from the contract price shall be made therefore or in the alternative, if the expense incurred by the County to correct deficient or defective Work exceeds the unpaid balance on this Contract, the Contractor shall pay the difference to the County. The liability of the Contractor and its surety or sureties for such payment is joint and several.

6. **PROJECT SCHEDULE/DELAY DAMAGES**

The Contractor will be issued a formal Notice to Proceed at or shortly after the Pre-Construction Meeting. The Contractor shall proceed with work at the specified job location within 10 calendar days of

receipt of the written Notice to Proceed and Purchase Order. After the initial notification, the Contractor shall provide service in accordance with the approved work schedule. After commencing work, the work shall continue without any interruptions until completion. The Contractor must give the Project Manager a minimum of twenty-four (24) hours written notice of any paving operation, listing the date, time, and road location the Contractor will begin a surfacing operation.

SCHEDULING OF WORK – The Contractor shall supply a work schedule to be approved by the Project Manager. The County shall review and approve the schedule submitted and reserves the right to demand reasonable changes or adjustments or to reject the entire proposed schedule. Surfacing projects that do not start within 7 calendar days of the agreed upon scheduled date shall be assessed liquidated damages of \$700.00, and thereafter \$100.00, per calendar day in addition to any liquidated damages incurred for not completing the surfacing project on time.

The Contractor shall make every effort to stay on schedule and shall complete all routine work during the scheduled calendar week and within approved scheduled time. Failure to complete the surfacing project within the approved scheduled days shall result in liquidated damages being applied to the surfacing project invoice of \$100.00 per calendar day. Time extensions may be granted for extenuating circumstances, at the sole discretion of the County. A rain day, upon request, shall be granted for each day rain exceeds 1” and an additional day for each additional 1” of rain. Rainfall will be determined by the nearest South Florida Water Management District gauges at www.sfwmd.gov/weather-radar/rainfall-historical/daily.

7. **TERM**

The term of this Contract shall be for a period of two (2) years beginning on **October 20, 2025**. Upon mutual written agreement, this Contract may be extended for three (3) additional one-year renewal periods pursuant to the same terms and conditions.

8. **CONTRACT PAYMENT**

The County shall pay the Contractor for the performance of this Contract and completion of the project in accordance with the Contract Documents, subject to adjustment by change order, the total amount in current funds being pursuant to the unit pricing listed on the bid price schedule.

Group A - General (Required)			
Item	Description	Unit	Unit Price
Mobilization			
101-1A	Work Order Total \$0.00 - \$50,000	LS	\$12,000.00
101-1B	Work Order Total \$50,001 - \$100,000	LS	\$15,000.00
101-1C	Work Order Total \$100,001 - \$500,000	LS	\$19,000.00
101-1D	Work Order Total Over \$500,000	LS	\$22,000.00
Maintenance of Traffic			
102-1A	Standard FDOT 600 Series MOT for Lane Closure	DA	\$3,500.00
Miscellaneous			
104-13-1	Silt Fence Type III	LF	\$2.50
110-7-1A	Mailbox (Remove and Replace)	EA	\$200.00
339-1	Miscellaneous Asphalt	TN	\$200.00
570-1	Performance Turf	SY	\$14.00

577-70A	Shoulder Rework	SY	\$12.00
918-331	Bituminous Patching Material	CF	\$55.00
ADA Standards			
520-1-11	Concrete Curb & Gutter, Variable Height, Type F	LF	\$29.00
522-2	Concrete Sidewalk & Driveways, 6"	SY	\$82.00
527-2	Detectable Warnings	SF	\$43.00
Painted Pavement Markings			
710-11-121	Standard, White, Solid 6"	LF	\$1.00
710-11-122	Standard, White, Solid 8"	LF	\$1.00
710-11-123	Standard, White, Solid 12"	LF	\$2.00
710-11-124	Standard, White, Solid 18"	LF	\$2.00
710-11-125	Standard, White, Solid 24"	LF	\$3.50
Item	Description	Unit	Unit Price
710-11-131	Standard, White Skip 6"	LF	\$1.00
710-11-141	Standard, White, Dotted/Guideline 6-10 Gap, 6"	LF	\$1.00
710-11-16	Standard, White, Message	EA	\$150.00
710-11-17	Standard, White, Arrows	EA	\$150.00
710-11-18	Standard, White, Yield Line	LF	\$1.20
710-11-221	Standard, Yellow, Solid 6"	LF	\$1.50
710-11-222	Standard, Yellow, Solid 8"	LF	\$2.00
710-11-223	Standard, Yellow, Solid 12"	LF	\$2.00
710-11-224	Standard, Yellow, Solid 18"	LF	\$3.50
710-11-225	Standard, Yellow, Solid 24"	LF	\$4.00
710-11-231	Standard, Yellow, Skip 6"	LF	\$2.00
710-11-241	Standard, Yellow, Dotted/Guideline 6-10 Gap, 6"	LF	\$2.00

Group B – Resurfacing/ Reconstruction			
Item	Description	Unit	Unit Price
Milling 0 to 2,500 Square Yards			
327-70-1A	1" Average Depth	SY	\$14.50
327-70-5A	2" Average Depth	SY	\$15.50
327-70-4A	Variable Depths over 2"	SY	\$16.50
Milling 2,501 to 10,000 Square Yards			
327-70-1B	1" Average Depth	SY	\$3.50
327-70-5B	2" Average Depth	SY	\$4.50
327-70-4B	Variable Depths over 2"	SY	\$5.50
Milling 10,001 to 20,000 Square Yards			
327-70-1C	1" Average Depth	SY	\$3.00
327-70-5C	2" Average Depth	SY	\$3.50
327-70-4C	Variable Depths over 2"	SY	\$4.00
Milling over 20,001 Square Yards			
327-70-1D	1" Average Depth	SY	\$3.00
327-70-5D	2" Average Depth	SY	\$3.50
327-70-4D	Variable Depths over 2"	SY	\$4.00

Asphalt Types from 0 to 2,500 Square Yards			
334-1-131A	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 1"	SY	\$17.50
334-1-133A	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 2"	SY	\$27.50
334-1-134A	Superpave Asphaltic Concrete (Traffic C, SP 12.5), 2"	SY	\$28.50
Asphalt Types from 2,501 to 10,000 Square Yards			
334-1-131B	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 1"	SY	\$16.00
334-1-133B	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 2"	SY	\$26.00
334-1-134B	Superpave Asphaltic Concrete (Traffic C, SP 12.5), 2"	SY	\$27.00
Asphalt Types from 10,001 to 20,000 Square Yards			
334-1-131C	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 1"	SY	\$15.00
334-1-133C	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 2"	SY	\$25.00
334-1-134C	Superpave Asphaltic Concrete (Traffic C, SP 12.5), 2"	SY	\$26.00
Asphalt Types over 20,001 Square Yards			
334-1-131D	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 1"	SY	\$14.00
334-1-133D	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 2"	SY	\$24.00
334-1-134D	Superpave Asphaltic Concrete (Traffic C, SP 12.5), 2"	SY	\$25.00
Full Depth Reclamation (FDR and Cold-in-Place (CIP) Recycling			
120-1A	Excavation for Widening or Unsuitable Material	CY	\$75.00
332-3	Cement - Cement Treatment	TN	\$320.00
332-4	Asphaltic Emulsion - Emulsion Treated Base	GAL	\$5.00
Full Depth Reclamation (FDR) and Cold-in-Place (CIP) Recycling from 0 to 2,500 Square Yards			
332-1A	Pulverization (FDR)	SY	\$15.00
332-2A	Recycling Bituminous Paving (CIP)	SY	\$12.00
Full Depth Reclamation (FDR) and Cold-in-Place (CIP) Recycling from 2,501 to 10,000 Square Yards			
332-1B	Pulverization (FDR)	SY	\$10.00
332-2B	Recycling Bituminous Paving (CIP)	SY	\$10.00
Full Depth Reclamation (FDR) and Cold-in-Place (CIP) Recycling 10,001 to 25,000 Square Yards			
332-1C	Pulverization (FDR)	SY	\$10.00
332-2C	Recycling Bituminous Paving (CIP)	SY	\$10.00
Full Depth Reclamation (FDR) and Cold-in-Place (CIP) Recycling over 25,001 Square Yards			
332-1D	Pulverization (FDR)	SY	\$9.00
332-2D	Recycling Bituminous Paving (CIP)	SY	\$9.00
SAFETY EDGE			
Asphalt Types From 0-2,500 Square Yards			
334-1-13E	Install Safety Edge (Traffic C, SP 9.5) 1"	SY	\$17.00
334-1-13E	Install Safety Edge (Traffic C, SP 9.5) 2"	SY	\$27.00
334-1-13E	Install Safety Edge (Traffic C, SP 12.5) 2"	SY	\$28.00
Asphalt Types From 2,501-10,000 Square Yards			
334-1-13F	Install Safety Edge (Traffic C, SP 9.5) 1"	SY	\$16.00
334-1-13F	Install Safety Edge (Traffic C, SP 9.5) 2"	SY	\$26.00
334-1-13F	Install Safety Edge (Traffic C, SP 12.5) 2"	SY	\$27.00
Asphalt Types From 10,001-20,000 Square Yards			
334-1-13G	Install Safety Edge (Traffic C, SP 9.5) 1"	SY	\$16.00

334-1-13G	Install Safety Edge (Traffic C, SP 9.5) 2"	SY	\$26.00
334-1-13G	Install Safety Edge (Traffic C, SP 12.5) 2"	SY	\$27.00
Asphalt Types over 20,001 Square Yards			
334-1-13H	Install Safety Edge (Traffic C, SP 9.5) 1"	SY	\$16.00
334-1-13H	Install Safety Edge (Traffic C, SP 9.5) 2"	SY	\$26.00
334-1-13H	Install Safety Edge (Traffic C, SP 12.5) 2"	SY	\$27.00

Group C - Preservation/ Restoration			
Item	Description	Unit	Unit Price
Pavement Preservation			
335-3A	Reclamite or Equivalent Pavement Rejuvenation	SY	\$70.00
335-4A	Fog Seal	SY	\$35.00
335-5A	Cape Seal	SY	\$55.00
350-99A	Crack Sealing	GAL	\$380.00
Micro-Surfacing			
335-1A	Single Application 0 to 15,000 Square Yards	SY	\$68.00
335-1B	Single Application over 15,001 Square Yards	SY	\$68.00
335-1C	Double Application 0 to 15,000 Square Yards	SY	\$68.00
Item	Description	Unit	Unit Price
335-1D	Double Application over 15,001 Square Yards	SY	\$115.00
335-1E	Rut Filling	TN	\$450.00
Chip Seal			
335-2A	Single Application 0 to 15,000 Square Yards	SY	\$75.00
335-2B	Single Application over 15,001 Square Yards	SY	\$75.00
335-2C	Double Application 0 to 15,000 Square Yards	SY	\$75.00
335-2D	Double Application over 15,001 Square Yards	SY	\$75.00
335-2E	Variable Depths over 2" 0 to 15,000 Square Yards	SY	\$115.00
335-2F	Variable Depths over 2" over 15,001 Square Yards	SY	\$115.00

This contract shall meet the definition of "Construction Services" as defined in F.S. §218.72. Contractor shall submit a payment application to the County's Project Manager. Payment to the Contractor shall be made within 20 business days of the County's receipt of the application. The County may reject the application in writing which shall specify the deficiency and the action necessary to correct the deficiency. Payment shall be due 10 days after the County's receipt of a corrected application, or if different, within such other period of time as defined by F.S. §218.735.

The County is exempt from the payment of Florida State Sales and Use Taxes. The County shall pay the Contractor through payments issued by the County Finance Department upon receipt of the certified invoice from the County Project Manager. The parties agree, however, that any payments withheld as liquidated damages or for any other reason allowed by this Contract, shall not be governed by the Florida Prompt Payment Act.

9. **SUBCONTRACTORS**

In the event Contractor requires the services of any subcontractor or professional associate in connection with the Work to be performed under this Contract, the Contractor shall secure the written approval of the County Project Manager before engaging such subcontractor or professional associate.

10. **AUDIT**

The Contractor agrees that the County or any of its duly authorized representatives shall, until the expiration of three years after expenditure of funds under this Contract, have access to and the right to examine any directly pertinent books, documents, papers, and records of the Contractor involving transactions related to this Contract. The Contractor agrees that payment(s) made under this Contract shall be subject to reduction for amounts charged thereto which are found on the basis of audit examination not to constitute allowable costs under this Contract. The Contractor shall refund by check payable to the County the amount of such reduction of payments. All required records shall be maintained until an audit is completed and all questions arising therefrom are resolved, or three years after completion of the project and issuance of the final certificate, whichever is sooner.

11. **PUBLIC RECORDS**

The Contractor shall allow public access to all documents, papers, letters, or other material subject to the provisions of Chapter 119, Florida Statutes, and made or received by the Contractor in conjunction with this Contract. Specifically, the Contractor shall:

- (a) Keep and maintain public records that ordinarily and necessarily would be required by the County in order to perform the service.
- (b) Provide the public with access to public records on the same terms and conditions that the County would provide the records and at a cost that does not exceed the cost provided in state law or as otherwise provided by law.
- (c) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law.
- (d) Upon completion of the Contract, transfer, at no cost, to the County all public records in possession of the Contractor or keep and maintain public records required by the County to perform the service. If the Contractor transfers all public records to the County upon completion of the Contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public record disclosure requirements. If the Contractor keeps and maintains public records upon completion of the Contract, the Contractor shall meet all applicable requirements for retaining public records. All record stored electronically must be provided to the County, upon request from the County's custodian of public records, in a format that is compatible with the information technology system of the County.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC

RECORDS AT (772)462-1441, Susan.Bellamy@stlucieco.gov, COUNTY ATTORNEY'S OFFICE 2300 VIRGINIA AVENUE, FORT PIERCE, FL 34982

12. GUARANTEE

The Contractor guarantees to repair, replace or otherwise make good to the satisfaction of the County any defects in workmanship or material appearing in the work within one year after the day of the certificate for final performance of the work for the service intended. Contractor further guarantees the successful performance of the work for the service intended. Neither inspection nor payment, including final payment by the County shall relieve the Contractor from his or its obligations to do and complete the work in accordance with this contract. If the County deems it inexpedient to require the Contractor to correct deficient or defective materials or labor, an equitable deduction from the contract price shall be made therefore or in the alternative, the County may sue for damages. This guarantee is in addition to any other warranty available to the County for the Work including but not limited to manufacturers warranties.

13. CONTRACTOR RESPONSIBILITY

The Contractor is an independent contractor and is not an employee or agent of the County. Nothing in this Contract shall be interpreted to establish any relationship other than that of an independent contractor, between the County and the Contractor, its employees, agents, subcontractors, or assigns, during or after the performance of this Contract. The Contractor shall take the whole responsibility for the means, methods, techniques, sequences, and production of the Work.

The Contractor shall bear all losses resulting to him, or its, on account of the amount or character of the Work, or because of the nature of the ground beneath, in or on which the Work is done is different from what was assumed or expected, or because of bad weather, or because of errors or omissions in his or its bid on the Contract price, or except as otherwise provided in the Contract Documents because of any other causes whatsoever. Execution of this Contract by the Contractor is a representation that the Contractor has visited the site, has conducted a sufficient investigation of the surface and sub-surface conditions in order to submit its bid, has become familiar with the local conditions under which the Work is to be performed, and correlated personal observations with the requirements of the Contract Documents.

