# PROCUREMENT DEPARTMENT



Teria G. Sheffield Procurement Director

# **ADDENDUM #2**

Date: 7/10/2024 PROPOSAL ID #2933

# IFB #2933 23-24 PAVING PROJECT #23346CF

THE FOLLOWING INFORMATION SHALL BE INCORPORATED AS PART OF THE ABOVE MENTIONED SOLICITATION; ALL OTHER TERMS AND CONDITIONS SHALL REMAIN THE SAME.

### Change 1: TABLE OF CONTENTS

Added two (2) roads to Reference Maps. Added Central Avenue Reference Map and O' Henry Lane Reference Map. These two roads will involve full depth (6") patching in the existing paved surface and placing a two (2) lift of asphalt on the existing asphalt surface. These roads will not involve milling or reclamation. Please reference the Maps for all estimated dimensions.

These additional project roads facilitated the page numbering system to change.

### Change 2: AGREEMENT

Under COMMENCEMENT AND COMPLETION OF WORK: Extended Project Completion Date to November 30th, 2025. The only exception is a Completion Date of November 30th, 2024 on Central Avenue and O' Henry Lane.

### Change 3: NOTICE TO PROCEED

Changed Project Completion date. Extended Project Completion Date to November 30th, 2025. The only exception is a Completion Date of November 30th, 2024 on Central Avenue and O' Henry Lane.

### Change 4: BID FORM

Page  $00\,41\,00-3\,$  Changes quantities for 2" HMA Surface Course, Type C to reflect addition of resurfacing on Central Avenue and O' Henry Lane.

### Change 5: UNIT PRICES

Page 01 22 00 – 3 Under 2" HMA Surface Course, Type C added estimated quantities for Central Avenue.

Page 01 22 00 – 4 Under 2" HMA Surface Course, Type C added estimated quantities for O' Henry Lane.

Page 01 22 00 – 4 Under Permanent Pavement Markings added estimated quantities for centerline paint on O' Henry Lane.

## Change 6: SUMMARY OF THE WORK

Page 01 11 00 – 1 Under Project/Work Identification – The Work updated the number of project roads and the estimated footage/miles.

# Change 7: ASPHALT PAVING

Page 32 12 16 – 4 Under PART 3- EXECUTION added Tack Coat: section specifying the requirement and placement of a tack coat.

# Change 8: REFERENCE MAP SECTION

Added the Reference Maps for the two added roads, Central Avenue and O' Henry Lane, in addition to an updated Project Location Map, delineating Central Avenue and O' Henry Lane.

## Change 9: SOLICITATION COVER PAGE

Change Bid due date to July 23, 2024 at 2:00 p.m.

# Change 1

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#### **AGREEMENT**

|               | AGREEMENT, made and entered into this day of <u>2024</u> A.D., by and between the unty Government, party of the first part (hereinafter sometimes called the "OWNER"), and party of the second part (hereinafter sometimes called the "CONTRACTOR").  |
|---------------|---|
| WITN follows: | IESSETH: That the parties hereto, for the consideration hereinafter set forth, mutually agree as  |
| 1.            | SCOPE OF THE WORK   |
| á             | The CONTRACTOR shall furnish all labor, materials, equipment, machinery, tools, apparatus, and transportation and perform all of the work shown on the maps and drawings and described in the Specifications entitled:  |
|               | 2023-2024 Paving Project #23346CF   |
| •             | as prepared by York County Engineering Department acting as, and in the Contract Documents entitled the ENGINEER, and shall do everything required by this Contract and the other Contract Documents.   |
| 2.            | THE CONTRACT SUM  |
| I             | The OWNER shall pay to the CONTRACTOR for the faithful performance of the Contract, in awful money of the United States, and subject to addition and deductions as provided in the Contract Documents, a total sum as follows:  |
| (             | Based upon the prices shown in the Bid heretofore submitted to the OWNER by the CONTRACTOR, a copy of said Proposal being a part of these Contract Documents, the aggregate amount of this Contract (obtained from either the lump sum price, the application of unit prices to the quantities shown in the Bid, or the combination of both) being the sum of |
| -             | ).  |
|               |   |

#### 3. COMMENCEMENT AND COMPLETION OF WORK

- 3.1. The CONTRACTOR shall commence Work and the Contract Time will commence to run on the date fixed in the Notice to Proceed.
- 3.2. The CONTRACTOR shall prosecute the Work with faithfulness and diligence and shall be completed and ready for final payment November 01, 2025. The only exception is a Completion Date of November 30<sup>th</sup>, 2024 on Central Avenue and O' Henry Lane.

### 4. CONTRACTOR'S ACCEPTANCE OF CONDITIONS

- 4.1. The CONTRACTOR hereby agrees that, by virtue of submitting a completed Bid including his declarations therein of full satisfaction, knowledge and understanding of the Contract Documents, site conditions (surface and subsurface) and all other conditions affecting the Work, he assumes full responsibility for performance of the Work as required under this Contract. It is expressly agreed that under no circumstances, conditions or situations shall this Contract be more strongly construed against the OWNER than against the CONTRACTOR and his Surety.
- 4.2. It is understood and agreed that the passing, approval and/or acceptance of any part of the Work or material by the OWNER, ENGINEER, or by any agent or representative, as being in

compliance with the terms of this Contract and/or of the Contract Documents, shall not operate as a waiver by the OWNER of strict compliance with the terms of this Contract, and/or the Contract Documents covering said Work; and the OWNER may require the CONTRACTOR and/or his surety to repair, replace, restore and/or make to comply strictly and in all things with this Contract and the Contract Documents any and all of said Work and/or materials which within a period of two years from and after the date of the acceptance of any such Work or material, are found to be defective or to fail in any way to comply with this Contract or with the Contract Documents. This provision shall not apply to materials or equipment normally expected to deteriorate or wear out and become subject to normal repair and replacement before their condition is discovered. Failure on the part of the CONTRACTOR and/or his Surety, immediately after notice to either, to repair or replace any such defective materials and workmanship shall entitle the OWNER, if it sees fit, to replace or repair the same and recover the reasonable cost of such replacement and/or repair from the CONTRACTOR and/or his surety, who shall in any event be jointly and severally liable to the OWNER for all damage, loss and expense caused to the OWNER by reason of the CONTRACTOR's breach of this Contract and/or his failure to comply strictly and in all things with this Contract.

#### LIQUIDATED DAMAGES

- 5.1. It is mutually agreed that time is of the essence of this Contract and should the CONTRACTOR fail to complete the work within the specified time, or any authorized extension thereof, there shall be deducted from the compensation otherwise to be paid to the CONTRACTOR, and the OWNER will retain the amount of *Six Hundred Dollars* (\$600.00) per calendar day as fixed, agreed, and liquidated damages for each calendar day elapsing beyond the specified time for substantial completion or any authorized extension thereof, which sum shall represent the actual damages which the OWNER will have sustained by failure of the CONTRACTOR to complete the work within the specified time. After substantial completion, if the CONTRACTOR shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by OWNER, Contractor shall pay OWNER *Six Hundred Dollars* (\$600.00) per for each calendar day that expires after the date specified for Final Completion and readiness for final payment until the work is complete and ready for final payment. It being further agreed that said sum is not a penalty, but is the stipulated amount of damages sustained by the OWNER in the event of such default by the CONTRACTOR.
- 5.2. For the purposes of this Article, the day of final acceptance of the Work shall be considered a day of delay, and the scheduled day of completion of the work shall be considered a day scheduled for production.