The Contractor shall protect the entire Work, all materials under the Contract and the County's property (including machinery and equipment) in, or on, or adjacent to the site of the Work until final completion and Work, from the action of the elements, acts of other contractors, or except as otherwise provided in the Contract Documents, and from any other causes whatsoever; should any damage occur by reason of any of the foregoing, the Contractor shall repair at his, or its, own expenses to the satisfaction of the County or its Project Manager. Neither the County nor its officers, employees or agents assume any responsibility for collection of indemnities or damages from any person or persons causing injury to the Work of the Contractor.

At his, or its expense, the Contractor shall take all necessary precautions (including without limitation) the furnishing of guards, fences, warnings signs, walks, flags, cables and lights for the safety of and the prevention of injury, loss and damage to persons and property (including without limitation) in the term persons, members of the public, the County and its employees and agents, the Project Manager and his employees, Contractor's employees, his or its subcontractors and their respective employees, other contractors, their subcontractors and respective employees, on, about or adjacent to the premises where

said Work is being performed, and shall comply with all applicable provisions of safety laws, rules, ordinances, regulations and orders of duly constituted public authorities and building codes.

The Contractor assumes all risk of loss, damage and destruction to all of his or its materials, tools appliances and property of every description and that of his or its subcontractors and of their respective employees or agents, and injury to or death of the Contractor, his or its employees, subcontractors or their respective employees or agents, including legal fees, court costs or other legal expenses, arising out of or in connection with the performance of this Contract.

14. **INDEMNITY**

The Contractor shall indemnify and hold harmless the County and its officers, and employees, from any and all liability, losses or damages, including attorney's fees and costs of defense, which the County or its officers and employees may incur as a result of claims, demands, suits, causes of actions or proceedings of any kind or nature, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the Contractor and persons employed or utilized by the Contractor in the performance of the construction contract. The Contractor shall pay all claims and losses in connection therewith, and shall investigate and defend all claims, suits or actions of any kind or nature in the name of the County, where applicable, including appellate proceedings, and shall pay all costs, judgments, and attorney's fees which may issue thereon. The Contractor expressly understands and agrees that any insurance protection required by this Agreement or otherwise provided by Contractor shall in no way limit the responsibility to indemnify, keep and save harmless and defend the County or its officers, employees, agents and instrumentalities as herein provided.

15. **INSPECTION**

The project will be inspected by the Project Manager and will be rejected if it is not in conformity with the Contract provisions. Rejected Work will be immediately corrected by the Contractor. When the Work is substantially completed, the Contractor shall notify the County in writing that the Work shall be ready for final inspection on a definite date, at least three (3) calendar days thereafter, which shall be stated in such notice.

16. **INSURANCE**

Each such General Liability Certificate shall include the following wording: **"St. Lucie County, its officers, agents and employees are named as additional insured's with respect to the work performed under this contract for Roadway Surfacing, Reconstruction and Preservation, St. Lucie County Bid No. 25-059"**.

Commercial General Liability:

The Contractor shall maintain and, prior to commencement of this contract, provide the County with evidence of commercial general liability insurance to include: 1) premises for limits of not less than \$1,000,000 per occurrence; and 2) a general aggregate limit of not less than \$2,000,000. The policy shall also provide the County will be given a thirty (30) day written notice of cancellation or non-renewal and include County as an additional insured.

Business Automobile Liability:

The Contractor shall maintain and, prior to commencement of this contract, provide the County with evidence of business automobile liability insurance to include: 1) coverage for any automobile for limits of not less than \$1,000,000 combined single limit (bodily injury & property damage) per accident and 2) Personal Injury Protection (Florida no-fault) with full statutory limits. The policy shall also provide the County will be given a thirty (30) day written notice of cancellation or non-renewal and include County as an additional insured.

Workers' Compensation and Employers Liability:

The Contractor shall maintain and, prior to commence of this contract, provide the County with evidence of workers' compensation insurance providing Florida statutory (F.S. 440) limits to cover all employees and include Employers Liability coverage with limits of not less than \$500,000 for accidents or disease. The policy shall also provide the County will be given a thirty (30) day written notice of cancellation or non-renewal.

17. **DEFAULT; TERMINATION**

A. **FOR CAUSE**

If the Contractor fails to fulfill its obligations under this Contract in a timely and proper manner, the County shall have the right, but not the obligation, to terminate this Contract by giving written notice of any deficiency and by allowing the party in default seven (7) calendar days to correct the deficiency. If the Contractor fails to correct the deficiency within the seven calendar day period, this Contract shall terminate at the expiration of that time period.

With regard to the Contractor, the following items shall be considered a default under this Contract:

- (1) If the Contractor should be adjudged bankrupt, or if he, or it, should make a general assignment for the benefit of his, or its, creditors, or if a receiver should be appointed on account of his, or its, insolvency.
- (2) If the Contractor should refuse or fail, except in cases for which an extension of time is provided, to supply enough properly skilled workmen or proper material to meet the project schedule or if the Contractor should fail to make prompt payment for materials, or labor or other services entering into the Work.
- (3) If the Contractor disregards laws, ordinances, or the instructions of the Project Manager or otherwise be guilty of a substantial violation of the provisions of the Contract.
- (4) Fails to perform any of the terms of this Contract or performs work which fails to conform to the requirements of this Contract.

In the event of termination, the County may take possession of the premises and all materials, tools, and appliances, thereon and finish the Work by whatever method it may deem expedient. In such cases, the Contractor shall only be entitled to receive payment for Work satisfactorily completed prior to the termination date, subject to any setoffs due the County in completing the Project and for reimbursement of damages incurred. The County may take possession of and use any materials, plant, tools, equipment, and

property of any kind furnished by Contractor to complete the Work. If the expense incurred by the County to finish the Work exceeds the unpaid balance on this Contract, the Contractor shall pay the difference to the County. The expense incurred by the County as herein provided, and the damage incurred through the Contractor's default, shall be certified by the Project Manager. The Contractor shall be responsible for both liquidated damages attributable to delay and for excess completion costs. The liability of the Contractor and its surety or sureties for such damages and costs is joint and several. The obligations of the Contractor and his surety with respect to the warranty and maintenance shall remain in full force and effect for the portion of the Work completed by the Contractor and shall not expire until the expiration of the prescribed time period measured from the final acceptance of the project in its entirety. These clauses shall survive the termination of this Contract. If the County makes a determination pursuant to this Contract to hold the Contractor in default and terminate the Contract for cause and it is subsequently determined that any such determination was improper, unwarranted, or wrongful, then any such termination shall be deemed for all purposes as a termination without cause as described below. The Contractor agrees that it shall be entitled to no damages, allowances or expenses of any kind other than as provided in this Agreement in connection with such termination, and does expressly waive, in the event of termination, any and all claims for consequential damages, loss of bonding capacity, destruction of business, unabsorbed home office overhead, lost profit and the like.

B. WITHOUT CAUSE

Either party may terminate the Contract without cause at any time upon thirty (30) calendar days prior written notice to the other party. In the event of termination, the County shall compensate the Contractor for all authorized work satisfactorily and responsibly completed through the termination date. Upon such termination, the Contractor waives any claims for damages from the termination without cause, including without limitation, any and all consequential claims as set forth above, and as the sole right and remedy of the Contractor, the County shall compensate the Contractor for all authorized Work satisfactorily and responsibly completed through the termination date.

C. SCRUTINIZED COMPANIES TERMINATION

The County may immediately terminate the Contract without cause at any time upon ascertaining that pursuant to § 287.135, Florida Statutes, a company is ineligible to, and may not, bid on, submit a proposal for, or enter into or renew a contract with an agency or local government entity for goods or services if at the time of bidding or submitting a proposal for a new contract or renewal of an existing contract, or at any time thereafter, the company: (1) is on the Scrutinized Companies that Boycott Israel List, created pursuant to § 215.4725, Florida Statutes, or is engaged in a boycott of Israel; (2) is on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, created pursuant to § 215.473, Florida Statutes; or (3) is engaged in business operations in Cuba or Syria. Furthermore, the County may immediately terminate the Contract if it is determined that the company submitted a false certification stating that it was not (1) on the Scrutinized Companies that Boycott Israel List or engaged in a boycott of Israel; (2) was not on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List; (3) or was not engaged in business operations in Cuba or Syria when in fact the company was engaged in such activities at the time of the bid or proposal, or at the time of entering into or renewing the Contract.

18. NON-DISCRIMINATION

Contractor covenants and agrees that Contractor shall not discriminate against any employee or applicant for employment to be employed in the performance of the Contract with respect to hiring, tenure,

terms, conditions or privileges of employment, or any matter directly or indirectly related to employment because of age, sex or physical handicaps (except where based on a bonafide occupational qualification); or because of marital status, race, color, religion, national origin or ancestry.

19. **E-VERIFY/ VERIFICATION OF EMPLOYMENT STATUS**

Effective as of January 1, 2021, as required by Section 448.095(2)(a), the Contractor and subcontractor shall register with and use the E-Verify System to verify the work authorization status of all newly hired employees. The County, Contractor, or subcontractor may not enter into a Contract unless each party to the Contract registers with and uses the E-Verify System. The Contractor shall provide documentation of their compliance of this requirement to the County upon request.

If the Contractor enters into a contract with a subcontractor, the subcontractor must provide the Contractor with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien. The Contractor shall maintain a copy of such affidavit for the duration of this Contract.

The County will not intentionally award contracts to any contractor who knowingly employs unauthorized alien workers, constituting a violation of the employment provisions of the Immigration and Nationality Act ("INA"). The County shall consider the employment by the Contractor of unauthorized aliens a violation of 8 U.S.C. Section 1324a(e) [Section 274A(e) of the INA]. The Contractor agrees that such violation by the Contractor shall be grounds for the unilateral cancellation of this Contract by the County.

20. **PRODUCTS OR MATERIALS WITH RECYCLED CONTENT**

Contractor is required to procure products or materials with recycled content with respect to Work performed or products supplied under the contract when those products or materials are available at reasonable prices. A decision to not procure such items must be based on a determination that such procurement:

- a) Is not available within a reasonable period of time; or
- b) Fails to meet the performance standards set forth in the applicable specifications or fails to meet the reasonable performance standards of the agency.

Contractor shall provide the County with a written statement indicating what recycled products were used or supplied. If a decision was made not to use recycled products, Contractor shall provide County with a written statement indicating the basis for the decision using the above criteria.

21. **FLORIDA PRODUCED LUMBER**

Where applicable Contractor agrees to comply with the provisions of Section 255.20, Florida Statutes, as may be amended from time to time.

22. **ASBESTOS-FREE MATERIALS**

Contractor shall not use any asbestos or asbestos-based fiber materials in the Work performed under this Contract.

23. **ASSIGNMENT**

The County reserves the right to freely assign this Contract. The Contractor, however, shall not assign this Contract to any other persons or firm without first obtaining County's written approval. In addition, the Contractor shall not have the right to assign any or all of its rights and interests under this agreement to any subsidiary or parent company, or any successor to its business through merger, consolidation, voluntary sale, or transfer of substantially all of its assets without the express written consent of the County. For purposes of this paragraph, a transfer of substantially all of its assets shall be deemed to occur when the owner(s) of more than 50% of the proprietary interest in the business entity transfer, other than between themselves, their immediate families or their heirs, such proprietary interest to another person, firm, partnership, corporation or business entity. Any attempt to effect an assignment without County's prior written consent shall be deemed a default subject to the remedies provided herein.

24. **NOTICES**

All notices, requests, consents, and other communications required or permitted under this Contract shall be in writing and shall be (as elected by the person giving such notice) hand delivered by messenger or courier service, telecommunicated, or mailed by registered or certified mail (postage prepaid) return receipt requested, addressed to:

As to County:

St. Lucie County Administrator
Administration Annex
2300 Virginia Avenue
Ft. Pierce, FL 34982

With a Copy To:

St. Lucie County Attorney
Administration Annex
2300 Virginia Avenue
Ft. Pierce, FL 34982

As to Contractor:

Boulder Construction, LLC
4674 Dyer Blvd.
Riviera Beach, Florida 33407
Phone: (561) 404-5050
Email: joe@boulderconstructions.com

or to such other address as any party may designate by notice complying with the terms of this Section. Each such notice shall be deemed delivered (a) on the date delivered if by personal delivery, (b) on the date upon which the return receipt is signed or delivery is refused or the notice is designated by the postal authorities as not deliverable, as the case may be, if mailed.

25. **NON-WAIVER**

The rights of the parties under this Contract shall be cumulative and the failure of either party to exercise properly any rights given hereunder shall not operate to forfeit any of the said rights.

26. **CONFLICT OF INTEREST**

The Contractor represents that it presently has no interest and shall acquire no interest, either direct or indirect, which would conflict in any manner with the performance of services required hereunder, as provided for in Section 112.311, Florida Statutes and as may be amended from time to time. The Contractor further represents that no person having any interest shall be employed for said performance.

The Contractor shall promptly notify the County in writing by certified mail of all potential conflicts of interest prohibited by existing state law for any prospective business association, interest or other circumstance which may influence or appear to influence the Contractor's judgment or quality of services being provided hereunder. Such written notification shall identify the prospective business association, interest or circumstance, the nature of Work that the Contractor may undertake and request an opinion of the County as to whether the association, interest or circumstance would, in the opinion of the County, constitute a conflict of interest if entered into by the Contractor. The County agrees to notify the Contractor of its opinion by certified mail within thirty (30) days of receipt of notification by the Contractor. If, in the opinion of the County, the prospective business association, interest or circumstance would not constitute a conflict of interest by the Contractor, the County shall so state in the notification and the Contractor shall, at his/her option, enter into said association, interest or circumstance and it shall be deemed not in conflict of interest with respect to services provided to the County by the Contractor under the terms of this Contract.

27. **DISPUTE RESOLUTION**

Any disputes relating to interpretation of the terms of this Contract or a question of fact or arising under this Contract shall be resolved through good faith efforts upon the part of the Contractor and the County or its Project Manager. At all times, the Contractor shall carry on the work and maintain its progress schedule in accordance with the requirements of the Contract and the determination of the County or its representatives, pending a final resolution of the dispute, including, if necessary, any determination by a Court of competent jurisdiction. Any dispute which is not resolved by mutual agreement shall be decided by the County Administrator who shall reduce the decision to writing. The decision of the County shall be final and conclusive unless determined by a court of competent jurisdiction to be fraudulent, capricious, arbitrary, so grossly erroneous as to necessarily imply bad faith, or not be supported by substantial evidence.

28. **MEDIATION**

Prior to initiating any litigation concerning this Contract, the parties agree to submit the disputed issue or issues to a mediator for non-binding mediation. The parties shall agree on a mediator chosen from a list of certified mediators available from the Clerk of Court for St. Lucie County. The fee of the mediator shall be shared equally by the parties. To the extent allowed by law, the mediation process shall be confidential and the results of the mediation or any testimony or argument introduced at the mediation shall not be admissible as evidence in any subsequent proceeding concerning the disputed issue.