#### PARTIAL AND FINAL PAYMENTS

- 6.1. In accordance with the provisions fully set forth in the General Conditions, and subject to additions and deductions as provided, the OWNER shall pay the CONTRACTOR as follows:
  - 6.1.1. Within 30 days after receipt by the OWNER of the CONTRACTOR's request for partial payment, the OWNER shall make partial payments to the CONTRACTOR, on the basis of the estimate of Work as approved by the ENGINEER, for work performed during the preceding calendar month, less ten percent (10%) of the amount of such estimate which is to be retained by the OWNER until all Work has been performed strictly in accordance with this Agreement and until such Work has been accepted by the OWNER.
  - 6.1.2. Upon submission by the CONTRACTOR of evidence satisfactory to the OWNER that all payrolls, material bills and other costs incurred by the CONTRACTOR in connection with the construction of the Work have been paid in full, including all retainage to subcontractors on the project, and also after all guarantees that may be required in the specifications have been furnished and are found acceptable by the OWNER, final payment on account of this Agreement shall be made within sixty (60) days after

completion by the CONTRACTOR of all Work covered by this Agreement and acceptance of such Work by the OWNER.

6.1.3. Retainage will be released in full at Final Completion.

#### ADDITIONAL BOND

7.1. It is further mutually agreed between the parties hereto that if, at any time after the execution of this Agreement and the Performance and Payment Bonds hereto attached for its faithful performance, the OWNER shall deem the surety or sureties upon such bonds to be unsatisfactory, or if, for any reason, such bond(s) ceases to be adequate to cover the performance of the Work, the CONTRACTOR shall, at his expense, and within three days after the receipt of notice from the OWNER to do so, furnish an additional bond or bonds, in such form and amount, and with such sureties as shall be satisfactory to the OWNER. In such event, no further payment to the CONTRACTOR shall be deemed due under this Agreement until such new or additional security for the faithful performance of the Work shall be furnished in manner and form satisfactory to the OWNER.

#### 8. CONTRACT DOCUMENTS

8.1. The Contract Documents, as stated in the Instructions to Bidders, including this Project Manual and the accompanying Contract Drawings, shall form the Contract and are as fully a part of this Contract as if herein repeated.

IN WITNESS WHEREOF the parties hereto have executed this Agreement on the day and date first above written in three (3) counterparts, each of which shall, without proof or accounting for the other counterparts, be deemed an original Contract.\*

| Contractor                    |
|-------------------------------|
| Ву:                           |
|                               |
| [Corporate Seal]              |
| Attest:                       |
| Address for giving notices:   |
| License No.                   |
| Agent for service of process: |
|                               |
|                               |

(\*) In the event that the CONTRACTOR is a Corporation, a certificate of resolution of the Board of Directors of the Corporation, authorizing the officer who signs the Contract to do so in its behalf shall be completed and submitted with this form.

**END OF SECTION** 

# **NOTICE TO PROCEED**

| Date:                         | ********                                    | <del>-</del>   |        |
|-------------------------------|---|--|--------|
| То:                           | <u> </u>                                    |  |        |
|                               |   |  |        |
|                               |   |  |        |
| Project                       |   | 024 Paving Project #23346CF  |        |
| on or b<br><mark>Novem</mark> | efore . The da                              | ork in accordance with the Agreement dated <mark>June</mark><br>te of completion of all work is therefore no later tha<br>of a completion date of November 30 <sup>th</sup> , 2024 o | an     |
|                               |   | On behalf of the   |        |
|                               |   | YORK COUNTY GOVERNMENT   |        |
|                               |   | Ву:  |        |
|                               |   | Title: York County Assistant Engineer  |        |
|                               | AC  | CEPTANCE OF NOTICE   |        |
|                               | t of the above Notice to Proceed<br>_day of | is hereby acknowledged by<br>_, <b>2024</b> .  | , this |
|                               |   | Ву:  |        |
|                               |   | Title:   |        |

NOTICE TO PROCEED 00 55 00

#### **BID FORM**

2023-2024 Paving Project #23346CF

Submitted: May 15, 2024

York County Government 6 South Congress Street York, SC 29745

Sir or Madam:

The undersigned, as Bidder, hereby declares that the only person or persons interested in the Bid, as principal or principals, is or are named herein and that no other person than herein mentioned has any interest in the Bid of the Contract to which the work pertains; that this Bid is made without connection or arrangement with any other person, company, or parties making a bid or proposal and that the Bid is in all respects fair and made in good faith without collusion or fraud.

The Bidder further declares that he has examined the site of the Work and, through personal knowledge and experience and/or subsurface investigations, has fully satisfied himself in regard to all conditions pertaining to such site and he assumes full responsibility therefore; that he has examined the Drawings and Specifications for the Work and from his own experience or from professional advice that the Drawings and Specifications are sufficient for the Work to be done; that he has examined the other Contract Documents and all addenda relating thereto, and that he has satisfied himself fully, relative to all matters and conditions with respect to the Work to which this Bid pertains.

The Bidder proposes and agrees, if this Proposal is accepted, to contract with York County Government (OWNER) in the form of contract specified, to furnish all necessary materials, equipment, machinery, tools, apparatus, transportation and labor and to perform all work necessary to complete the Work specified in the Bid and other Contract Documents.

The Bidder further proposes and agrees to commence substantial work on this project within 15 days of a Notice to Proceed and agrees that the Work will be completed and ready for final payment on or before May 30, 2025.

The Bidder further agrees that the deductions for liquidated damages, as stated in the Agreement and General Conditions, constitute fixed, agreed, and liquidated damages to reimburse the OWNER for additional costs to the OWNER resulting from the Work not being completed within the time limit stated in the Contract Form. The liquidated damages shall be \$600.00 for each consecutive calendar day thereafter.

The Bidder further agrees to execute a Contract and furnish satisfactory Performance and Indemnity and Payment Bonds, and the required Certificates of Insurance, within ten consecutive calendar days after receipt of Notice of Award of the Contract, and the undersigned agrees that in case of failure on his part to execute the said Contract and Performance and Indemnity and Payment Bonds within the ten (10) consecutive calendar days after the award of the Contract, the Bid Guarantee accompanying his Bid and the money payable thereon shall be paid to the OWNER as liquidation of damages sustained by the OWNER; otherwise, the Bid Guarantee shall be returned to the undersigned after the Contract is signed and the Performance and Indemnity and Payment Bonds are filed.

| Documents.  |        |  |
|-------------|--------|--|
| Addendum No | Dated: |  |
| Addendum No | Dated: |  |
| Addendum No | Dated: |  |

Acknowledgement is hereby made of the following Addenda received since issuance of the Bid

Note:

All work performed by the Contractor as essential to the completion of the intent of the Contract Documents shall be paid in accordance with the Bid Schedule. No direct payment will be made for work performed which is not shown as a separate Bid Item. The undersigned proposes the following unit prices to be utilized on the Work or Extra Work should modifications or variations incorporate these items of work into the Work.