29. **ANTITRUST ASSIGNMENT**

The Contractor and the County and the State of Florida recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by the State of Florida and local governments. Therefore, the Contractor assigns to the State of Florida and the County any and all claims for such overcharges as to goods, materials or services purchased in connection with the Contract.

29. **INTERPRETATION; VENUE**

This Contract constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior verbal or written agreements between the parties with respect thereto. This Contract may only be amended by written document, properly authorized, executed and delivered by both parties hereto. This Contract shall be interpreted as a whole unit and section headings are for convenience only. All interpretations shall be governed by the laws of the State of Florida. In the event

it is necessary for either party to initiate legal action regarding this Contract, venue shall be exclusively in the Nineteenth Judicial Circuit for St. Lucie County, Florida, for claims under state law and the Southern District of Florida for any claims which are justiciable in federal court.

IN WITNESS WHEREOF, the parties hereto have accepted, made and executed this Agreement in counterparts each of which shall be treated as an original upon the terms and conditions above stated.

ATTEST:

Kim Smith
DEPUTY CLERK

BOARD OF COUNTY COMMISSIONERS
ST. LUCIE COUNTY, FLORIDA

BY: *James Lee Fowler*
CHAIR



APPROVED AS TO FORM AND CORRECTNESS:

[Signature]
Interim COUNTY ATTORNEY

BOULDER CONSTRUCTION, LLC

BY: *Joe Sarquis*

PRINT NAME: Joe Sarquis

TITLE: Authorized Member

DATE: 9/7/2025

SECTION 00110 – BIDDER’S CHECKLIST (BID COVER PAGE)

THIS SHOULD BE THE FIRST PAGE OF YOUR BID

BIDS SHALL BE REJECTED AS NON-RESPONSIVE if the following documents and/or attachments are not completely filled out and submitted with your bid.

BID NO. 25-059

BID NAME: Roadway Surfacing, Reconstruction, and Preservation

Bid Form and Bidders’ Qualification Questionnaire

Two (2) copies of either a State Certification or County Competency Card.

BIDS MAY NOT BE CONSIDERED and may be rejected as non-responsive if the following documents and/or attachments are not completely filled out and submitted with your bid.

Before sending in your bid, please make sure you have completed all of the following:

Please complete in their entirety: Sections; 00110 (Bidder’s Checklist); 00200 (Bid Form and Bidder’s Qualification Questionnaire); 00454 (Confirmation of Drug Free Workplace); and 00455 (Non-Collusion Affidavit); and 00480 (Trench Safety Act Compliance Statement).

Bid Form (Section 00200) must be complete and have an original signature (preferably signed in blue ink).

Every page that has anything handwritten on it must be imprinted with the company’s name on the top right-hand corner of the page.

Acknowledge in the bid any and all addendums issued and manually sign each addendum sheet and submit it with your bid.

Erasures, as well as descriptive literature, brochures and/or data must be initialed by the person signing the bid.

Enclose **One (Original) Bid Package**, and **One (1) copy** of the bid package, as well as two (2) sets of any descriptive literature, brochures and/or supporting data. Bidders are advised to make and retain a separate copy of this bid package for your files.

Return bid in an opaque, sealed envelope identify the envelope with: (1) Project Name, (2) Name of Bidder, (3) Bid Number. Submit bid in accordance with the Invitation to Bid. All forms required for responsive bid shall be included, i.e. Bid, Bond, Public Entity Crimes Statement, Questionnaire, etc. If using Fed-Ex or UPS, please keep bid in a separate sealed envelope when placing it in their packaging.

If you desire a copy of the bid tabulation, include a **self-addressed, stamped envelope** for bid tabulation to be mailed back to you

PLEASE INITIAL AND RETURN WITH BID FORM

**BID No. 25-059
Roadway Surfacing, Reconstruction, and Preservation**

1.0 SCOPE

The Specifications consist of preparation and surfacing various County roads and final cleanup, associated appurtenances, and other related work.

The County will offer a two (2) year contract with three (3) one-year renewal options.

PRICING

The successful bidder shall furnish and apply product at the unit price indicated on the bid unit price form for the applicable distance to any location within St. Lucie County.

PLANS

There are no separate plans for this project. Sketches may accompany each individual project that may result from this bid.

2.0 BID UNIT PRICE SCHEDULE

All items in Group A must be bid in order to be considered responsive. Group B and Group C may be awarded to one or more contractors based on the best interest of the County.

The Contractor shall furnish all labor, superintendence, materials, plant, power, light, fuel, water, tools, appurtenances, equipment, supplies, and all other means of construction of properly performing the work.

Contractor shall complete all work as specified or indicated in the Contract Documents. The work is generally described as follows which shall include, but is not necessarily limited to the following:

Group A - General (Required)			
Item	Description	Unit	Unit Price
Mobilization			
101-1A	Work Order Total \$0.00 - \$50,000	LS	12,000.00
101-1B	Work Order Total \$50,001 - \$100,000	LS	15,000.00
101-1C	Work Order Total \$100,001 - \$500,000	LS	19,000.00
101-1D	Work Order Total Over \$500,000	LS	22,000.00
Maintenance of Traffic			
102-1A	Standard FDOT 600 Series MOT for Lane Closure	DA	3,500.00
Miscellaneous			
104-13-1	Silt Fence Type III	LF	2.50
110-7-1A	Mailbox (Remove and Replace)	EA	200.00
339-1	Miscellaneous Asphalt	TN	200.00
570-1	Performance Turf	SY	14.00
577-70A	Shoulder Rework	SY	12.00
918-331	Bituminous Patching Material	CF	55.00
ADA Standards			
520-1-11	Concrete Curb & Gutter, Variable Height, Type F	LF	29.00
522-2	Concrete Sidewalk & Driveways, 6"	SY	82.00
527-2	Detectable Warnings	SF	43.00

Painted Pavement Markings			
Item	Description	Unit	Unit Price
710-11-121	Standard, White, Solid 6"	LF	1.00
710-11-122	Standard, White, Solid 8"	LF	1.00
710-11-123	Standard, White, Solid 12"	LF	2.00
710-11-124	Standard, White, Solid 18"	LF	2.00
710-11-125	Standard, White, Solid 24"	LF	3.50
710-11-131	Standard, White Skip 6"	LF	1.00
710-11-141	Standard, White, Dotted/Guideline 6-10 Gap, 6"	LF	1.00
710-11-16	Standard, White, Message	EA	150.00
710-11-17	Standard, White, Arrows	EA	150.00
710-11-18	Standard, White, Yield Line	LF	1.20
710-11-221	Standard, Yellow, Solid 6"	LF	1.50
710-11-222	Standard, Yellow, Solid 8"	LF	2.00
710-11-223	Standard, Yellow, Solid 12"	LF	2.00
710-11-224	Standard, Yellow, Solid 18"	LF	3.50
710-11-225	Standard, Yellow, Solid 24"	LF	4.00
710-11-231	Standard, Yellow, Skip 6"	LF	2.00
710-11-241	Standard, Yellow, Dotted/Guideline 6-10 Gap, 6"	LF	2.00

Group B – Resurfacing/ Reconstruction			
Item	Description	Unit	Unit Price
Milling 0 to 2,500 Square Yards			
327-70-1A	1" Average Depth	SY	14.50
327-70-5A	2" Average Depth	SY	15.50
327-70-4A	Variable Depths over 2"	SY	16.50
Milling 2,501 to 10,000 Square Yards			
327-70-1B	1" Average Depth	SY	3.50
327-70-5B	2" Average Depth	SY	4.50
327-70-4B	Variable Depths over 2"	SY	5.50
Milling 10,001 to 20,000 Square Yards			
327-70-1C	1" Average Depth	SY	3.00
327-70-5C	2" Average Depth	SY	3.50
327-70-4C	Variable Depths over 2"	SY	4.00
Milling over 20,001 Square Yards			
327-70-1D	1" Average Depth	SY	3.00
327-70-5D	2" Average Depth	SY	3.50
327-70-4D	Variable Depths over 2"	SY	4.00
Asphalt Types from 0 to 2,500 Square Yards			
334-1-131A	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 1"	SY	17.50
334-1-133A	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 2"	SY	27.50
334-1-134A	Superpave Asphaltic Concrete (Traffic C, SP 12.5), 2"	SY	28.50
Asphalt Types from 2,501 to 10,000 Square Yards			
334-1-131B	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 1"	SY	16.00
334-1-133B	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 2"	SY	26.00
334-1-134B	Superpave Asphaltic Concrete (Traffic C, SP 12.5), 2"	SY	27.00

Asphalt Types from 10,001 to 20,000 Square Yards			
334-1-131C	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 1"	SY	15.00
334-1-133C	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 2"	SY	25.00
334-1-134C	Superpave Asphaltic Concrete (Traffic C, SP 12.5), 2"	SY	26.00
Asphalt Types over 20,001 Square Yards			
334-1-131D	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 1"	SY	14.00
334-1-133D	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 2"	SY	24.00
334-1-134D	Superpave Asphaltic Concrete (Traffic C, SP 12.5), 2"	SY	25.00
Full Depth Reclamation (FDR and Cold-in-Place (CIP) Recycling			
120-1A	Excavation for Widening or Unsuitable Material	CY	75.00
332-3	Cement - Cement Treatment	TN	320.00
332-4	Asphaltic Emulsion - Emulsion Treated Base	GAL	5.00
Full Depth Reclamation (FDR) and Cold-in-Place (CIP) Recycling from 0 to 2,500 Square Yards			
332-1A	Pulverization (FDR)	SY	15.00
332-2A	Recycling Bituminous Paving (CIP)	SY	12.00
Full Depth Reclamation (FDR) and Cold-in-Place (CIP) Recycling from 2,501 to 10,000 Square Yards			
332-1B	Pulverization (FDR)	SY	10.00
332-2B	Recycling Bituminous Paving (CIP)	SY	10.00
Full Depth Reclamation (FDR) and Cold-in-Place (CIP) Recycling 10,001 to 25,000 Square Yards			
332-1C	Pulverization (FDR)	SY	10.00
332-2C	Recycling Bituminous Paving (CIP)	SY	10.00
Full Depth Reclamation (FDR) and Cold-in-Place (CIP) Recycling over 25,001 Square Yards			
332-1D	Pulverization (FDR)	SY	9.00
332-2D	Recycling Bituminous Paving (CIP)	SY	9.00
SAFETY EDGE			
Asphalt Types From 0-2,500 Square Yards			
334-1-13E	Install Safety Edge (Traffic C, SP 9.5) 1"	SY	17.00
334-1-13E	Install Safety Edge (Traffic C, SP 9.5) 2"	SY	27.00
334-1-13E	Install Safety Edge (Traffic C, SP 12.5) 2"	SY	28.00
Asphalt Types From 2,501-10,000 Square Yards			
334-1-13F	Install Safety Edge (Traffic C, SP 9.5) 1"	SY	16.00
334-1-13F	Install Safety Edge (Traffic C, SP 9.5) 2"	SY	26.00
334-1-13F	Install Safety Edge (Traffic C, SP 12.5) 2"	SY	27.00
Asphalt Types From 10,001-20,000 Square Yards			
334-1-13G	Install Safety Edge (Traffic C, SP 9.5) 1"	SY	16.00
334-1-13G	Install Safety Edge (Traffic C, SP 9.5) 2"	SY	26.00
334-1-13G	Install Safety Edge (Traffic C, SP 12.5) 2"	SY	27.00
Asphalt Types over 20,001 Square Yards			
334-1-13H	Install Safety Edge (Traffic C, SP 9.5) 1"	SY	16.00
334-1-13H	Install Safety Edge (Traffic C, SP 9.5) 2"	SY	26.00
334-1-13H	Install Safety Edge (Traffic C, SP 12.5) 2"	SY	27.00

Group C - Preservation/ Restoration			
Item	Description	Unit	Unit Price
Pavement Preservation			
335-3A	Reclamite or Equivalent Pavement Rejuvenation	SY	70.00
335-4A	Fog Seal	SY	35.00
335-5A	Cape Seal	SY	55.00
350-99A	Crack Sealing	GAL	380.00
Micro-Surfacing			
335-1A	Single Application 0 to 15,000 Square Yards	SY	68.00
335-1B	Single Application over 15,001 Square Yards	SY	68.00
335-1C	Double Application 0 to 15,000 Square Yards	SY	68.00
Item	Description	Unit	Unit Price
335-1D	Double Application over 15,001 Square Yards	SY	115.00
335-1E	Rut Filling	TN	450.00
Chip Seal			
335-2A	Single Application 0 to 15,000 Square Yards	SY	75.00
335-2B	Single Application over 15,001 Square Yards	SY	75.00
335-2C	Double Application 0 to 15,000 Square Yards	SY	75.00
335-2D	Double Application over 15,001 Square Yards	SY	75.00
335-2E	Variable Depths over 2" 0 to 15,000 Square Yards	SY	115.00
335-2F	Variable Depths over 2" over 15,001 Square Yards	SY	115.00

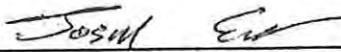
BID UNIT PRICE SCHEDULE

All bid items shall include all costs for furnishing to the owner all materials, equipment and supplies, permits and for all costs incurred in providing all work shown on the **Roadway Surfacing, Reconstruction, and Preservation** project outlined in the contract specifications for the construction.

NOTE: This bid is on a unit price basis. The total estimated amount is for bid comparison purposes only. The contractor should field verify the actual site conditions prior to time of bidding and before submitting the bid proposal. The contractor should read the special conditions and the requirements for insurance before submitting a bid proposal. The contractor should verify the quantities to be included in the construction contract. Density testing shall be at the expense of St. Lucie County, except for failing tests, which shall be charged to the contractor.

Date: 07/18/2025

Bidder (Company Name): Boulder Construction

By (Signature): 

By (Printed Name & Title): Joseph Sarquis, Authorized Member

Business Address: 4674 Dyer Blvd.

City, State, Zip Code: Riviera Beach, FL 33407

Business Phone Number: 561-404-5050

E-Mail Address: joe@boulderconstructions.com

BIDDER'S QUALIFICATION QUESTIONNAIRE

BID No. 25-059

PROJECT NAME: ROADWAY SURFACING, RECONSTRUCTION, AND PRESERVATION

THE UNDERSIGNED GUARANTEES THE TRUTH AND ACCURACY OF ALL STATEMENTS AND ANSWERS HEREIN CONTAINED:

BIDDER'S GENERAL INFORMATION:

Bidder shall furnish the following information. Failure to comply with this requirement will render Bid non-responsive and may cause its rejection. Additional sheets shall be attached as required.

1. Bidder's Name, Principal Address, Phone and Fax Number:

Boulder Construction

4674 Dyer Blvd.

Riviera Beach, FL 33407

561-404-5050

2. Number of years as a Contractor in this type of work: 4.5

3. Names and titles of all officers, partners or individuals doing business under trade name:

Joseph Sarquils, Authorized Member

Richard Rama, Authorized Member

Please provide proof of State Certification and/or State Registration by attaching copies of State Certifications. State Registrations shall also be accompanied by proof of St. Lucie County Certificate(s) of Competency by attaching copies of County Certificate(s) **Possession of either a State Certification or County Competency card must be attained prior to bid submittal.**

4. The business is a: Sole Proprietorship Partnership X Corporation

5. Name, address, and telephone number of Surety Company and agent who will provide the required bonds on this contract:

Merchants National Bonding, Inc.

P.O. Box 14498, Des Moines, IA 50306-3498

800-678-8171

6. What is the last project of this nature that you have completed?

ASPHLT AT ANDENS 700 TONS 9.5. 58 III

7. Have you ever failed to complete work awarded to you? If so, when, where and why?

Boulder Construction

No _____

8. Have you personally inspected the proposed work and do you have a complete plan for its performance?
 Yes _____

9. List CM's or GC's your company has worked for within the past three years. (List 2 other than those shown below)

CM/GC Wynn + Sons Construction Contact Milling + Paving Tel: 561-777-9452
 No. 1 Person: Rick Volpe Fax: _____

CM/GC Hinterland Group Contact Milling + Paving Tel: 561-657-5011
 No. 2 Person: Nelson Bella Fax: _____

10. List three SIGNIFICANT PROJECTS completed within the past five years.

Project No. 1	Lennar Builders	Location: Port St. Lucie	Contract Amount: 400,000	Date Completed: March 21, 2025
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Contracting Agency	Lennar Builders	Contact Person: Courtney Donofrino	Tel: 561-779-1665	Fax: _____
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Project No. 2	City of Margate	Location: Margate	Contract Amount: 100,000	Date Completed: February 7, 2025
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Contracting Agency	City of Margate	Contact Person: Eduardo Morales	Tel: 305-8077-9055	Fax: _____
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Project No. 3	Palm Beach County Parks and Rec Department	Location: Palm Beach County	Contract Amount: Multiple w/o equalling 150,000	Date Completed: 2024
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Contracting Agency	Palm Beach County Parks and Rec Department	Contact Person: Joel Becerra	Tel: 561-603-3592	Fax: _____
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11. List two SIGNIFICANT PROJECTS currently under construction.

Project	Location:	Contract Amount:	Date Completed:
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Boulder - Construction

No. 1 Palm Beach County

600K Mill/PAVE PALMTC ROAD completed 05/20/25

Contracting Agency WVD Palm Beach County
Contact Person: M Bullo

Tel: (561) 657-5011

Fax:

Project No. 2

Location: willamina rd

Contract Amount: 240K

Date Completed: 04/15/21

Contracting Agency CITY OF WEST PALM BEACH
Contact Person: Nick Valle

Tel: (561) 797 9452

Fax:

12. List the pertinent experience of the key individuals of your organization (continue on insert sheet, if necessary).

Joseph Sarquis 10 years of construction experience BS. Construction

Manuel Isava 20 years of construction exp. Bachelor in construction

Richard NAMA. 20 year of construction exp.

13. State the name and licensing of the individual who will have personal supervision of the WORK.

Joseph Sarquis / Boulder Construction

CFC1433766 / CGC1534310 / CUC1226462

14. Will you sublet any part of this WORK? If so, give details.

reclamation.

15. What equipment do you own that is available for the WORK? (Attach additional sheets as necessary)

3 PAVERS, 2 roller, 3 dump trucks, 3 plate compactors

multiple asphalt and concrete tools.

16. What equipment will you purchase for the proposed WORK?

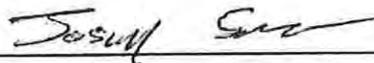
ANY equipment required.

17. What equipment will you rent for the proposed WORK?

ANY EQUIPMENT REQUIRED.

The BIDDER acknowledges and understands that the information contained in response to this Qualification's Statement shall be relied upon by COUNTY in awarding the contract and such information is warranted by BIDDER to be true. The discovery of any omission or misstatement that materially affects the BIDDER'S qualifications to perform under the contract shall cause the COUNTY to reject the Bid, and if after the award, to cancel and terminate the award and/or contract.

The BIDDER also acknowledges that all information listed above may be checked by the COUNTY and authorizes all entities or persons listed above to answer any and all questions. BIDDER hereby indemnifies the COUNTY and persons or entities listed above and hold them harmless from any claim arising from such authorization or the exercise thereof, including the dissemination of information requested above.

By 
(Signature)

Date 07/18/2025

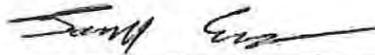
SECTION 00454 – CONFIRMATION OF DRUG-FREE WORKPLACE

IDENTICAL TIE BIDS: Preference shall be given to businesses with drug-free workplace programs. Whenever two or more bids which are equal with respect to price, quantity, and service are received by the State or by any political subdivision for the procurement of commodities or contractual services, a bid received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing tie bids will be followed if none of the tied vendors have a drug-free workplace program (Florida Statutes Section 287.087 Florida Statutes). In order to have a drug-free workplace program, a business shall:

In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibitions.
2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
3. Give each employee engaged in providing the commodities or Contractual services that are under Bid a copy of the statement specified in subsection (1).
4. In the statement specified in subsection (1), notify the employee that, as a condition of working on the commodities or Contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendens to, any violation of Chapter 893 Florida Statutes or of any controlled substance law of the United States or any State, for a violation occurring in the workplace no later than five (5) days after the conviction.
5. Impose a sanction on, or require 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.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.



Contractor's Signature

SECTION 00455 – NON-COLLUSION AFFIDAVIT

STATE OF FLORIDA

COUNTY OF Palm Beach

Joseph Sarquis being first duly sworn, deposes and says that:

1. BIDDER is the Authorized Member
(Owner, Partner, Officer, Representative or Agent)
2. BIDDER is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;
3. Such Bid is genuine and is not a collusive or sham Bid;
4. Neither the said BIDDER nor any of its officers, partners, owners, agents, representative, employees or parties in interest, including this affidavit, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other BIDDER, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted; or to refrain from bidding in connection with such Contract; or have in any manner, directly or indirectly, sought by agreement or collusion, or communications, or conference with any BIDDER, firm, or person to fix the price or prices in the attached Bid or any other BIDDER, or to fix any overhead, profit, or cost element of the Bid Price or the Bid Price of any other BIDDER, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against CITY, or any person interested in the proposed Contract;
5. The price of items quoted in the attached Bid are fair and proper and are not tainted by collusion, conspiracy, connivance, or unlawful agreement on the part of the BIDDER or any other of its agents, representatives, owners, employees or parties in interest.

By Joseph Sarquis
Joseph Sarquis, Authorized Member

Sworn to and subscribed before me on this 23rd day of July
2025 by Joseph Sarquis who is personally known to me or who has presented the following type of identification: personally known.

Emma Hamilton
Signature of Notary Public, State of Florida



Notary seal (stamped in black ink)
OR
Printed, typed or stamped name of Notary
and Commission Number

Boulden

Construction

**BOARD OF COUNTY
COMMISSIONERS**



**PURCHASING
DEPARTMENT**

ADDENDUM No. 2

Bid No. 25-059

Roadway Surfacing, Reconstruction and Preservation

July 21, 2025

To: All Prospective Bidders:

The following changes, additions, clarifications, and deletions amend the Bid Documents of the above captioned Project and shall become an integral part of the Contract Documents. Please note the contents herein and affix same to the documents you have on hand. Indicate on the Bid Form that this Addendum has been received.

CLARIFICATION:

Trench Safety Act Compliance Statement Form is not required to be submitted or included as part of bid submission. Please disregard any reference to this form.

Please sign and include in submittal.

Name of Firm: *Boulden Construction LLC*

Signature: *[Handwritten Signature]*

Date: *07/22/25*

Boulder

Construction

**BOARD OF COUNTY
COMMISSIONERS**



**PURCHASING
DEPARTMENT**

ADDENDUM No. 1

Bid No. 25-059

Roadway Surfacing, Reconstruction and Preservation

July 11, 2025

To: All Prospective Bidders:

The following changes, additions, clarifications, and deletions amend the Bid Documents of the above captioned Project and shall become an integral part of the Contract Documents. Please note the contents herein and affix same to the documents you have on hand. Indicate on the Bid Form that this Addendum has been received.

ATTACHMENT:

Pre-bid meeting minutes

Please sign and include in submittal.

Name of Firm: *Boulder Construction LLC*

Signature: *Joseph E. [Signature]*

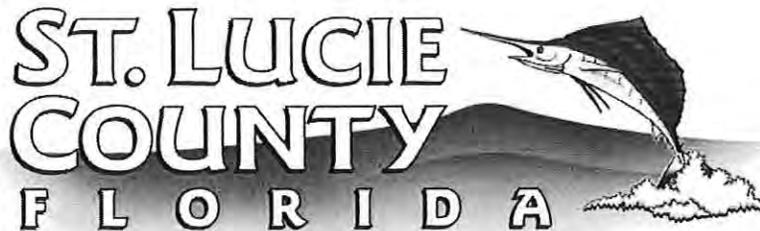
Date: *07/22/25*

**ST. LUCIE COUNTY
BOARD OF COUNTY COMMISSIONERS**

INVITATION TO BID

BID NO.: 25-059

ROADWAY SURFACING, RECONSTRUCTION, AND PRESERVATION



Due Date: Wednesday, July 23, 2025

Due Time: 3:00 P.M.

PURCHASING DEPARTMENT

2300 Virginia Avenue

Fort Pierce, Florida 34982-5652

Ph (772) 462-1700 Fax (772) 462-1704

**BOARD OF COUNTY COMMISSIONERS
ST. LUCIE COUNTY, FLORIDA**

CALL FOR BIDS

Sealed bids will be received at the Purchasing Department, 2300 Virginia Avenue, Fort Pierce, FL 34982, until **3:00 P.M.** local time on **Wednesday, July 23, 2025** for the following:

**BID No. 25-059
ROADWAY SURFACING, RECONSTRUCTION, AND PRESERVATION
Public Works/ Road and Bridge**

Bid documents may be obtained via download from www.DemandStar.com or by contacting the Office of the Purchasing Department at 2300 Virginia Avenue, Fort Pierce, Florida, 34982, (772) 462-1700.

Bids may be either mailed or hand delivered to the St. Lucie County Purchasing Department, 2300 Virginia Avenue, 2nd Floor, Room 228, Fort Pierce, FL 34982. Any bids received after the above stated time will be returned to the bidder unopened.

A Mandatory Pre-Bid Meeting will be held Tuesday, July 8, 2025 at 10:00 A.M. in the Road & Bridge Conference Room located at 3158 Will Fee Road, Fort Pierce, Fl. Only those contractors attending the pre-bid conference will be permitted to bid this project.

The Board of County Commissioners reserves the right to waive any informalities or minor irregularities; reject any and all bids which are incomplete, conditional, obscure, or which contain additions not allowed for; accept or reject any proposal in whole or in part with or without cause; and accept the proposal which best serves the County.

For Bids, RFP's, Addenda Information, Bid Results and other information visit the St. Lucie County Purchasing Web Site at <http://www.stlucieco.gov>

St. Lucie County is an Equal Opportunity/Affirmative Action Employer.

Board of County Commissioners
St. Lucie County, Florida
By: Desiree Cimino, Purchasing Manager

PUBLISH: Sunday, June 22, 2025

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SECTION 00100 – INSTRUCTIONS TO BIDDERS

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- 27.0 Bonding and Insurance Requirements

INSTRUCTIONS TO BIDDERS

In order to be considered responsive, all Bids must be made in accordance with these Instructions to Bidders

1.0 Documents.

Bona fide bidders may obtain bid documents via download from <http://www.DemandStar.com> or by contacting the Office of the Purchasing Division at 2300 Virginia Avenue, Fort Pierce, Florida 34982, (772) 462-1700. No partial sets will be issued.

2.0 Examination of Contract Documents and Site.

It is the responsibility of each Bidder before submitting a Bid, to:

- 2.1 Examine the Contract Documents thoroughly,
- 2.2 Visit the site to become familiar with local conditions that may affect cost, progress, or performance, of the Work,
- 2.3 Consider federal, state and local Laws and Regulations that may affect cost, progress, or performance of the Work,
- 2.4 Study and carefully correlate the Bidder's observations with the Contract Documents, and
- 2.5 Notify the County of all conflicts, errors, or discrepancies in the Contract Documents.

Information and data reflected in the Contract Documents with respect to Underground Utilities at or contiguous to the site is based upon information and data furnished to the OWNER and the Design Consultant by owners of such Underground Utilities or others, and the OWNER does not assume responsibility for the accuracy or completeness thereof unless it is expressly provided otherwise.

Before submitting a Bid, each Bidder shall, at Bidder's own expense, make or obtain any additional examination, investigations, explorations, tests, and studies and obtain any additional information and data which pertain to the physical conditions (surface, subsurface, and Underground Utilities) at or contiguous to the site or otherwise which may affect cost, progress, or performance of the Work and which the Bidder deems necessary to determine its Bid for performing the Work in accordance with the time, price, and other terms and conditions of the Contract Documents.

The Contractor shall verify and familiarize himself with the lands upon which the Work is to be performed, rights-of-way and easements for access thereto and other lands designated for use by the Contractor in performing the Work and identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities or storage of materials and equipment are to be provided by the Contractor. Easements for permanent structures or permanent changes in existing structures are to be obtained by the County unless otherwise provided in the Contract Documents.

The Contractor shall verify and become familiar with the lands upon which the Work is to be performed, rights-of-way and easements for access thereto and other lands designated for use by the Contractor in performing the Work and identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities or storage of materials and equipment are to be provided by the Contractor. Easements for permanent structures or permanent changes in existing structures are to be obtained by the Owner unless otherwise provided in the Contract Documents.

A submission of a Bid shall constitute an incontrovertible representation by the Bidder that the Bidder has complied with every requirement of Article 2, "Examination of Contract Documents and

Site," herein, and that without exception the Bid is premised upon performing the Work required by the Contract Documents with such means, methods, techniques, sequences, or procedures of construction as may be indicated in or required by the Contract Documents, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the Work.

3.0 Questions.

Submit all questions about the Drawings and Specifications to the Purchasing Department in writing via facsimile or email (email preferred). Replies will be issued to all bidders of record as Addenda to the Drawings and Specifications and will become part of the Contract. The County will not be responsible for oral clarification. Questions received after **5:00 p.m. on July 14, 2025**, cannot be answered. All questions shall be emailed to ciminod@stlucieco.org to the attention of Desiree Cimino.

4.0 Substitutions.

To obtain approval to use unspecified products, bidders shall submit written requests at least ten (10) days before the bid date and hour. Requests received after this time will not be considered. Requests shall clearly describe the product for which approval is asked, including all data necessary to demonstrate acceptability. If the product is acceptable, the Engineer will approve it in an Addendum issued to all prime bidders to whom Drawings and Specifications have been issued.

5.0 Addenda.

Any Addenda prepared and issued by the County prior to opening of bids for the purpose of changing the intent of the plans and specifications or clarifying the meaning of same shall be binding in the same way as if written in the specifications. Any Addenda issued prior to the execution of the Contract, shall be binding upon the Contractor after the execution of the agreement.

6.0 Basis of Bid.

No segregated bids or assignments will be considered. The bid shall be submitted on unit price and/or lump sum basis as indicated on the bid form. Where items of work are to be paid for on a unit price basis, estimated quantities are shown for the purpose of estimating total cost. Final payment quantities for unit price shall be those quantities actually constructed within limits of plan quantities and modifications thereof approved in writing in accordance with the General Conditions, Section 00700.