# Bid Form

# 2023-2024 Paving Project #23346CF

# Package A (C-Funds)

(The base bid of this bid document shall include all costs to provide each line item described to the roads contained within this bid and as outlined in this bid document).

| lumber | Item   | Quantity         | Unit Price | Total Cost |  |
|--------|--|------------------|------------|------------|--|
| 1.     | Mobilization                                   | 1 <u>LS</u>      | \$         | \$         |  |
|        | Unit Price (in words)                          |                  |            | _          |  |
| 2.     | Traffic Control                                | 1 <u>LS</u>      | \$         | \$         |  |
|        | Unit Price (in words)                          |                  |            |            |  |
| 3.     | Removal of Existing Asphalt (2" Uniform)       | 27,515 <u>SY</u> | \$         | <u>\$</u>  |  |
|        | Unit Price (in words)                          |                  |            |            |  |
| 4.     | Cement Modified Recycled Base (10" Uniform)    | 45,855 <u>SY</u> | \$         | \$         |  |
|        | Unit Price (in words)                          |                  |            |            |  |
| 5.     | 2" HMA Surface Course, Type C                  | 47,656 SY        | <u>\$</u>  | \$         |  |
|        | Unit Price (in words)                          |                  |            |            |  |
| 5.     | Speed tables (4)                               | 1 <u>LS</u>      | <u>\$</u>  | \$         |  |
|        | Unit Price (in words)                          |                  |            |            |  |
| 6.     | Permanent Pavement Markings                    | 1 <u>LS</u>      | \$         | \$         |  |
|        | Unit Price (in words)                          |                  |            |            |  |
|        | Base Bid Subtotal                              |                  |            | \$         |  |
|        | Subtotal (use words)                           |                  |            |            |  |
| For    | prices if needed                               |                  |            |            |  |
| 1.     | Full Depth Asphalt Pavement Patching (6" Unifo | orm) <u>SY</u>   | <u>\$</u>  | <u>\$</u>  |  |
|        | Unit Price (in words)                          |                  |            |            |  |
| 2.     | Removal of Unsuitable Material (12" Uniform)   | <u>SY</u>        | \$         | <u>\$</u>  |  |
|        | Unit Price (in words)                          |                  |            |            |  |

# Contingency

(Contingency covers Owner authorized changes in the scope of work.)

| Number | Item   | Unit Price               | Total Cost |
|--------|--|--------------------------|------------|
| 1.     | Contingency                                  | 10% of Base Bid Subtotal | \$         |
|        | Contingency Subtotal (in words)              |                          |            |
|        | AL BASE BID                                  |                          | \$         |
| •      | e Bid Subtotal + Contingency)<br>(use words) |                          |            |

\*Note: The above quantity totals are estimates, and shall be verified in the field prior to bidding, by bidding contractor.

# Alternative A (Bonner Horton Rd)

(The base bid of this bid document shall include all costs to provide each line item described to the roads contained within this bid and as outlined in this bid document).

| Number | Item                                   | Quantity        | Unit Price | Total Cost |
|--------|--|-----------------|------------|------------|
| 1.     | Mobilization                           | 1 <u>LS</u>     | \$         | \$         |
|        | Unit Price (in words)                  |                 |            |            |
| 2.     | Traffic Control                        | 1 <u>LS</u>     | \$         | \$         |
|        | Unit Price (in words)                  |                 |            |            |
| 3.     | 8" Graded Aggregate Base Course        | 1,585 <u>SY</u> | \$         | \$         |
|        | Unit Price (in words)                  |                 |            |            |
| 4.     | <b>6</b> " HMA Surface Course, Type C  | 150 <u>SY</u>   | \$         | \$         |
|        | Unit Price (in words)                  |                 |            |            |
| 5.     | Clearing and Grubbing                  | 1 <u>LS</u>     | \$         | \$         |
|        | Unit Price (in words)                  |                 |            |            |
| 6.     | Removal of Topsoil and Organic Removal | 1 <u>LS</u>     | \$         | \$         |
|        | Unit Price (in words)                  |                 |            |            |
| 7.     | Crossline Entrance Pipe and Ditch      | 1 <u>LS</u>     | \$         | <u>\$</u>  |
|        | Unit Price (in words)                  |                 |            |            |

|   | Base Bid Subtotal  |   |  | \$                             |
|---|--|---|--|--------------------------------|
|   | Subtotal (use words)   |   |  |                                |
| Con   | tingency   |   |  |                                |
| Contingen   | cy covers Owner authorized changes i   | n the scope of work.)   |  |                                |
| Number  | Item   | Unit Price  | Tota                                     | l Cost                         |
| 1.  | Contingency  | 10% of Base Bid Subt  | total <u>\$</u>                          |                                |
|   | Contingency Subtotal (in words)  |   |  |                                |
| (Bas  | AL BASE BID e Bid Subtotal + Contingency) I (use words)  |   |  |                                |
|   |  |   |  | dina hu hiddina                |
| <mark>contr</mark>  | e: The above quantity totals are estimates, and cactor.  B (Lakewood Road)   | nd shall be verified in the f   | field prior to bidd                      | ung, vy viaaing                |
| <i>contr</i><br>Iternative<br>The base b<br>ads conta   | e B (Lakewood Road)  bid of this bid document shall include a ained within this bid and as outlined in   | III costs to provide each   | h line item des                          | cribed to the                  |
| contr<br>Iternative<br>The base be<br>pads conta<br>umber   | e B (Lakewood Road)  oid of this bid document shall include a ained within this bid and as outlined in   | III costs to provide each<br>this bid document).<br>Quantity                | h line item des<br>Unit Price            | cribed to the                  |
| <i>contr</i><br>Iternative<br>The base k<br>pads conta  | e B (Lakewood Road)  oid of this bid document shall include a ained within this bid and as outlined in ltem  Mobilization  | all costs to provide each<br>this bid document).<br>Quantity<br>1 <u>LS</u> | h line item des  Unit Price              | Total Cost                     |
| contr<br>Iternative<br>The base be<br>ads conta<br>umber  | e B (Lakewood Road)  oid of this bid document shall include a ained within this bid and as outlined in   | all costs to provide each<br>this bid document).<br>Quantity<br>1 <u>LS</u> | h line item des  Unit Price              | Total Cost                     |
| contr<br>Iternative<br>The base k<br>pads conta<br>umber<br>1.  | e B (Lakewood Road)  oid of this bid document shall include a ained within this bid and as outlined in   Item  Mobilization  Unit Price (in words)  Traffic Control  | Ill costs to provide each this bid document).  Quantity  1 LS               | h line item des  Unit Price  \$          | Total Cost                     |
| contr<br>Iternative<br>The base k<br>pads conta<br>umber<br>1.  | e B (Lakewood Road)  Did of this bid document shall include a ained within this bid and as outlined in ltem  Mobilization  Unit Price (in words)   | Ill costs to provide each this bid document).  Quantity  1 LS               | h line item des  Unit Price  \$          | Total Cost                     |
| controller liternative The base to bads contact the liternative  1.  2.   | e B (Lakewood Road)  oid of this bid document shall include a ained within this bid and as outlined in   Item  Mobilization  Unit Price (in words)  Traffic Control  Unit Price (in words)  8" Graded Aggregate Base Course  | all costs to provide each this bid document).  Quantity  1 LS  1 LS         | h line item des  Unit Price  \$ \$ \$ \$ | Total Cost  \$  \$  \$         |
| controller | e B (Lakewood Road)  oid of this bid document shall include a ained within this bid and as outlined in   Item  Mobilization  Unit Price (in words)  Traffic Control  Unit Price (in words)   | all costs to provide each this bid document).  Quantity  1 LS  1 LS         | h line item des  Unit Price  \$ \$ \$    | Total Cost  \$  \$  \$         |
| controller liternative The base to bads contact umber  1.  2.  3.   | e B (Lakewood Road)  oid of this bid document shall include a ained within this bid and as outlined in   Item  Mobilization  Unit Price (in words)  Traffic Control  Unit Price (in words)  8" Graded Aggregate Base Course  Unit Price (in words)                             | Ill costs to provide each this bid document).  Quantity  1 LS  1 LS  655 SY | h line item des  Unit Price \$ \$ \$ \$  | Total Cost  \$  \$  \$  \$  \$ |
| controller liternative The base to bads contact umber  1.  2.  3.   | B (Lakewood Road)  Did of this bid document shall include a sained within this bid and as outlined in ltem  Mobilization  Unit Price (in words)  Traffic Control  Unit Price (in words)  8" Graded Aggregate Base Course  Unit Price (in words)  2" HMA Surface Course, Type C | Ill costs to provide each this bid document).  Quantity  1 LS  1 LS  655 SY | h line item des  Unit Price \$ \$ \$ \$  | Total Cost  \$  \$  \$  \$  \$ |

BID FORM 00 41 00 - 5

Unit Price (in words)

<u>SY</u>

Full Depth Asphalt Pavement Patching (6" Uniform)

1.

| 2.          | Removal of Unsuitable Material                        | <u>SY</u>                              | \$                  | \$     |
|-------------|---|--|---------------------|--------|
|             | Unit Price (in words)                                 |  |                     |        |
| Cont        | tingency  |  |                     |        |
| (Contingend | cy covers Owner authorized changes                    | s in the scope of work.)               |                     |        |
| Number      | Item  | Unit Price                             | Total Cost          |        |
| 1.          | Contingency   | 10% of Base Bid Subtotal               | \$                  |        |
|             | Contingency Subtotal (in words)                       |  |                     |        |
| (Base       | AL BASE BID e Bid Subtotal + Contingency) (use words) |  | \$                  |        |
| *Note       | : The above quantity totals are estimates,            | and shall be verified in the field pri | or to bidding, by b | idding |

\*Note: The above quantity totals are estimates, and shall be verified in the field prior to bidding, by bidding contractor.

# Package B (Critical Needs)

(The base bid of this bid document shall include all costs to provide each line item described to the roads contained within this bid and as outlined in this bid document).

| Number | Item                  | Quantity | Unit Price | Total Cost |
|--------|-----------------------|----------|------------|------------|
| 1.     | Mobilization          | 1 LS     | \$         | <u>\$</u>  |
|        | Unit Price (in words) |          |            |            |
| 2.     | Traffic Control       | 1 LS     | \$         | \$         |
|        | Unit Price (in words) |          |            |            |

| 3.            | Removal of Existing Asphalt (2" Unifor   | m) 7,625 <u>SY</u>              | <u>\$</u>                      |
|---------------|--|---------------------------------|--------------------------------|
|               | Unit Price (in words)  |                                 |                                |
| 4.            | Cement Modified Recycled Base (10"   | Uniform) 25,750 <u>SY</u>       | <u>\$</u>                      |
|               | Unit Price (in words)  |                                 |                                |
| 5.            | 2" HMA Surface Course, Type C  | 25,750 <u>SY</u>                | <u>\$</u>                      |
|               | Unit Price (in words)  |                                 |                                |
| 6.            | Permanent Pavement Markings  | 1 <u>LS</u>                     | <u>\$</u>                      |
|               | Unit Price (in words)  |                                 |                                |
|               | Base Bid Subtotal  |                                 | \$                             |
|               | Subtotal (use words)   |                                 |                                |
| Fo            | or prices if needed  |                                 |                                |
| 1.            | Full Depth Asphalt Pavement Patching   | g (6" Uniform) <u>SY</u>        | <u>\$</u> \$                   |
|               | Unit Price (in words)  |                                 |                                |
| 2.            | Removal of Unsuitable Material   | <u>SY</u>                       | <u>\$</u> \$                   |
|               | Unit Price (in words)  |                                 |                                |
| Co            | ontingency   |                                 |                                |
| (Continge     | ency covers Owner authorized changes i   | n the scope of work.)           |                                |
| Number        | r Item   | Unit Price                      | Total Cost                     |
| 1.            | Contingency  | 10% of Base Bid Subtot          | al <u>\$</u>                   |
|               | Contingency Subtotal (in words)  |                                 |                                |
| (Ba           | OTAL BASE BID<br>ase Bid Subtotal + Contingency)<br>otal (use words)                     |                                 | <u>\$</u>                      |
| * <b>A</b> .) | Jote: The above quantity totals are estimates, an  | nd shall be verified in the fie | ld prior to hidding by hidding |
|               | ntractor.  | na snau ve verijiea in ine flei | a prior to valuing, by valuing |
| Alternati     | ive A (SAGRADA DR)   |                                 |                                |
|               | e bid of this bid document shall include a<br>ntained within this bid and as outlined in |                                 | line item described to the     |
| Number        | Item   | Quantity                        | Unit Price Total Cost          |

| 1.         | Mobilization                                   | 1 LS                     | \$ <u>\$</u> | <u>\$</u>  | <del> </del> |
|------------|--|--------------------------|--------------|------------|--------------|
|            | Unit Price (in words)                          |                          |              |            |              |
| 2.         | Traffic Control                                | 1 LS                     | S <u>\$</u>  | <u>\$</u>  |              |
|            | Unit Price (in words)                          |                          |              |            |              |
| 3.         | Cement Modified Recycled Base (10"             | Uniform) 2,190 <u>SY</u> | \$           |            |              |
|            | Unit Price (in words)                          |                          |              |            |              |
| 4.         | 2" HMA Surface Course, Type C                  | 2,190 <u>SY</u>          | \$           |            |              |
|            | Unit Price (in words)                          |                          |              |            |              |
|            | Base Bid Subtotal                              |                          |              | \$         |              |
|            | Subtotal (use words)                           |                          |              |            |              |
|            |  |                          |              |            |              |
| For        | prices if needed                               |                          |              |            |              |
| 1.         | Full Depth Asphalt Pavement Patching           | g (6" Uniform) <u>S\</u> | <u>(</u>     | \$         | \$           |
|            | Unit Price (in words)                          |                          |              |            |              |
| 2.         | Removal of Unsuitable Material                 | <u>S)</u>                | <u>′</u>     | \$         | \$           |
|            | Unit Price (in words)                          |                          |              |            |              |
| Con        | tingency                                       |                          |              |            |              |
| (Contingen | cy covers Owner authorized changes i           | n the scope of work      | .)           |            |              |
| Number     | Item   | Unit Price               |              | Total Cost |              |
| 1.         | Contingency                                    | 10% of Base Bid S        | ubtotal      | \$         |              |
|            | Contingency Subtotal (in words)                |                          |              |            |              |
| тот,       | AL BASE BID                                    |                          |              | \$         |              |
| (Bas       | e Bid Subtotal + Contingency)<br>I (use words) |                          |              |            |              |
|            | (doc Words)                                    |                          |              |            |              |
|            |  |                          |              |            |              |

\*Note: The above quantity totals are estimates, and shall be verified in the field prior to bidding, by bidding contractor.

| Altaorica nei | eto is a cashier's check o | Bank of                                  |        |
|---------------|----------------------------|--|--------|
|               | Dollars (                  | or Bid Bond for the su<br>),made payable | ım     |
| to            | (Owi                       | ner).                                    |        |
|               |                            | (Name of Bidder) (Affix Seal)            | _ L.S. |
|               |                            | (Signature of Officer)                   | _ L.S. |
|               |                            | (Title of Officer)                       | _ L.S. |

| Address:   |   |
|--|---|
| P.O. Box   | Street:   |
| City:  | State, Zip Code:  |
| Telephone:   | Fax:  |
| Federal ID#:                                       |   |
| Email address:                                     |   |
| Contractor License type:                           | Contractor License number:                                      |
| License status:                                    | Expiration:   |
| Classification:                                    |   |
| The full names and residences of personas follows: | ns and firms interested in the foregoing bid, as principals, ar |
|  |   |
| Name of the executive who will give pers           | sonal attention to the work:                                    |
|  |   |
| <del></del>  |   |

Attach list of subcontractors as required by Article 13.4 of Instruction to Bidders.

END OF SECTION

### **UNIT PRICES**

#### PART 1 - GENERAL

#### **Related Documents**

General provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

#### **Summary**

This Section includes administrative and procedural requirements for unit prices.