7.0 Preparation of Bids.

Bids shall be made on unaltered Bid forms included herewith under Section 00300-Bid Form. Fill in all blank spaces and submit one (1) original. Bids shall be signed with name and typed signature below. Where bidder is a corporation, bids must be signed with the legal name of the corporation followed by the name of the state of incorporation and the legal signatures of the officers authorized to bind the corporation to a Contract. Bids submitted after the time and date specified shall not be considered and shall be returned unopened.

8.0 Bid Security. - NOT REQUIRED

Bid security shall be made payable to the Board of County Commissioners, St. Lucie County, Florida, in the amount of 5% of the total contract amount. Security shall be either certified check, cashier's check, or bid bond issued by a surety licensed to conduct business in the State of Florida. Surety shall have a rating of A+ or A by "Best's Rating Guide." The accepted bidder's security will be retained until the agreement is executed and the required payment and performance bonds are

furnished. The Owner reserves the right to retain the security of any or all of the remaining bidders until the date stated on the bid form. If any accepted bidder refuses to enter into a contract, the Owner shall retain the difference between the amount specified in said Bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said Bid, not to exceed the amount of the Bid Security. Such Security shall be retained as liquidated damages but not as a penalty. The Bid Security shall be enclosed with the Sealed Bid.

9.0 Public Construction Bond for Payment and Performance.

The accepted Bidder shall furnish the Owner a Public Construction Bond in the amount of 100% of the total contract amount from a surety licensed to conduct business in the State of Florida. The Surety shall have an A+ or A rating under "Best's Rating Guide." The bond shall be submitted on the form furnished herewith under Section 00610. The Public Construction Bond shall guarantee that the Contract will be faithfully performed; that the Contractor will save the Owner harmless on account of all claims for damaged persons, property or premises arising out of his operation prior to the acceptance of the finished work; and that he will promptly make payment to all persons supplying him labor, materials, supplies and services used directly or indirectly by the Contractor in the prosecution of the work provided for in the Contract. The Public Construction Bond shall continue in effect for one (1) year after completion and acceptance of the work as guarantee against construction defects.

In the event the Surety Company becomes unsatisfactory to the Owner, the Owner may at its discretion, require the Contractor to issue a new bond in the same or lesser penal sum satisfactory to him, to be conditioned as above required. Upon the Contractor's failure to furnish such additional or new bond within ten (10) days from the date of written notice to do so, all payment under this Contract will be withheld until such additional bond is furnished. The cost of the bond shall be included by the Contractor in his bid.

10.0 Submittal.

Submit your bid in an opaque, sealed envelope. Identify the envelope with: (1) Project Name, (2) Name of Bidder, (3) Bid Number. Submit bid in accordance with the Invitation to Bid. All forms required for responsive bid shall be included, i.e. Bid, Bond, Public Entity Crimes Statement, Questionnaire, etc. It is the responsibility of the Bidder to ensure that the Bid is received in proper time. All Bids shall remain subject to acceptance for ninety (90) calendar days after the day of the Bid opening, but the County may, at the sole discretion of the County, release any Bid and return the Bid Security prior to that date.

11.0 Withdrawal of Bid.

The Bid may be withdrawn by the Bidder by means of a written request, signed by the Bidder or its duly authorized representative. Such written request must be delivered to the place stipulated in the Invitation to Bid for receipt of Bids prior to the Scheduled closing time for receipt of Bids.

12.0 Bidder's Qualifications Questionnaire.

All bidders shall fill out the enclosed Bidder's Qualifications Questionnaire and enclose it with the Bid.

13.0 Disqualification.

More than one Bid from an individual, firm, partnership, corporation, or association under the same or different names will not be considered. If the County believes that any Bidder is interested in more than one Bid for the work contemplated, all Bids in which such Bidder is interested shall be rejected. If the County believes that collusion exists among Bidders, all Bids shall be rejected.

14.0 Governing Laws and Regulations.

The Bidder shall be familiar with all Federal, State, and Local laws, ordinances, rules and regulations that in any manner affect the work. Ignorance on the part of the Bidder will in no way relieve him from responsibility from compliance with such laws and regulations.

15.0 Trench Safety Act.

The Contractor shall comply with the provisions of Chapter 90-96 of Laws of Florida (Trench Safety Act) and execute the included Trench Safety Act Compliance Statement.

16.0 Patent Fees and Royalties.

If the Contractor requires or desires to use any design, trademark, device, material or process covered by letter of patent or copyright, the Contractor and his surety shall indemnify and save harmless the County from any and all claims for infringement by reason of the use of any such patented design, device, trademark, copyright, material or process in connection with the work agreed to be performed under the contract and shall indemnify the County from any cost, expense, or damage which he may be obligated to pay reason of any infringement at any time during the prosecution of or after completion of the work.

17.0 Licenses and Permits.

The Contractor shall secure and pay for all construction related licenses, permits, and inspection fees required to perform the work. Dump fees will not be waived for County projects except for clean excavated fill as set forth in Paragraph 23.0, Delivery of Clean Excavated Fill. These costs are to be included in the unit prices for other pay items listed.

18.0 Award.

The award of the Contract, if it is awarded, shall be to the lowest responsive and responsible bidder whose qualifications indicate the award will be in the best interest of the County and whose bid complies with all prescribed requirements. The Contract shall not be awarded until the County has concluded such investigations as it deems necessary to establish the responsibility, qualifications, and financial ability of the Bidder to do the work in accordance with the Contract Documents to the satisfaction of the County within the time prescribed. The County reserves the right to reject the Bid of any Bidder who does not pass such investigation to the County's satisfaction. If the Contract is awarded, the County will give the accepted Bidder a Notice of Anticipated Award within the time Bids are to be held open as stated in the Bid form.

19.0 Opening.

Bids will be opened as announced in the Invitation to Bid.

20.0 Execution of Contract.

The Contract between Contractor and County shall utilize the form furnished herewith. The accepted Bidder shall assist and cooperate with the County in preparing the Contract, and within fifteen (15) calendar days following its presentation shall execute same and return it to the County along with the Public Construction Bond for payment and performance, Insurance Certificates, and any other documentation that may be required by the Contract Documents to be submitted at that time. The resulting Contract will include the terms included in Exhibit B and attached to this ITB.

21.0 Definitions.

Whenever in these Specifications, the terms defined in Article I of the General Conditions are used (or pronouns used in place of them), their intent and meaning shall be interpreted as indicated in the General Conditions.

22.0 Certification of Competency.

All Bidders shall provide proof that they are State Certified or State Registered, and a State Registered License shall be based on the possession of a St. Lucie County Certificate of Competency. Specialty contractors shall be required to provide proof of having obtained a St. Lucie County Certificate of Competency. **Possession of either a State Certification or County Competency card must be attained prior to bid submittal.** It is the responsibility of the bidder to confirm that they have all the proper licenses to perform the work. If the bidder has any uncertainty, they should submit the license to the Contractor Licensing Division of St. Lucie County, telephone 772-462-1672. Failure to comply with this condition shall result in rejection of the Bid.

23.0 Delivery of Clean Excavated Fill.

The successful bidder will not be required to deliver all clean excavated fill removed during the Work and not required by the Work, to the St. Lucie County Landfill. The clean fill shall not contain any construction debris or vegetative growth. There will be no disposal fee for such clean fill. The Contractor shall, however, be responsible for the cost of transportation of the fill and should include this cost in any bid.

24.0 Quantities of Work.

The County does not guarantee the amount of work or material that will be utilized during the contract term.

25.0 Contractor's Own Forces.

No more than seventy-five percent (75%) of the dollar value of the total contract may be accomplished by Subcontractors. Balance of work must be accomplished by SUCCESSFUL BIDDER'S own forces. Each BIDDER must furnish with its Bid Form, a list of the items it proposes to subcontract and the estimated cost of these items.

26.0 Equal Opportunity.

The County recognizes fair and open competition as a basic tenet of public procurement and encourages participation by minority and women business enterprises. The County requests minority and women business enterprises to submit evidence of such classification with their submittals.

27.0 Bonding and Insurance Requirements.

INSURANCE REQUIREMENTS:

The Contractor shall, at its own expense, procure and maintain throughout the term of this Agreement, and such insurance requirements shall provide coverage for the Contractor, its subcontractors, representatives, and anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, with insurers lawfully authorized to do business in Florida (which company or companies shall, at a minimum, have a rating of not less than "A-" as to management and "VIII" as to strength in the latest edition of Best's Insurance Guide), such insurance as will protect the Contractor from claims set forth below which may arise out of or result from the Contractor's operations under the Construction Agreement and for which the Contractor

may be legally liable, whether such operations be by the Contractor or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. **The Contractor's types and amounts of insurance shall conform to the following minimum requirements:**

Workers' Compensation/Employers' Liability - Such insurance shall be no more restrictive than that provided by the Florida Workers Compensation Act. In addition to coverage for the Florida Workers' Compensation Act, where appropriate, coverage is to be included for the Federal Employer's Liability Act and any other applicable federal or state law. The Workers' Compensation policy must be endorsed to waive the insurer's right to subrogate against the County, and its members, officials, officers and employees.

The minimum limits (inclusive of any amount provided by an umbrella or excess policy) shall be:

Part One: "Statutory"
Part Two: \$500,000 (Each Accident)
\$500,000 (Disease-Each Employee)
\$500,000 (Disease-Policy Limit)

Commercial General Liability - The limits are to be applicable only to work performed under the Contract and shall be those that would be provided with the attachment of the Amendment of Limits of Insurance (Designated Project or Premises) endorsement (ISO Form CG 25 01) to a Commercial General Liability policy. The County and the County's board members, officials, officers and employees shall be included as "Additional Insureds" on a form no more restrictive than ISO Form CG 20 10 (Additional Insured - Owners, Lessees, or Contractors).

The minimum limits (inclusive of any amount provided by an umbrella or excess policy) shall be:

Each Occurrence	\$1,000,000
Per Project Aggregate	\$2,000,000
General Aggregate	\$2,000,000
Products/Completed Operations Aggregate	\$2,000,000

Firm shall continue to maintain products/completed operations coverage in the amounts stated above through the entire period of repose under Chapter 95, Florida Statutes. The insurance shall be on a form no more restrictive than, and shall cover those sources of liability which would be covered by Coverage A of, the latest occurrence form edition of the Commercial General Liability Coverage Form (ISO Form CG 00 01), or of the occurrence Products/Completed Operations Liability Coverage Form (ISO Form CG 00 37), as filed for use in the State of Florida by ISO, without restrictive endorsements other than mandatory endorsements under an ISO filing.

Automobile Liability - Such insurance shall cover all owned, non-owned, and hired autos used in connection with the performance of the work and shall not be subject to any aggregate limit.

The minimum limits (inclusive of any amount provided by an umbrella or excess policy) shall be:

Each Occurrence Bodily Injury and Property Damage Liability Combined	\$1,000,000
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Miscellaneous Provisions - The insurance provided by Firm shall apply on a primary and non-contributory basis to any insurance or self-insurance maintained by the County. Any insurance, or self-insurance, maintained by the County shall be excess of the insurance provided by Firm.

The insurance maintained by Firm shall apply on a first dollar basis without application of a deductible or self-insured retention. Any deductible or self-insurance retention must be indicated on the Certificate of Insurance. Under limited circumstances and only with prior written approval,

the County may permit the application of a deductible or permit Firm to self-insure, in whole or in part, one or more of the insurance coverages required by this Agreement. In such instances, Firm shall pay on behalf of the County or the County's board members, officials, officers and employees any deductible or self-insured retention applicable to a claim.

Compliance with these insurance requirements shall not limit the liability of Firm or the remedies available to the County under the Construction Agreement or otherwise. If Firm obtains insurance with higher limits than the requirements herein, those higher limits shall apply.

Evidence of Insurance Required Prior to Contract Execution – Evidence of insurance shall be provided to the County prior to contract execution. Firm shall not commence any construction work until all insurance set forth above is in force and evidence of insurance acceptable to the County has been provided and approved by the County. **An appropriate Certificate of Insurance (identifying the Project) signed by an authorized representative of the insurer(s), with copies of the actual additional insured endorsement and notice of cancellation endorsement as issued on the policies, shall be satisfactory evidence of insurance.** With respect to Property Insurance, Firm shall provide a Certificate of Property Insurance form or other evidence satisfactory to the County. For the purposes of the Bid, if the Firm does not carry the required insurance, a letter from its insurance agent attesting that the Firm, if awarded the Project, can obtain such insurance, is required.

Until such insurance is no longer required by the Construction Agreement, Firm shall provide the County with renewal or replacement evidence of insurance at least thirty (30) days prior to the expiration or termination of such insurance. Firm shall, within thirty (30) days of a written request from the County, provide the County with a certified copy of the policy or policies providing the coverage required herein. Firm or its agent may redact or omit provisions of the policy that are not relevant to the insurance required herein.

Failure to establish and maintain the required insurance shall result in the termination of the Construction Agreement for cause.

Policies shall be endorsed to provide the County with 30 days' notice of cancellation.

Certificates of Insurance must be completed as follows:

Additional Insured:

St. Lucie County, its officers, agents and employees, and reference this specific Project.

Certificate Holder

St. Lucie County Board of County Commissioners

2300 Virginia Avenue

Fort Pierce FL 34982

Remainder of this page intentionally left blank.

SECTION 00110 – BIDDER’S CHECKLIST (BID COVER PAGE)

THIS SHOULD BE THE FIRST PAGE OF YOUR BID

BIDS SHALL BE REJECTED AS NON-RESPONSIVE if the following documents and/or attachments are not completely filled out and submitted with your bid.

BID NO. 25-059

BID NAME: Roadway Surfacing, Reconstruction, and Preservation

___ **Bid Form** and Bidders’ Qualification Questionnaire

___ Two (2) copies of either a State Certification or County Competency Card.

BIDS MAY NOT BE CONSIDERED and may be rejected as non-responsive if the following documents and/or attachments are not completely filled out and submitted with your bid.

Before sending in your bid, please make sure you have completed all of the following:

___ Please complete in their entirety: Sections; 00110 (Bidder’s Checklist); 00200 (Bid Form and Bidder’s Qualification Questionnaire); 00454 (Confirmation of Drug Free Workplace); and 00455 (Non-Collusion Affidavit); and 00480 (Trench Safety Act Compliance Statement).

___ Bid Form (Section 00200) must be complete and have an original signature (preferably signed in blue ink).

___ Every page that has anything handwritten on it must be imprinted with the company’s name on the top right-hand corner of the page.

___ Acknowledge in the bid any and all addendums issued and manually sign each addendum sheet and submit it with your bid.

___ Erasures, as well as descriptive literature, brochures and/or data must be initialed by the person signing the bid.

___ Enclose **One** (Original) Bid Package, and **One** (1) copy of the bid package, as well as two (2) sets of any descriptive literature, brochures and/or supporting data. Bidders are advised to make and retain a separate copy of this bid package for your files.