#### **Definitions**

Unit price is an amount proposed by bidders, stated on the Bid Form, as a price per unit of measurement for materials or services added to or deducted from the Contract Sum by appropriate modification, if the estimated quantities of Work required by the Contract Documents are increased or decreased.

#### **Procedures**

Unit prices include all necessary material, plus cost for delivery, installation, insurance, overhead, profit, and applicable taxes.

<u>Measurement and Payment</u>: Refer to individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.

The Owner reserves the right to reject the Contractor's measurement of work-in-place that involves use of established unit prices, and to have this work measured, at the Owner's expense, by an independent surveyor acceptable to the Contractor.

<u>Schedule</u>: A "Unit Price Schedule" is included at the end of this Section. Specification Sections referenced in the Schedule contain requirements for materials described under each unit price.

PART 2 - PRODUCTS (Not Applicable)

**PART 3 - EXECUTION** 

**Base Bid** 

# Package A (C-Funds)

#### **Mobilization**

Mobilization is paid at the lump sum (LS) price bid, which price and payment is full compensation for organizing and moving all forces, supplies, equipment, and incidentals to each project site, regardless of the number of times such moves are made, and all preconstruction costs incurred after award of the Contract. The price and payment also includes costs for demobilization.

Payment will be full compensation for operations including moving personnel and equipment to the job site; paying bond and insurance premiums; establishing facilities necessary for work on the project; and all other work or materials necessary to complete the work. Partial payment for this item in no way acts to preclude or limit any of the provisions or partial payment otherwise provided for by the Contract.

#### **Traffic Control**

Traffic Control will be measured for payment on the basis of lump sum (LS) cost required to maintain adequate traffic control according to the South Carolina Manual on Uniform Traffic Control Devices for Streets and Highways.

Payment will be full compensation for all materials, labor, and equipment necessary for fabricating, preparing, installing, removing or relocating, maintaining, and repairing or replacing all traffic control items needed to complete the work.

#### Removal of Existing Asphalt (2" Uniform)

Removal of Existing Asphalt (2" Uniform) will be measured for payment on the basis of per square yard (SY) of material removed from the roadway, *prior to introduction of cement/lime*, in order to prepare for a desired final grade.

Payment will be full compensation for removal of two (2) inches of material off the top of the roadway before the initial pulverization, prior to introduction of chemical treatment, to prepare for a desired final grade in relation to existing curb and gutter; location and protection of existing above and below ground utilities and structures; hauling and legally disposing of removed materials off-site; repairing, replacing, or relocating any items that are inadvertently damaged during the demolition process which were not scheduled for demolition; and all other materials, labor, equipment, tools, transportation, and incidentals necessary to complete the work.

Removal of Existing Asphalt will be used on the following roads in this project for the entire area specified.

- 1. Abingdon Way 1,120 SY
- 2. Adair Marble Street 1,395 SY
- 3. Brittany Lane 1,610 SY
- 4. Caliper Place 1,935 SY
- 5. Canterbury Crossing 2,785 SY
- 6. Crofton Drive 7,045 SY
- 7. Stirling Heights 3,045 SY
- 8. Turquoise Way 5,790 SY
- 9. Warwick Way 1,350 SY
- 10. Whitmyre Court 1,440 SY

#### **Cement Modified Recycled Base (10" Uniform)**

Cement Modified Recycled Base (10" Uniform) will be measured for payment on the basis of per square yard (SY) of construction of a cement modified base at a rate of sixty (60) pounds per square yard (LB/SY)\* of portland cement in accordance with these specifications.

Payment will be full compensation for constructing the cement modified recycled base course per contract documents; including pulverizing and scarifying the existing pavement or base material to a minimum depth of 10 inches; furnishing, weighing, applying and spreading cement at a rate established in the mix design for each road; watering and maintaining proper moisture content; processing and mixing base course material; compacting, finishing, establishing a 2% cross slope and curing base course; an application of a modified cationic emulsion (CRS-2P) and an application of aggregate that conforms to Section 406 of the SCDOT Standard Specifications, constructed on a prepared base course until application of the specified HMA; selecting curing method from specifications and submitting for approval; allowing for a curing time of no less than 3 days; cleaning construction area of construction debris and excess material; locating and protecting existing above and below ground utilities and structures; repairing, replacing, or relocating any items that are inadvertently damaged during the demolition process which were not scheduled for demolition;

and all other materials, labor, equipment, tools, transportation, and incidentals necessary to complete the work.

\*Cement rate of 60 lb/sy, previously specified, is for bidding purposes only. Bid price shall include the cost of a third party testing service approved by OWNER. The testing service shall provide a mix design specifying cement rate, optimum moisture, and maximum dry density for each road in the project. Should mix design dictate a cement rate other than 60 lb/sy, CONTRACTOR and OWNER will negotiate price adjustment. Testing service shall also be present on site to verify and monitor moisture and compaction for each road in the project.

CMRB will be used on the following roads in this package for the entire area specified.

- 1. Abingdon Way 1,120 SY
- 2. Adair Marble Street 1.395 SY
- 3. Brittany Lane 1,610 SY
- 4. Caliper Place 1,935 SY
- 5. Canterbury Crossing 2,785 SY
- 6. Crofton Drive 7,045 SY
- 7. Stirling Heights 3,045 SY
- 8. Turquoise Way 5,790 SY
- 9. Warwick Way 1,350 SY
- 10. Whitmyre Court 1,440 SY
- 11. Bridges Drive 1,000 SY
- 12. Cheek Rd. 2,225 SY
- 13. Cloverbrook Drive 3,155 SY
- 14. Deertrack Drive 4,945 SY
- 15. Evelyn Street 1,660 SY
- 16. Hempstead Rd. 1,130 SY
- 17. Marine Drive 2,380 SY
- 18. Old Depot Rd. 1,845 SY

#### 2" HMA Surface Course, Type C

This item will be measured for payment on the basis of square yard (SY) of hot mix asphalt (HMA) required to complete the work described.

Payment for construction will be full compensation for providing all labor, equipment, and materials necessary to place a two (2) inch asphalt overlay per contract documents, including broom cleaning base to be overlaid; providing manhole and valve collars as necessary; providing, placing and compacting the minimum two (2) inch compacted thickness of HMA Type C Surface Course along the entire specified area; ensuring that there are no areas where water ponds on the asphalt and making any repairs as needed; surfacing driveway and road intersections with a smooth transition from the new pavement onto the existing apron; tying to existing concrete if applicable; relocating mailboxes and street signs as necessary for construction; cleaning the construction area; restoring and stabilizing disturbed surfaces; placement of erosion and sediment controls as needed; removal of temporary erosion control measures at the end of construction and all other related work.

2" HMA Surface Course, Type C will be used on the following roads in this package for the entire areas specified.

- 1. Abingdon Way 1,120 SY
- Adair Marble Street 1.395 SY
- 3. Brittany Lane 1,610 SY
- 4. Caliper Place 1,935 SY
- 5. Canterbury Crossing 2,785 SY
- 6. Central Avenue 800 SY

- 7. Crofton Drive 7,045 SY
- 8. Stirling Heights 3.045 SY
- 9. Turquoise Way 5,790 SY
- 10. Warwick Way 1,350 SY
- 11. Whitmyre Court 1,440 SY
- 12. Bridges Drive 1,000 SY
- 13. Cheek Rd. 2,225 SY
- 14. Cloverbrook Drive 3.155 SY
- 15. Deertrack Drive 4,945 SY
- 16. Evelyn Street 1,660 SY
- 17. Hempstead Rd. 1,130 SY
- 18. Marine Drive 2,380 SY
- 19. Old Depot Rd. 1,845 SY
- 20. O' Henry Lane 1001 SY

#### **Speed Tables** (See attached details for speed tables)

- 1. Brittany Lane 2 speed tables
- 2. Mobley Road 2 speed tables

#### **Permanent Pavement Markings**

This item will be measured for payment on a lump sum (LS) basis to complete the permanent pavement markings described on sheet 4 pavement and striping plan in the attached plans.

Payment for the Permanent Pavement Markings shall be full compensation for providing all labor, equipment, and materials necessary for applying fast dry paint, thermoplastic pavement markings, and RPM's as specified for the (2) roads listed below; including preparing the pavement surface; removing existing pavement markings as needed; and all other material, labor, equipment, supplies, and incidentals necessary to complete the work. Locations will be marked by York County.

Permanent pavement markings will be used on the following roads in this package for the entire area specified.

- 1. Adair Marble St. 1 crosswalk, 2 Stop Bars (See strip map for location)
- 2. Marine Drive 2 Railroad crossings, 2 Stop Bars
- 3. Caliper Place 1 Stop Bar
- 4. O' Henry Lane 150 LF of permanent yellow centerline continuous line

#### Full Depth Asphalt Pavement Patching – 6" Uniform (if needed)

Full Depth Asphalt Pavement Patching will be measured for payment on the basis of per square yard (SY) of asphalt and base removal and replacement as required to complete the repair in accordance with these specifications.

Payment will be full compensation for providing all materials, equipment, and labor necessary to remove the asphalt and base material to a depth of six (6) inches including removing, hauling, and legally disposing of unclassified materials off-site; location and protection of existing above and below ground utilities and structures; placing and compacting six (6) inches of HMA Asphalt Binder Course, Type B; or HMA Type C Asphalt Surface Course; and all other related work. Payment for Full Depth Asphalt Pavement Patching shall also include full compensation of repairing, replacing, or relocating any items that are inadvertently damaged during the demolition process which were not scheduled for demolition. York County Engineering staff will locate areas for repair in the field if any is needed during construction.

#### Removal of Unsuitable Material - 2' uniform (If needed)

Backfill Material will be measured for payment on the basis of per square yard (SY) of Geotextile fabric, and ABC stone in accordance with these specifications.

Payment will be full compensation for removing unstable material if any, hauling, and legally disposing of materials off-site, providing geotextile fabric, and adequate ABC stone for backfilling the volume of material removed, and thoroughly compacting in layers not exceeding eight (8) inches with vibratory compactors. York County Engineering staff will locate areas for repair in the field if any are needed during construction.

# **Alternative A (Lakewood Road)**

#### **Mobilization**

Mobilization is paid at the lump sum (LS) price bid, which price and payment is full compensation for organizing and moving all forces, supplies, equipment, and incidentals to each project site, regardless of the number of times such moves are made, and all preconstruction costs incurred after award of the Contract. The price and payment also includes costs for demobilization.

Payment will be full compensation for operations including moving personnel and equipment to the job site; paying bond and insurance premiums; establishing facilities necessary for work on the project; and all other work or materials necessary to complete the work. Partial payment for this item in no way acts to preclude or limit any of the provisions or partial payment otherwise provided for by the Contract.

#### **Traffic Control**

Traffic Control will be measured for payment on the basis of lump sum (LS) cost required to maintain adequate traffic control according to the South Carolina Manual on Uniform Traffic Control Devices for Streets and Highways.

Payment will be full compensation for all materials, labor, and equipment necessary for fabricating, preparing, installing, removing or relocating, maintaining, and repairing or replacing all traffic control items needed to complete the work.

#### 8" Graded Aggregate Base Course

This item will be measured for payment on the basis of square yards (SY) specified in the Contract.

Payment for construction will be full compensation for providing all labor, equipment, and materials necessary to place a 8"uniform graded aggregate base per the contract documents. Remove existing subgrade to a depth of 8 inches, clear all debris from road bed, compact the total area for stability, preform foundation proof roll to confirm proper compaction. Place the base course aggregate on the prepared foundation. Perform the spreading so that the finished base course conforms to the lines, grades, dimensions, and the typical cross-sections shown in the contract. Use crushed stone meeting the grading requirements of Aggregate Number CR-14. Spread and grade the aggregate to a uniform 8" thickness while at optimum moisture content, consolidate it until the aggregates and subbase is compacted to at least 98.0% of the maximum dry density as determined by ASTM D-698. Continue operations until a 8" uniform, dense surface, free from loose material, is produced. Take care during the shaping and rolling operations to retain the material within the limits indicated in the contract. If during the shaping and rolling operations, the material becomes segregated, then re-work the material until a 8" uniform thickness is obtained. Material must be wet at a minimum of twice per day until paved. Once a passing final proof roll is complete, paving operations can commence. All construction in this section must confine to the **2007 SCDOT Standard Specifications Section 305.** 

Graded aggregate base course will be used on the following roads in this project for the entire area specified.

# 1. Lakewood Road – 655 SY

#### 2" HMA Surface Course, Type C

This item will be measured for payment on the basis of square yard (SY) of hot mix asphalt (HMA) required to complete the work described.

Payment for construction will be full compensation for providing all labor, equipment, and materials necessary to place a two (2) inch asphalt overlay per contract documents, including broom cleaning base to be overlaid; providing manhole and valve collars as necessary; providing, placing and compacting the minimum two (2) inch compacted thickness of HMA Type C Surface Course along the entire specified area; ensuring that there are no areas where water ponds on the asphalt and making any repairs as needed; surfacing driveway and road intersections with a smooth transition from the new pavement onto the existing apron; tying to existing concrete if applicable; relocating mailboxes and street signs as necessary for construction; cleaning the construction area; restoring and stabilizing disturbed surfaces; placement of erosion and sediment controls as needed; removal of temporary erosion control measures at the end of construction and all other related work.

2" HMA Surface Course, Type C will be used on the following roads in this package for the entire areas specified.

1. Lakewood Road - 655 SY

## Full Depth Asphalt Pavement Patching - 6" Uniform (if needed)

Full Depth Asphalt Pavement Patching will be measured for payment on the basis of per square yard (SY) of asphalt and base removal and replacement as required to complete the repair in accordance with these specifications.

Payment will be full compensation for providing all materials, equipment, and labor necessary to remove the asphalt and base material to a depth of six (6) inches including removing, hauling, and legally disposing of unclassified materials off-site; location and protection of existing above and below ground utilities and structures; placing and compacting six (6) inches of HMA Asphalt Binder Course, Type B; or HMA Type C Asphalt Surface Course; and all other related work. Payment for Full Depth Asphalt Pavement Patching shall also include full compensation of repairing, replacing, or relocating any items that are inadvertently damaged during the demolition process which were not scheduled for demolition. York County Engineering staff will locate areas for repair in the field if any is needed during construction.

#### Removal of Unsuitable Material - 2' uniform (If needed)

Backfill Material will be measured for payment on the basis of per square yard (SY) of Geotextile fabric, and ABC stone in accordance with these specifications.

Payment will be full compensation for removing unstable material if any, hauling, and legally disposing of materials off-site, providing geotextile fabric, and adequate ABC stone for backfilling the volume of material removed, and thoroughly compacting in layers not exceeding eight (8) inches with vibratory compactors. York County Engineering staff will locate areas for repair in the field if any are needed during construction.

# Alternative B (Bonner Horton Rd.)

#### Mobilization

Mobilization is paid at the lump sum (LS) price bid, which price and payment is full compensation for organizing and moving all forces, supplies, equipment, and incidentals to each project site, regardless of the

number of times such moves are made, and all preconstruction costs incurred after award of the Contract. The price and payment also includes costs for demobilization.