___ Return bid in an opaque, sealed envelope Identify the envelope with: (1) Project Name, (2) Name of Bidder, (3) Bid Number. Submit bid in accordance with the Invitation to Bid. All forms required for responsive bid shall be included, i.e. Bid, Bond, Public Entity Crimes Statement, Questionnaire, etc. If using Fed-Ex or UPS, please keep bid in a separate sealed envelope when placing it in their packaging.

___ If you desire a copy of the bid tabulation, include a **self-addressed, stamped envelope** for bid tabulation to be mailed back to you

___ **PLEASE INITIAL AND RETURN WITH BID FORM**

BID No. 25-059
Roadway Surfacing, Reconstruction, and Preservation

1.0 SCOPE

The Specifications consist of preparation and surfacing various County roads and final cleanup, associated appurtenances, and other related work.

The County will offer a two (2) year contract with three (3) one-year renewal options.

PRICING

The successful bidder shall furnish and apply product at the unit price indicated on the bid unit price form for the applicable distance to any location within St. Lucie County.

PLANS

There are no separate plans for this project. Sketches may accompany each individual project that may result from this bid.

2.0 BID UNIT PRICE SCHEDULE

All items in Group A must be bid in order to be considered responsive. Group B and Group C may be awarded to one or more contractors based on the best interest of the County.

The Contractor shall furnish all labor, superintendence, materials, plant, power, light, fuel, water, tools, appurtenances, equipment, supplies, and all other means of construction of properly performing the work.

Contractor shall complete all work as specified or indicated in the Contract Documents. The work is generally described as follows which shall include, but is not necessarily limited to the following:

Group A - General (Required)			
Item	Description	Unit	Unit Price
Mobilization			
101-1A	Work Order Total \$0.00 - \$50,000	LS	
101-1B	Work Order Total \$50,001 - \$100,000	LS	
101-1C	Work Order Total \$100,001 - \$500,000	LS	
101-1D	Work Order Total Over \$500,000	LS	
Maintenance of Traffic			
102-1A	Standard FDOT 600 Series MOT for Lane Closure	DA	
Miscellaneous			
104-13-1	Silt Fence Type III	LF	
110-7-1A	Mailbox (Remove and Replace)	EA	
339-1	Miscellaneous Asphalt	TN	
570-1	Performance Turf	SY	
577-70A	Shoulder Rework	SY	
918-331	Bituminous Patching Material	CF	
ADA Standards			
520-1-11	Concrete Curb & Gutter, Variable Height, Type F	LF	
522-2	Concrete Sidewalk & Driveways, 6"	SY	
527-2	Detectable Warnings	SF	

Painted Pavement Markings			
Item	Description	Unit	Unit Price
710-11-121	Standard, White, Solid 6"	LF	
710-11-122	Standard, White, Solid 8"	LF	
710-11-123	Standard, White, Solid 12"	LF	
710-11-124	Standard, White, Solid 18"	LF	
710-11-125	Standard, White, Solid 24"	LF	
710-11-131	Standard, White Skip 6"	LF	
710-11-141	Standard, White, Dotted/Guideline 6-10 Gap, 6"	LF	
710-11-16	Standard, White, Message	EA	
710-11-17	Standard, White, Arrows	EA	
710-11-18	Standard, White, Yield Line	LF	
710-11-221	Standard, Yellow, Solid 6"	LF	
710-11-222	Standard, Yellow, Solid 8"	LF	
710-11-223	Standard, Yellow, Solid 12"	LF	
710-11-224	Standard, Yellow, Solid 18"	LF	
710-11-225	Standard, Yellow, Solid 24"	LF	
710-11-231	Standard, Yellow, Skip 6"	LF	
710-11-241	Standard, Yellow, Dotted/Guideline 6-10 Gap, 6"	LF	

Group B – Resurfacing/ Reconstruction			
Item	Description	Unit	Unit Price
Milling 0 to 2,500 Square Yards			
327-70-1A	1" Average Depth	SY	
327-70-5A	2" Average Depth	SY	
327-70-4A	Variable Depths over 2"	SY	
Milling 2,501 to 10,000 Square Yards			
327-70-1B	1" Average Depth	SY	
327-70-5B	2" Average Depth	SY	
327-70-4B	Variable Depths over 2"	SY	
Milling 10,001 to 20,000 Square Yards			
327-70-1C	1" Average Depth	SY	
327-70-5C	2" Average Depth	SY	
327-70-4C	Variable Depths over 2"	SY	
Milling over 20,001 Square Yards			
327-70-1D	1" Average Depth	SY	
327-70-5D	2" Average Depth	SY	
327-70-4D	Variable Depths over 2"	SY	
Asphalt Types from 0 to 2,500 Square Yards			
334-1-131A	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 1"	SY	
334-1-133A	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 2"	SY	
334-1-134A	Superpave Asphaltic Concrete (Traffic C, SP 12.5), 2"	SY	
Asphalt Types from 2,501 to 10,000 Square Yards			
334-1-131B	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 1"	SY	
334-1-133B	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 2"	SY	
334-1-134B	Superpave Asphaltic Concrete (Traffic C, SP 12.5), 2"	SY	

Asphalt Types from 10,001 to 20,000 Square Yards			
334-1-131C	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 1"	SY	
334-1-133C	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 2"	SY	
334-1-134C	Superpave Asphaltic Concrete (Traffic C, SP 12.5), 2"	SY	
Asphalt Types over 20,001 Square Yards			
334-1-131D	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 1"	SY	
334-1-133D	Superpave Asphaltic Concrete (Traffic C, SP 9.5), 2"	SY	
334-1-134D	Superpave Asphaltic Concrete (Traffic C, SP 12.5), 2"	SY	
Full Depth Reclamation (FDR and Cold-in-Place (CIP) Recycling			
120-1A	Excavation for Widening or Unsuitable Material	CY	
332-3	Cement - Cement Treatment	TN	
332-4	Asphaltic Emulsion - Emulsion Treated Base	GAL	
Full Depth Reclamation (FDR) and Cold-in-Place (CIP) Recycling from 0 to 2,500 Square Yards			
332-1A	Pulverization (FDR)	SY	
332-2A	Recycling Bituminous Paving (CIP)	SY	
Full Depth Reclamation (FDR) and Cold-in-Place (CIP) Recycling from 2,501 to 10,000 Square Yards			
332-1B	Pulverization (FDR)	SY	
332-2B	Recycling Bituminous Paving (CIP)	SY	
Full Depth Reclamation (FDR) and Cold-in-Place (CIP) Recycling 10,001 to 25,000 Square Yards			
332-1C	Pulverization (FDR)	SY	
332-2C	Recycling Bituminous Paving (CIP)	SY	
Full Depth Reclamation (FDR) and Cold-in-Place (CIP) Recycling over 25,001 Square Yards			
332-1D	Pulverization (FDR)	SY	
332-2D	Recycling Bituminous Paving (CIP)	SY	
SAFETY EDGE			
Asphalt Types From 0-2,500 Square Yards			
334-1-13E	Install Safety Edge (Traffic C, SP 9.5) 1"	SY	
334-1-13E	Install Safety Edge (Traffic C, SP 9.5) 2"	SY	
334-1-13E	Install Safety Edge (Traffic C, SP 12.5) 2"	SY	
Asphalt Types From 2,501-10,000 Square Yards			
334-1-13F	Install Safety Edge (Traffic C, SP 9.5) 1"	SY	
334-1-13F	Install Safety Edge (Traffic C, SP 9.5) 2"	SY	
334-1-13F	Install Safety Edge (Traffic C, SP 12.5) 2"	SY	
Asphalt Types From 10,001-20,000 Square Yards			
334-1-13G	Install Safety Edge (Traffic C, SP 9.5) 1"	SY	
334-1-13G	Install Safety Edge (Traffic C, SP 9.5) 2"	SY	
334-1-13G	Install Safety Edge (Traffic C, SP 12.5) 2"	SY	
Asphalt Types over 20,001 Square Yards			
334-1-13H	Install Safety Edge (Traffic C, SP 9.5) 1"	SY	
334-1-13H	Install Safety Edge (Traffic C, SP 9.5) 2"	SY	
334-1-13H	Install Safety Edge (Traffic C, SP 12.5) 2"	SY	

Group C - Preservation/ Restoration			
Item	Description	Unit	Unit Price
Pavement Preservation			
335-3A	Reclamite or Equivalent Pavement Rejuvenation	SY	
335-4A	Fog Seal	SY	
335-5A	Cape Seal	SY	
350-99A	Crack Sealing	GAL	
Micro-Surfacing			
335-1A	Single Application 0 to 15,000 Square Yards	SY	
335-1B	Single Application over 15,001 Square Yards	SY	
335-1C	Double Application 0 to 15,000 Square Yards	SY	
Item	Description	Unit	Unit Price
335-1D	Double Application over 15,001 Square Yards	SY	
335-1E	Rut Filling	TN	
Chip Seal			
335-2A	Single Application 0 to 15,000 Square Yards	SY	
335-2B	Single Application over 15,001 Square Yards	SY	
335-2C	Double Application 0 to 15,000 Square Yards	SY	
335-2D	Double Application over 15,001 Square Yards	SY	
335-2E	Variable Depths over 2" 0 to 15,000 Square Yards	SY	
335-2F	Variable Depths over 2" over 15,001 Square Yards	SY	

BID UNIT PRICE SCHEDULE

All bid items shall include all costs for furnishing to the owner all materials, equipment and supplies, permits and for all costs incurred in providing all work shown on the **Roadway Surfacing, Reconstruction, and Preservation** project outlined in the contract specifications for the construction.

NOTE: This bid is on a unit price basis. The total estimated amount is for bid comparison purposes only. The contractor should field verify the actual site conditions prior to time of bidding and before submitting the bid proposal. The contractor should read the special conditions and the requirements for insurance before submitting a bid proposal. The contractor should verify the quantities to be included in the construction contract. Density testing shall be at the expense of St. Lucie County, except for failing tests, which shall be charged to the contractor.

Date: _____

Bidder (Company Name): _____

By (Signature): _____

By (Printed Name & Title): _____

Business Address _____

City, State, Zip Code _____

Business Phone Number _____

E-Mail Address _____

3.0 SPECIFICATIONS

BID ITEMS:

The governing specifications for this project are the most current revision of the State of Florida Department of Transportation Standard Specifications for Road and Bridge Construction, the FDOT Roadway and Traffic Design Standards, and the 2010 ADA (Americans with Disabilities Act) Standards for Accessible Design.

The following information is in addition to the specifications previously referenced.

101-1D Mobilization/Demobilization

The work specified in this section consists of the preparatory work and operations in mobilizing for beginning work on the project, including, but not limited to, those operations necessary for the movement of personnel, equipment, supplies and incidentals to the project site, and for the establishment of temporary offices, buildings, safety equipment and first aid supplies, sanitary and other facilities, as required by these Specifications, the special provisions, and State and local laws and regulations. The CONTRACTOR will be responsible for providing the OWNER with a detailed and narrated preconstruction video (with an index identifying stationing) of the site prior to the start of construction. All costs for bonds, permits and any required insurance, and any other pre-construction expense necessary for the start of the work, as well the cost of the removal of the above items, shall be also be included in this Section. This item also includes any costs related to obtaining an NPDES permit if necessary.

At the pre-construction meeting, the CONTRACTOR shall submit a tentative work schedule as well as a list of subcontractors and emergency contact people and phone numbers.

The project superintendent shall provide the ENGINEER with a cellular phone number for 24-hour access at the preconstruction meeting. It will be incumbent upon the CONTRACTOR to answer all calls, or respond to any missed call within thirty (30) minutes.

The basis of payment for **Mobilization/Demobilization** shall be paid as per LUMP SUM in accordance with the following schedule:

101-1A Work Order Total \$0 - \$50,000
101-1B Work Order Total \$50,001 - \$100,000
101-1C Work Order Total \$100,001 - \$500,000
101-1D Work Order Total Over \$500,000

102-1A Maintenance of Traffic (MOT)

The bid price for this item shall include, but not be limited to, the requirements of Section 102 Maintenance of Traffic of the FDOT Standard Specifications (Latest Edition). The maintenance of traffic for this project shall be in accordance with the applicable FDOT index numbers (600 Series) and these documents: The Manual on Uniform Traffic Control Devices for Streets and Highways, U.S. Department of Transportation, and FHWA. These documents shall be followed in the design, application, installation, maintenance and removal. It shall include, but not be limited to all traffic control devices, warning devices, barriers, temporary reflective markers, temporary pavement markings, dust control, and all other items necessary to protect the public and workers from hazards within the project limits. Maintenance of Traffic items needed in addition to lane closures will be a pass-through charge and not subject to markup by the contractor.

At the Pre-Construction Meeting, the CONTRACTOR shall submit a detailed Maintenance of Traffic plan depicting the necessary traffic control devices for the specified detour route. This plan shall include the approval of any state or city agency owning or maintaining the roads to be utilized as a detour route. The CONTRACTOR shall provide access to driveways at all times.

- Any road closure requests must be APPROVED by the St. Lucie County Engineer a minimum of 2 weeks prior to implementation.
- The CONTRACTOR shall provide access to driveways at all times.
- The CONTRACTOR shall allow access for trash and postal services.
- The CONTRACTOR shall allow access for all emergency vehicles and school buses.

The basis of payment for **Maintenance of Traffic** shall be paid as per DAY.

110-7-1A Mailbox:

When removal and reinstallation of mailboxes is required to facilitate the work, permit each owner to remove the existing mailbox. Reinstall the mailboxes in accordance with the Standard Plans. The quantity to be paid for will be the number of mailboxes acceptably removed and reinstalled.

The basis of payment for **Mailboxes** shall be paid as per EACH.

120-1 Excavation for Widening or Unsuitable Material:

Excavate and construct embankments as required for the roadway, ditches, channel changes and borrow material. Use suitable excavated material or authorized borrow to prepare subgrades and foundations. Construct embankments in accordance with Standard Plans, Index 120-001. Compact and dress excavated areas and embankments.

Meet the requirements of Section 110 for excavation of material for clearing and grubbing and Section 125 for excavation and backfilling of structures and pipe.

The basis of payment for **Excavation for Widening or Unsuitable Materials** shall be paid as per CUBIC YARD.

327-70-1A-D Milling of Existing Asphalt Pavement, 1" Average Depth:

Remove existing asphalt concrete pavement by milling to improve the rideability and cross slope of the finished pavement, to lower the finished grade adjacent to existing curb before resurfacing, or to completely remove existing pavement.

Milled material will be delivered to St. Lucie County Road & Bridge Division. St. Lucie County Road & Bridge Division will specify a location for the contractor to deliver milled material.

The basis of payment for **Milling Existing Asphalt Pavement, 1" Average Depth** shall be paid as per SQUARE YARD.

- 327-70-1A Milling 0 to 2,500 Square Yards
- 327-70-1B Milling 2,501 to 10,000 Square Yards
- 327-70-1C Milling 10,001 to 20,000 Square Yards
- 327-70-1D Milling over 20,001 Square Yards

327-70-4A-D Milling of Existing Asphalt Pavement, Variable Depths over 2”:

Remove existing asphalt concrete pavement by milling to improve the rideability and cross slope of the finished pavement, to lower the finished grade adjacent to existing curb before resurfacing, or to completely remove existing pavement.

Milled material is to be delivered to St. Lucie County Road & Bridge Division.

The basis of payment for **Milling Existing Asphalt Pavement, Variable Depths over 2”** shall be paid as per SQUARE YARD.

- 327-70-4A Milling 0 to 2,500 Square Yards
- 327-70-4B Milling 2,501 to 10,000 Square Yards
- 327-70-4C Milling 10,001 to 20,000 Square Yards
- 327-70-4D Milling over 20,001 Square Yards

327-70-5A-D Milling of Existing Asphalt Pavement, 2” Average Depth:

Remove existing asphalt concrete pavement by milling to improve the rideability and cross slope of the finished pavement, to lower the finished grade adjacent to existing curb before resurfacing, or to completely remove existing pavement.

Milled material is to be delivered to St. Lucie County Road & Bridge Division.

The basis of payment for **Milling Existing Asphalt Pavement, 2” Average Depth** shall be paid as per SQUARE YARD.

- 327-70-2A Milling 0 to 2,500 Square Yards
- 327-70-2B Milling 2,501 to 10,000 Square Yards
- 327-70-2C Milling 10,001 to 20,000 Square Yards
- 327-70-2D Milling over 20,001 Square Yards

332 Full Depth Reclamation

332-1 Description.

This work in this Section consists of the preparation of a base course constructed by in-place pulverizing and blending of the existing bituminous pavement and a predetermined portion of the underlying materials, and the introduction of asphalt emulsion, cement, and other additives. Pulverize existing asphalt pavement and underlying base material by a method that does not damage the material below the design depth as shown in the Plans.

Refer to the Plans for site specific restrictions.

332-2 Materials.

332-2.1 Base Material: If field conditions necessitate the use of additional base material, use a base material meeting the requirements of Section 285.

332-2.2 Asphalt Emulsion: Use CSS-1h meeting the requirements of Section 916, AASHTO M 208, and approved by the State Materials Office (SMO) prior to use.

Use prime and tack coats meeting the requirements of Section 300.

332-2.3 Portland Cement: Add Type I or II Portland cement meeting the requirements of Section 921, in either a dry or slurry form, to the reclaimed mixture. Slurry made from Portland cement must contain a minimum of 30% dry solids content.

332-2.4 Water: Use water meeting the requirements of Section 923 for the base course compaction.

332-2.5 Documents: Submit copies of all material delivery tickets to the Engineer upon delivery to the project site.

332-3 Qualifications.

The Contractor performing the work must submit a list of at least three projects, successfully completed within the last three years, where work included a minimum of 7,000 square yards of full depth reclamation using emulsion and cement blend stabilization. For each project listed, provide the project location, the project owner’s name and the name, title, and current phone number of a project owner representative. Include documentation that verifies that the Specification criteria for each project was met.

332-4 Mix Design.

Prior to construction, obtain an adequate number of core samples from each type of material to develop the mix designs. Representative samples of the asphalt pavement material, underlying base material, and virgin materials, where applicable, must be supplied to a nationally accredited laboratory for testing to determine the proportions of asphalt emulsion, cement, and other additives, if necessary, needed to produce a mix design meeting the requirements of Table 332-1. Use cement at a minimum dosage rate of 1.0 percent and a maximum dosage rate of 1.5 percent based upon the maximum unit weight determined by the bulk specific gravity of Marshall specimens or the modified Proctor unit weight of the reclaimed material. Cement amounts greater than 1.5 percent will only be allowed if approved by the Engineer. The ratio of residual emulsified asphalt to cement shall be a minimum of 1.5:1.0. The optimum binder content will be the binder content that results in the highest wet Marshall stability while also having 70% retained Marshall stability compared to the dry Marshall stability and additionally the dry Marshall stability shall be a minimum of 3,500 pounds and not to exceed 6,000 pounds. The mix design must be signed and sealed by a Professional Engineer, registered in the State of Florida and submitted to the Engineer prior to use for approval.

Table 332-1 Mix Design Criteria		
Test	Test Method Number	Criteria
Gradation of reclaimed material	AASHTO T 27 and FM 1-T 011	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 MS14, Appendix F ASTM D6926 AASHTO T 312 FM 1-T 166	Report
Marshall stability Cure at 60°C to constant weight. Test at 40°C at 48 +/-8 hours.	ASTM D6927	3,500 lb minimum stability; not to exceed 6,000 lb
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 with modification of Marshall stability instead of tensile strength	70% minimum retained Marshall stability

Compressive Strength of Molded Soil-Cement Cylinders	ASTM D1633, FM 5-520	Minimum compressive strength multiplied by 0.85 \geq 90 psi; 7- day maximum compressive strength \leq 300 psi
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332-5 Equipment.

332-5.1 Road Reclaimer: Use a road reclaimer specifically designed for pavement reclaiming and capable of pulverizing and mixing pavement, base materials, and subgrade soil to a depth of 16 inches. It must have the capability of introducing and metering additives uniformly and accurately and have positive displacement pumps which can accurately meter the planned amount of asphalt emulsion into the mixture. The reclaiming machine must be capable of mixing the emulsified asphalt additive thoroughly with the RAP and soil materials. The pump must be interlocked with the ground speed of the machine. The asphalt metering system and water metering system must be capable of continuously monitoring flow and totaling the quantity of water and asphalt applied into the mixing chamber.

Additives, if specified, must be uniformly distributed and mixed with the pulverized material and any existing underlying material.

332-5.2 Cement Spreader: Uniformly spread the cement using a cement spreader equipped with a bag house and curtains. Other types of spreader equipment may be approved by the Engineer. Minimize the amount of airborne cement dust. Air pressure shall only be used to transfer the cement from the tanker into a holding bin or spreader truck. An integrated cement spreader system shall be required in urban and other sensitive areas.

332-5.3 Motor Grader: Use a motor grader of sufficient size and horsepower to adequately rough grade the pulverized base and rough and finish grade the mixed and compacted base. The equipment must be in good working order free from leaks and capable of maintaining an accurate grade and cross-slope.

332-5.4 Rollers: Use rollers in good working order free from leaks and capable of compacting the mix to the requirements of this Section.

332-5.5 Additional equipment: Use additional equipment as needed to complete the work in this Section.

332-6 Construction.

332-6.1 Layout: The Contractor is responsible for the string lining and layout of the roadway prior to reclaiming. Elevations of the existing roadway must be referenced at 100-foot intervals to ensure the roadway elevation is constructed in accordance with the Contract Documents. Existing structures shall be protected in accordance with Section 108.

332-6.2 Weather and Seasonal Limitations: Do not mix or place the base while the air temperature is below 40°F or when conditions indicate that the temperature may fall below 40°F within 24 hours. Do not mix or place the base when the weather is foggy or rainy or when the soil or subgrade is frozen.

332-6.3 Widening Existing Shoulder Base: Prior to pulverization, excavate the existing embankment as shown in the plans from the edge of the existing pavement to at least six inches beyond the planned new width of the base. Keep the bottom of the trench free of loose soil and vegetation.

If needed to increase material volume, place approved base material on the existing pavement so it can be mixed in with the existing pavement and base material during the pulverization operation to make a homogeneous base course across the entire width of the paved shoulder. Correct all areas of irregular grade or deficient thickness and remove and replace material contaminated with soil, organic material, or debris.

332-6.4 Additional Material: When additional material is to be added to correct cross slope deficiencies or change elevation as directed by the Engineer, use approved base material placed on the roadway prior to the final pass for pulverization and mix uniformly with the existing material.

332-6.5 Pulverization: Pulverize and blend the existing pavement and base material to the depth required so that all material is uniformly graded in accordance with AASHTO T 27 and FM 1-T 011 and meet the requirements of Table 332-2.

Table 332-2 Gradation Requirements for Pulverized Material	
Sieve Size	Percent Passing
3 inches	= 100
2 inches	≥ 95
No. 200	0 to 20

Material gradation may vary due to local aggregates and conditions. A minimum of two passes of the reclaimer is required. If approved by the Engineer, thick hot mix asphalt sections may be pre-cut with a milling machine. Perform as many passes necessary to achieve the required gradation requirements in accordance with Table 332-2.

Remove pulverized material to the depth shown in the Plans.

Incorporate the asphalt emulsion into the mix through the reclaimer uniformly and accurately metered so that all areas are of equal consistency and moisture content.

Control the moisture of the material to be compacted, as required. During wetting or drying operations, manipulate, as a unit, the entire width and depth of the course that is being compacted. Combine the reclaimed material and additives 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, permit the Engineer access to the mixing equipment in order to read the meter to verify the quantity of asphalt emulsion and cement applied during the day's work. Make field adjustments, as necessary, to the mix design to obtain a satisfactory reclaimed mixture of consistent composition and stability throughout the project. Submit daily printouts of cement spread rate and emulsion spread rate meeting the requirements of the mix design.

332-6.6 Laboratory Testing: Reclaimed base testing shall be performed as quickly as possible and completed after the material is pulverized and blended, prior to curing, in accordance with Table 332-3.

332-6.7 Compaction: After the material has been processed, compact the completed base course to conform with the finished lines, grades, and cross-section as required in the Plans. Apply water as necessary to ensure adequate moisture content at the time of mixing and compaction.

Determine the modified Proctor maximum density and optimum moisture content in accordance with FM 1-T 180. Construct a control strip of not less than 1,000 feet to develop proper rolling/compaction patterns and methods to obtain a minimum QC density of 96% of the modified Proctor maximum density by nuclear density testing in accordance with FM 1-T 310. Whenever there is a change in the reclaimed material, compaction method, equipment, mix design, or when unacceptable results occur, construct a new control strip of the same length. Control strips failing to meet Specification criteria may be required to be reworked, as determined by the Engineer. Acceptance of the control strips must be obtained prior to continuance with production. Furnish the proper number, weight, and type of rollers to obtain the required compaction of the reclaimed material. Begin rolling at the low side of the course, except leave three to six inches from any unsupported edge or edges unrolled initially to prevent distortion.

Correct any pavement shoving or other unacceptable displacement. Take care in rolling the edges of the reclaimed mixture so the line and grade of the edges are maintained.

At the end of each day's production, construct a transverse joint formed by a header or by cutting back into the compacted material to form a vertical face free of loose material. Protect construction joints so that the placing, spreading, and compacting of base material will not damage previous work. Where it is necessary to operate or turn any equipment on the completed base course, protect and cover the finished surface using mats or wood planks to prevent damage.

332-6.8 Thickness: Report depth requirements in the Earthwork Records System (ERS) section of the Department's database measured to the nearest 0.25 inch. The difference between the individual measured depth thickness on the roadway and the plan target thickness must not exceed 3/4 inches. The difference between the LOT average (average of the three individual measured depth thickness) and the plan target thickness must not exceed 1/2 inch. Meet the frequency requirements for reclaimed base thickness of

332-7.7.

Measure the thickness while being witnessed by the Engineer. Meet the required plan mixing depths by ensuring the bottom of the base is at plan elevation during mixing and the top of the base is at plan elevation after final grading. When the thickness is not within the tolerances given, the Engineer will evaluate the area and determine if it must be reconstructed at the Contractor's expense or the deficiency deducted from the total material in place. With the approval of the Engineer, for areas of deficient thickness, an asphalt leveling course or overbuild may be used to correct deficiencies.

Determine test locations, including stations and offsets, using the Random Number generator approved by the Engineer. Notify the Engineer a minimum of 24 hours before checking mixing depths. Record the results as approved by the Engineer.

332-6.9 Finishing: After completing all base course operations, ensure the base course conforms to the required lines, grades, and cross section. The cured reclaimed base may be milled to achieve the desired lines, grades, and cross slope. If the Engineer identifies an objectionable surface irregularity, straightedge and correct all deficiencies, 50 feet on both sides (where possible), that are in excess of 3/8 inch over 15 feet in length within 72 hours of placement to the full depth of the reclaimed base, or as determined by the Engineer.

332-6.10 Protection and Curing: Protect and cure the completed base course by applying a prime coat at a rate of 0.10 to 0.15 gallons per square yard. Apply the prime coat after the completion of finishing operations and prior to opening to traffic. Keep the finished base course continuously moist until the prime coat is placed. At the time the prime coat is applied, ensure the surface is dense, free of all loose and extraneous material, and contains sufficient moisture to promote proper penetration of the bituminous material. Apply water in sufficient quantity to fill the surface voids immediately before the bituminous curing material is applied.

For base courses that have been milled, apply tack coat at a rate of 0.09 gallons per square yard prior to paving. 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. Apply sand to primed surface as necessary to prevent tracking and broom off excess when installing temporary striping prior to opening to traffic. The Contractor shall be responsible for any damage caused to the base.

332-7 Quality Control Testing.

Collect the required amounts of reclaimed base material to conduct QC lab testing at a minimum frequency referenced in 332-7.7 (Table 332-3). For construction of mainline, shoulder, turn lanes, and ramps, a LOT is defined as a single lift of finished base not to exceed 500 feet. Isolated compaction operations will be considered as separate LOTs. For multiple phase construction, a LOT shall not extend beyond the limits of the phase. Determine test locations, including stations and offsets, using the Random Number generator approved by the Engineer. Record QC test results in the ERS section of the Department's data base.

332-7.1 Reclaimed Material Gradation Analysis: Perform gradation analysis on the sample collected in 332-7 in accordance with AASHTO T 27 and FM 1-T 011. The sample must not include any additives. Meet the requirements of Table 332-2. If the requirements of Table 332-2 are not met, adjust the pulverization operation so that the resultant material will meet Specification requirements, or to the satisfaction of the Engineer.

332-7.2 Modified Proctor Maximum Density Determination: Determine modified Proctor maximum density and optimum moisture content by sampling and testing the material collected in 332-7 in accordance with FM 1-T 180.

332-7.3 Density Testing Requirements: Obtain a minimum QC density of 96% of the modified Proctor maximum density by nuclear density testing the full reclaimed base depth in accordance with FM 1-T 310. If one density test is below 96% of the modified Proctor maximum density, cease production and resolve the issue to the satisfaction of the Engineer before resuming production. Determine the in-place moisture content for each density test in accordance with FM 5-507 (Determination of Moisture Content by Means of a Calcium Carbide Gas Pressure Moisture Tester), or ASTM D4643 (Determination of Water Content of Soil and Rock by Microwave Oven Heating) for moisture determination. The test depth for density shall not be greater than 12 inches.

332-7.4 Marshall Stability and Retained Marshall Stability: Perform both Marshall stability and retained Marshall stability to the frequency referenced in 332-7.7 (Table 332-3). Meet the requirements of Table 332-1. If the Marshall stability or the retained Marshall stability does not meet the requirements of Table 332-1, cease production and resolve the issue to the satisfaction of the Engineer before resuming production.

332-7.5 Surface Testing Requirements: Test the finished surface of the base course with a 15-foot straightedge laid parallel to the centerline of the road. Correct all irregularities greater than 1/4 inch to the satisfaction of the Engineer. For high straightedge deficiencies only, the reclaimed base may be milled for the full lane width to a depth and length adequate to remove the deficiency. With the approval of the Engineer, an asphalt leveling course or overbuild may be used to correct low straightedge deficiencies.

Meet the requirements for cross slope measurement in accordance with Section 330, Table 330-3. Meet the frequency requirements for reclaimed base surface of 332-7.7.