Payment will be full compensation for operations including moving personnel and equipment to the job site; paying bond and insurance premiums; establishing facilities necessary for work on the project; and all other work or materials necessary to complete the work. Partial payment for this item in no way acts to preclude or limit any of the provisions or partial payment otherwise provided for by the Contract.

#### **Traffic Control**

Traffic Control will be measured for payment on the basis of lump sum (LS) cost required to maintain adequate traffic control according to the South Carolina Manual on Uniform Traffic Control Devices for Streets and Highways.

Payment will be full compensation for all materials, labor, and equipment necessary for fabricating, preparing, installing, removing or relocating, maintaining, and repairing or replacing all traffic control items needed to complete the work.

#### 8" Graded Aggregate Base Course

This item will be measured for payment on the basis of square yards (SY) specified in the Contract.

Payment for construction will be full compensation for providing all labor, equipment, and materials necessary to place a 8"uniform graded aggregate base per the contract documents. Remove existing subgrade to a depth of 8 inches, clear all debris from road bed, compact the total area for stability, preform foundation proof roll to confirm proper compaction. Place the base course aggregate on the prepared foundation. Perform the spreading so that the finished base course conforms to the lines, grades, dimensions, and the typical cross-sections shown in the contract. Use crushed stone meeting the grading requirements of Aggregate Number CR-14. Spread and grade the aggregate to a uniform 8" thickness while at optimum moisture content, consolidate it until the aggregates and subbase is compacted to at least 98.0% of the maximum dry density as determined by ASTM D-698. Continue operations until a 8" uniform, dense surface, free from loose material, is produced. Take care during the shaping and rolling operations to retain the material within the limits indicated in the contract. If during the shaping and rolling operations, the material becomes segregated, then re-work the material until a 8" uniform thickness is obtained. Material must be wet at a minimum of twice per day until paved. Once a passing final proof roll is complete, paving operations can commence. All construction in this section must confine to the **2007 SCDOT Standard Specifications Section 305.** 

Graded aggregate base course will be used on the following roads in this project for the entire area specified.

2. Bonner Horton Rd. – 1,585 SY

#### 6" HMA Surface Course, Type C

This item will be measured for payment on the basis of square yard (SY) of hot mix asphalt (HMA) required to complete the work described.

Payment for construction will be full compensation for providing all labor, equipment, and materials necessary to place a Six (6) inch asphalt overlay per contract documents, including broom cleaning base to be overlaid; providing manhole and valve collars as necessary; providing, placing and compacting the minimum Six (6) inch compacted thickness of HMA Type C Surface Course along the entire specified area; ensuring that there are no areas where water ponds on the asphalt and making any repairs as needed; surfacing driveway and road intersections with a smooth transition from the new pavement onto the existing apron; tying to existing concrete if applicable; relocating mailboxes and street signs as necessary for construction; cleaning

the construction area; restoring and stabilizing disturbed surfaces; placement of erosion and sediment controls as needed; removal of temporary erosion control measures at the end of construction and all other related work.

6" HMA Surface Course, Type C will be used on the following roads in this package for the entire areas specified.

2. Bonner Horton Rd. - 150 SY

#### Clearing and Grubbing

Clearing and Grubbing will be measured for payment on the basis of lump sum (LS) cost required to clear and grub all of the trees and bushes, in alignment with the new centerline, within the proposed road right-of-way. This includes stump and root removal/disposal.

Payment will be full compensation for all materials, labor, and equipment necessary for removal and constructing of the new roadway.

## Full Depth Asphalt Pavement Patching - 6" Uniform (if needed)

Full Depth Asphalt Pavement Patching will be measured for payment on the basis of per square yard (SY) of asphalt and base removal and replacement as required to complete the repair in accordance with these specifications.

Payment will be full compensation for providing all materials, equipment, and labor necessary to remove the asphalt and base material to a depth of six (6) inches including removing, hauling, and legally disposing of unclassified materials off-site; location and protection of existing above and below ground utilities and structures; placing and compacting six (6) inches of HMA Asphalt Binder Course, Type B; or HMA Type C Asphalt Surface Course; and all other related work. Payment for Full Depth Asphalt Pavement Patching shall also include full compensation of repairing, replacing, or relocating any items that are inadvertently damaged during the demolition process which were not scheduled for demolition. York County Engineering staff will locate areas for repair in the field if any is needed during construction.

#### Removal of Unsuitable Material - 2' uniform (If needed)

Backfill Material will be measured for payment on the basis of per square yard (SY) of Geotextile fabric, and ABC stone in accordance with these specifications.

Payment will be full compensation for removing unstable material if any, hauling, and legally disposing of materials off-site, providing geotextile fabric, and adequate ABC stone for backfilling the volume of material removed, and thoroughly compacting in layers not exceeding eight (8) inches with vibratory compactors. York County Engineering staff will locate areas for repair in the field if any are needed during construction.

# Package B (Critical Needs)

### **Mobilization**

Mobilization is paid at the lump sum (LS) price bid, which price and payment is full compensation for organizing and moving all forces, supplies, equipment, and incidentals to each project site, regardless of the number of times such moves are made, and all preconstruction costs incurred after award of the Contract. The price and payment also includes costs for demobilization.

Payment will be full compensation for operations including moving personnel and equipment to the job site; paying bond and insurance premiums; establishing facilities necessary for work on the project; and all other work or materials necessary to complete the work. Partial payment for this item in no way acts to preclude or

limit any of the provisions or partial payment otherwise provided for by the Contract.

#### **Traffic Control**

Traffic Control will be measured for payment on the basis of lump sum (LS) cost required to maintain adequate traffic control according to the South Carolina Manual on Uniform Traffic Control Devices for Streets and Highways.

Payment will be full compensation for all materials, labor, and equipment necessary for fabricating, preparing, installing, removing or relocating, maintaining, and repairing or replacing all traffic control items needed to complete the work.

#### Removal of Existing Asphalt (2" Uniform)

Removal of Existing Asphalt (2" Uniform) will be measured for payment on the basis of per square yard (SY) of material removed from the roadway, *prior to introduction of cement/lime*, in order to prepare for a desired final grade.

Payment will be full compensation for removal of two (2) inches of material off the top of the roadway before the initial pulverization, prior to introduction of chemical treatment, to prepare for a desired final grade in relation to existing curb and gutter; location and protection of existing above and below ground utilities and structures; hauling and legally disposing of removed materials off-site; repairing, replacing, or relocating any items that are inadvertently damaged during the demolition process which were not scheduled for demolition; and all other materials, labor, equipment, tools, transportation, and incidentals necessary to complete the work.

Removal of Existing Asphalt will be used on the following roads in this project for the entire area specified.

- 1. Bethelfield Terrace 2,832 SY
- 2. Landing Pointe Dr. 4,790 SY

## **Cement Modified Recycled Base (10" Uniform)**

Cement Modified Recycled Base (10" Uniform) will be measured for payment on the basis of per square yard (SY) of construction of a cement modified base at a rate of sixty (60) pounds per square yard (LB/SY)\* of portland cement in accordance with these specifications.

Payment will be full compensation for constructing the cement modified recycled base course per contract documents; including pulverizing and scarifying the existing pavement or base material to a minimum depth of 10 inches; furnishing, weighing, applying and spreading cement at a rate established in the mix design for each road; watering and maintaining proper moisture content; processing and mixing base course material; compacting, finishing, establishing a 2% cross slope and curing base course; an application of a modified cationic emulsion (CRS-2P) and an application of aggregate that conforms to Section 406 of the SCDOT Standard Specifications, constructed on a prepared base course until application of the specified HMA; selecting curing method from specifications and submitting for approval; allowing for a curing time of no less than 3 days; cleaning construction area of construction debris and excess material; locating and protecting existing above and below ground utilities and structures; repairing, replacing, or relocating any items that are inadvertently damaged during the demolition process which were not scheduled for demolition; and all other materials, labor, equipment, tools, transportation, and incidentals necessary to complete the work.