332-7.6 Additional Testing: 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.

332-7.7 Frequency: Conduct QC sampling and testing at a minimum frequency listed in the table below. The Engineer will perform Verification testing at a minimum frequency listed in the table below.

Table 332-3 Sampling and Testing Frequency		
Test Name/Method	Quality Control	Verification
Modified Proctor Maximum Density (FM 1-T 180)	One per four consecutive LOTs	Witness QC
Gradation (AASHTO T 27/ FM 1-T 011)		
Marshall Stability (ASTM D6927)	One per four consecutive LOTs Break at 48+/- 8 hours	
Density (FM 1-T 310)	One per LOT	
Reclaimed Base Surface	Ten per LOT	
Reclaimed Base Thickness	Three per LOT	

332-8 Acceptance.

The Engineer may inspect and test any material, at points of production, distribution and use. The Engineer will base acceptance of the work on determining that the material requirements and the testing requirements of this Section and the placement requirements of the Plans have been met.

332-9 Method of Measurement.

The quantity to be paid for will be the area, in square yards, of base course constructed, completed, and accepted, including the areas of widened base.

332-10 Basis of Payment.

Price and payment will be full compensation for all work specified in this Section, including furnishing all labor, materials, tools, equipment, testing, and incidentals necessary to complete the work.

332-11 Cement – Cement Treatment:

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.

332-12 Asphaltic Emulsion – Emulsion Treated Base:

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.

Payment will be made under shall be paid as per SQUARE YARD:

120-1A	Excavation for Widening or Unsuitable Material	as per Cubic Yard
332-3	Cement - Cement Treatment	as per Ton
332-4	Asphaltic Emulsion - Emulsion Treated Base	as Per Gallon
332-1A	Pulverization (FDR) 0-2,500 Square Yards	as per Square Yard
332-2A	Recycling Bituminous Paving (CIP) 0-2,500 Square Yards	as Per Square Yard
332-1B	Pulverization (FDR) 2,501-10,000 Square Yards	as Per Square Yard
332-2B	Recycling Bituminous Paving (CIP) 2,501-10,000 Square Yards	as Per Square Yard
332-1C	Pulverization (FDR) 10,001-25,000 Square Yards	as Per Square Yard
332-2C	Recycling Bituminous Paving (CIP) 10,001-25,000 Square Yards	as Per Square Yard
332-1D	Pulverization (FDR) Over 25,001 Square Yards	as Per Square Yard
332-2D	Recycling Bituminous Paving (CIP) Over 25,001 Square Yards	as Per Square Yard

334-1-131A-D Superpave Asphaltic Concrete (Traffic C, SP 9.5), 1”:

Construct a Superpave Asphalt Concrete pavement with the type of mixture specified in the Contract Documents, or when offered as alternates, as selected. Superpave mixes are identified as Type SP-9.5, Type SP-12.5 or Type SP-19.0.

Obtain Superpave Asphalt Concrete from a plant that is currently on the FDOT Production Facility Listing. Producers seeking inclusion on the list shall meet the requirements of Section 105. Producers must meet the requirements of Section 320 for plant and equipment and the general construction requirements of Section 330.

The basis of payment for **Superpave Asphaltic Concrete (Traffic C, SP 9.5), 1”** shall be paid as per SQUARE YARD.

- 334-1-131A Asphalt 0 to 2,500 Square Yards
- 334-1-131B Asphalt 2,501 to 10,000 Square Yards
- 334-1-131C Asphalt 10,001 to 20,000 Square Yards
- 334-1-131D Asphalt over 20,001 Square Yards

334-1-133A-D Superpave Asphalt Concrete (Traffic C, SP 9.5), 2”:

Construct a Superpave Asphalt Concrete pavement with the type of mixture specified in the Contract Documents, or when offered as alternates, as selected. Superpave mixes are identified as Type SP-9.5, Type SP-12.5 or Type SP-19.0.

Obtain Superpave Asphalt Concrete from a plant that is currently on the FDOT Production Facility Listing. Producers seeking inclusion on the list shall meet the requirements of Section 105. Producers must meet the requirements of Section 320 for plant and equipment and the general construction requirements of Section 330.

The basis of payment for **Superpave Asphalt Concrete (Traffic C, SP 9.5), 2”** shall be paid as per SQUARE YARD.

- 334-1-133A Asphalt 0 to 2,500 Square Yards
- 334-1-133B Asphalt 2,501 to 10,000 Square Yards
- 334-1-133C Asphalt 10,001 to 20,000 Square Yards
- 334-1-133D Asphalt over 20,001 Square Yards

334-1-134A-D Superpave Asphalt Concrete (Traffic C, SP 12.5), 1”:

Construct a Superpave Asphalt Concrete pavement with the type of mixture specified in the Contract Documents, or when offered as alternates, as selected. Superpave mixes are identified as Type SP-9.5, Type SP-12.5 or Type SP-19.0.

Obtain Superpave Asphalt Concrete from a plant that is currently on the FDOT Production Facility Listing. Producers seeking inclusion on the list shall meet the requirements of Section 105. Producers must meet the requirements of Section 320 for plant and equipment and the general construction requirements of Section 330.

The basis of payment for **Superpave Asphalt Concrete (Traffic C, SP 12.5), 1”** shall be paid as per SQUARE YARD.

- 334-1-134A Asphalt 0 to 2,500 Square Yards
- 334-1-134B Asphalt 2,501 to 10,000 Square Yards
- 334-1-134C Asphalt 10,001 to 20,000 Square Yards
- 334-1-134D Asphalt over 20,001 Square Yards

334-1-131E-H Superpave Asphalt Concrete (Traffic C, SP 9.5), 1”:

Construct a Superpave Asphalt Concrete pavement with the type of mixture specified in the Contract Documents, or when offered as alternates, as selected. Superpave mixes are identified as Type SP-9.5, Type SP-12.5 or Type SP-19.0.

Obtain Superpave Asphalt Concrete from a plant that is currently on the FDOT Production Facility Listing. Producers seeking inclusion on the list shall meet the requirements of Section 105. Producers must meet the requirements of Section 320 for plant and equipment and the general construction requirements of Section 330. Utilize an approved Safety EdgeSM system to create a sloped edge profile onto the roadway shoulder. Utilize an approved Safety EdgeSM system that compacts the AC and provides a sloped wedge equal to 1:1.2 to 1:2.0 measured from the pavement surface cross slope extended. The use of a single plate strike off is not allowed. The Safety EdgeSM shall be constructed monolithically with the AC pavement.

Utilize an approved Safety EdgeSM system that is adjustable to accommodate varying paving thicknesses.

All Safety EdgeSM systems to be used for the purpose of creating a Safety EdgeSM must meet the approval of the Engineer. The Engineer may require proof that the system has been used on previous projects with acceptable results or may require a test section constructed prior to the beginning of work to demonstrate the edge shape and compaction to the satisfaction of the Engineer.

Construction Methods

A Shoulder Preparation

Prior to placing asphalt or concrete pavement, prepare the shoulder material where the Safety EdgeSM will be placed to provide a foundation that will support the placement of the Safety EdgeSM in accordance with the owner agency's standard practice.

B. AC Density Adjacent to Safety EdgeSM

For AC pavements and overlays, the percent compaction of the AC adjacent to the Safety EdgeSM shall be in accordance with the owner agency unconfined longitudinal edge specification.

C. Shoulder Backing Material

Furnish, place and compact shoulder backing material to the top of the Safety EdgeSM as shown in Manual of Uniform Minimum Standards for Design,

Construction and Maintenance for Streets and Highways Revised March 16, 2020 (Florida Green Book) Chapter 10 Page 10-8 & 10-9.

D. Handwork

Obtain approval in advance from the Engineer for short sections of handwork such as transitions at driveways, intersections, interchanges, and bridges.

The basis of payment for **Install Safety Edge Superpave Asphaltic Concrete (Traffic C, SP 9.5), 1"** shall be paid as per SQUARE YARD.

334-1-131E Safety Edge Oto 2,500 Square Yards

334-1-131F Safety Edge 2,501 to 10,000 Square Yards

334-1-131G Safety Edge 10,001 to 20,000 Square Yards

334-1-131H Safety Edge over 20,001 Square Yards

334-1-133E-H Superpave Asphaltic Concrete (Traffic C, SP 9.5), 2":

Construct a Superpave Asphalt Concrete pavement with the type of mixture specified in the Contract Documents, or when offered as alternates, as selected. Superpave mixes are identified as Type SP-9.5, Type SP-12.5 or Type SP-19.0.

Obtain Superpave Asphalt Concrete from a plant that is currently on the FDOT Production Facility Listing. Producers seeking inclusion on the list shall meet the requirements of Section 105. Producers must meet the requirements of Section 320 for plant and equipment and the general construction requirements of Section 330.

Utilize an approved Safety EdgeSM system to create a sloped edge profile onto the roadway shoulder. Utilize an approved Safety EdgeSM system that compacts the AC and provides a sloped wedge equal to 1:1.2 to 1:2.0 measured from the pavement surface cross slope extended. The use of a single plate strike off is not allowed. The Safety EdgeSM shall be constructed monolithically with the AC pavement.

Utilize an approved Safety EdgeSM system that is adjustable to accommodate varying paving thicknesses.

All Safety EdgeSM systems to be used for the purpose of creating a Safety EdgeSM must meet the approval of the Engineer. The Engineer may require proof that the system has been used on previous projects with acceptable results or may require a test section constructed prior to the beginning of work to demonstrate the edge shape and compaction to the satisfaction of the Engineer.

Construction Methods

A. Shoulder Preparation

Prior to placing asphalt or concrete pavement, prepare the shoulder material where the Safety EdgeSM will be placed to provide a foundation that will support the placement of the Safety EdgeSM in accordance with the owner agency's standard practice.

B. AC Density Adjacent to Safety EdgeSM

For AC pavements and overlays, the percent compaction of the AC adjacent to the Safety EdgeSM shall be in accordance with the owner agency unconfined longitudinal edge specification.

C. Shoulder Backing Material

Furnish, place and compact shoulder backing material to the top of the Safety EdgeSM as shown in Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways Revised March 16, 2020 (Florida Green Book) Chapter 10 Page 10-8 & 10-9.

D. Handwork

Obtain approval in advance from the Engineer for short sections of handwork such as transitions at driveways, intersections, interchanges, and bridges.

The basis of payment for **Install Safety Edge Superpave Asphaltic Concrete (Traffic C, SP 9.5), 2"** shall be paid as per SQUARE YARD.

334-1-133E Safety Edge Oto 2,500 Square Yards

334-1-133F Safety Edge 2,501 to 10,000 Square Yards

334-1-133G Safety Edge 10,001 to 20,000 Square Yards

334-1-133H Safety Edge over 20,001 Square Yards

334-1-134E-H Superpave Asphaltic Concrete (Traffic C, SP 12.5), 2":

Construct a Superpave Asphalt Concrete pavement with the type of mixture specified in the Contract Documents, or when offered as alternates, as selected. Superpave mixes are identified as Type SP-9.5, Type SP-12.5 or Type SP-19.0.

Obtain Superpave Asphalt Concrete from a plant that is currently on the FDOT Production Facility Listing. Producers seeking inclusion on the list shall meet the requirements of Section 105. Producers must meet the requirements of Section 320 for plant and equipment and the general construction requirements of Section 330.

Utilize an approved Safety EdgeSM system to create a sloped edge profile onto the roadway shoulder. Utilize an approved Safety EdgeSM system that compacts

the AC and provides a sloped wedge equal to 1:1.2 to 1:2.0 measured from the pavement surface cross slope extended. The use of a single plate strike off is not allowed. The Safety EdgeSM shall be constructed monolithically with the AC pavement.

Utilize an approved Safety EdgeSM system that is adjustable to accommodate varying paving thicknesses.

All Safety EdgeSM systems to be used for the purpose of creating a Safety EdgeSM must meet the approval of the Engineer. The Engineer may require proof that the system has been used on previous projects with acceptable results or may require a test section constructed prior to the beginning of work to demonstrate the edge shape and compaction to the satisfaction of the Engineer.

Construction Methods

A Shoulder Preparation

Prior to placing asphalt or concrete pavement, prepare the shoulder material where the Safety EdgeSM will be placed to provide a foundation that will support the placement of the Safety EdgeSM in accordance with the owner agency's standard practice.

B. AC Density Adjacent to Safety EdgeSM

For AC pavements and overlays, the percent compaction of the AC adjacent to the Safety EdgeSM shall be in accordance with the owner agency unconfined longitudinal edge specification.

C. Shoulder Backing Material

Furnish, place and compact shoulder backing material to the top of the Safety EdgeSM as shown in Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways Revised March 16, 2020 (Florida Green Book) Chapter 10 Page 10-8 & 10-9.

D. Handwork

Obtain approval in advance from the Engineer for short sections of handwork such as

transitions at driveways, intersections, interchanges, and bridges.

The basis of payment for **Install Safety Edge Superpave Asphaltic Concrete (Traffic C, SP 12.5), 2"** shall be paid as per SQUARE YARD.

- 334-1-134E Safety Edge Oto 2,500 Square Yards
- 334-1-134F Safety Edge 2,501 to 10,000 Square Yards
- 334-1-134G Safety Edge 10,001 to 20,000 Square Yards
- 334-1-134H Safety Edge over 20,001 Square Yards

335-3A Reclamite or Equivalent Pavement 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 in accordance with 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 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) 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:

PC + A₁ S + A₂

PC = Polar Compounds, A₁ = First Acidaffins

A₂ = 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. 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 M.O.T 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.

M.O.T. 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: 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.

Payment will be made under:

The basis of payment for **Reclamite or Equivalent Pavement Rejuvenation** shall be paid as per SQUARE YARD.

335-3A Reclamite or Equivalent Pavement Rejuvenation

335-1 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 be able to 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 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.

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 prior to 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:

Table 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. 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 the Florida Department of Transportation’s website and also meeting the requirements of this specification.

The URL for obtaining the list of aggregates is: <ftp://ftp.dot.state.fl.us/fdot/smo/website/sources/frictioncourse.pdf>.

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 in accordance with 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.

Table 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%

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 in accordance with 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 (5) similar projects and have been 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.

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 requires 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 inch 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 prior to 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 prior to 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 prior to 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 surface of the pavement 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 back-up 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 prior to 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 **Micro-Surfacing**:

Item No. 335-1 Micro surfacing as Per square yard Item No.

The basis of payment for shall be paid as per SQUARE YARDS.

917-335-1A Single Application, 0 to 15,000 Square Yards

917-335-1B Single Application over 15,001 Square Yards

917-335-1C Double Application, 0 to 15,000 Square Yards

917-335-1D Double Application over 15,001 Square Yards

335-2 Rut fill/scratch course

Per ton

335-4A 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 bituminous surface treatment on a paved roadway or on 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 owner prior to the start of the surface treatment.

All aggregate, #89, #78 and #67 shall be treated prior to application with 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 prior to the oil and chip process. All of the stone 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 is approved by the County. 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 items surface treatment CRS-2P and asphaltic pre-coated cover material, clean broken stone.

Payment shall not be made for the surface treatment/pre-coated cover material, clean broken stone unless a representative of the County is present to observe the pre-coating process.