\*Cement rate of 60 lb/sy, previously specified, is for bidding purposes only. Bid price shall include the cost of a third party testing service approved by OWNER. The testing service shall provide a mix design specifying cement rate, optimum moisture, and maximum dry density for each road in the project. Should mix design dictate a cement rate other

than 60 lb/sy, CONTRACTOR and OWNER will negotiate price adjustment. Testing service shall also be present on site to verify and monitor moisture and compaction for each road in the project.

CMRB will be used on the following roads in this package for the entire area specified.

- 1. Bethelfield Terrace 2,835 SY
- 2. Landing Pointe Dr. 4,790 SY
- 3. Cyrus Dr. 2,155 SY
- 4. Fairwood Dr. 2,400 SY
- 5. Farm Branch Dr. 6,205 SY
- 6. Impulse Ln. 2,745 SY
- 7. Rippling Creek Dr. 4,620 SY

### 2" HMA Surface Course, Type C

This item will be measured for payment on the basis of square yard (SY) of hot mix asphalt (HMA) required to complete the work described.

Payment for construction will be full compensation for providing all labor, equipment, and materials necessary to place a two (2) inch asphalt overlay per contract documents, including broom cleaning base to be overlaid; providing manhole and valve collars as necessary; providing, placing and compacting the minimum two (2) inch compacted thickness of HMA Type C Surface Course along the entire specified area; ensuring that there are no areas where water ponds on the asphalt and making any repairs as needed; surfacing driveway and road intersections with a smooth transition from the new pavement onto the existing apron; tying to existing concrete if applicable; relocating mailboxes and street signs as necessary for construction; cleaning the construction area; restoring and stabilizing disturbed surfaces; placement of erosion and sediment controls as needed; removal of temporary erosion control measures at the end of construction and all other related work.

2" HMA Surface Course, Type C will be used on the following roads in this package for the entire areas specified.

- 1. Bethelfield Terrace 2,835 SY
- 2. Landing Pointe Dr. 4,790 SY
- 3. Cvrus Dr. 2.155 SY
- 4. Fairwood Dr. 2,400 SY
- 5. Farm Branch Dr. 6,205 SY
- 6. Impulse Ln. 2,745 SY
- 7. Rippling Creek Dr. 4,620 SY

#### **Permanent Pavement Markings**

This item will be measured for payment on a lump sum (LS) basis to complete the permanent pavement markings described on sheet 4 pavement and striping plan in the attached plans.

Payment for the Permanent Pavement Markings shall be full compensation for providing all labor, equipment, and materials necessary for applying fast dry paint, thermoplastic pavement markings, and RPM's as specified for the (1) road listed below; including preparing the pavement surface; removing existing pavement markings as needed; and all other material, labor, equipment, supplies, and incidentals necessary to complete the work. Locations will be marked by York County.

Permanent pavement markings will be used on the following roads in this package for the entire area specified.

1. Landing Pointe Dr. – 2 Stop Bars

### Full Depth Asphalt Pavement Patching - 6" Uniform (if needed)

Full Depth Asphalt Pavement Patching will be measured for payment on the basis of per square yard (SY) of asphalt and base removal and replacement as required to complete the repair in accordance with these specifications.

Payment will be full compensation for providing all materials, equipment, and labor necessary to remove the asphalt and base material to a depth of six (6) inches including removing, hauling, and legally disposing of unclassified materials off-site; location and protection of existing above and below ground utilities and structures; placing and compacting six (6) inches of HMA Asphalt Binder Course, Type B; or HMA Type C Asphalt Surface Course; and all other related work. Payment for Full Depth Asphalt Pavement Patching shall also include full compensation of repairing, replacing, or relocating any items that are inadvertently damaged during the demolition process which were not scheduled for demolition. York County Engineering staff will locate areas for repair in the field if any is needed during construction.

#### Removal of Unsuitable Material - 2' uniform (If needed)

Backfill Material will be measured for payment on the basis of per square yard (SY) of Geotextile fabric, and ABC stone in accordance with these specifications.

Payment will be full compensation for removing unstable material if any, hauling, and legally disposing of materials off-site, providing geotextile fabric, and adequate ABC stone for backfilling the volume of material removed, and thoroughly compacting in layers not exceeding eight (8) inches with vibratory compactors. York County Engineering staff will locate areas for repair in the field if any are needed during construction.

# Alternative A (Sagrada Dr.)

#### Mobilization

Mobilization is paid at the lump sum (LS) price bid, which price and payment is full compensation for organizing and moving all forces, supplies, equipment, and incidentals to each project site, regardless of the number of times such moves are made, and all preconstruction costs incurred after award of the Contract. The price and payment also includes costs for demobilization.

Payment will be full compensation for operations including moving personnel and equipment to the job site; paying bond and insurance premiums; establishing facilities necessary for work on the project; and all other work or materials necessary to complete the work. Partial payment for this item in no way acts to preclude or limit any of the provisions or partial payment otherwise provided for by the Contract.

#### **Traffic Control**

Traffic Control will be measured for payment on the basis of lump sum (LS) cost required to maintain adequate traffic control according to the South Carolina Manual on Uniform Traffic Control Devices for Streets and Highways.

Payment will be full compensation for all materials, labor, and equipment necessary for fabricating, preparing, installing, removing or relocating, maintaining, and repairing or replacing all traffic control items needed to complete the work.

#### **Cement Modified Recycled Base (10" Uniform)**

Cement Modified Recycled Base (10" Uniform) will be measured for payment on the basis of per square yard

(SY) of construction of a cement modified base at a rate of sixty (60) pounds per square yard (LB/SY)\* of portland cement in accordance with these specifications.

Payment will be full compensation for constructing the cement modified recycled base course per contract documents; including pulverizing and scarifying the existing pavement or base material to a minimum depth of 10 inches; furnishing, weighing, applying and spreading cement at a rate established in the mix design for each road; watering and maintaining proper moisture content; processing and mixing base course material; compacting, finishing, establishing a 2% cross slope and curing base course; an application of a modified cationic emulsion (CRS-2P) and an application of aggregate that conforms to Section 406 of the SCDOT Standard Specifications, constructed on a prepared base course until application of the specified HMA; selecting curing method from specifications and submitting for approval; allowing for a curing time of no less than 3 days; cleaning construction area of construction debris and excess material; locating and protecting existing above and below ground utilities and structures; repairing, replacing, or relocating any items that are inadvertently damaged during the demolition process which were not scheduled for demolition; and all other materials, labor, equipment, tools, transportation, and incidentals necessary to complete the work.

\*Cement rate of 60 lb/sy, previously specified, is for bidding purposes only. Bid price shall include the cost of a third party testing service approved by OWNER. The testing service shall provide a mix design specifying cement rate, optimum moisture, and maximum dry density for each road in the project. Should mix design dictate a cement rate other than 60 lb/sy, CONTRACTOR and OWNER will negotiate price adjustment. Testing service shall also be present on site to verify and monitor moisture and compaction for each road in the project.

CMRB will be used on the following roads in this package for the entire area specified.

1. Sagrada Dr. - 2,835 SY

#### 2" HMA Surface Course, Type C

This item will be measured for payment on the basis of square yard (SY) of hot mix asphalt (HMA) required to complete the work described.

Payment for construction will be full compensation for providing all labor, equipment, and materials necessary to place a two (2) inch asphalt overlay per contract documents, including broom cleaning base to be overlaid; providing manhole and valve collars as necessary; providing, placing and compacting the minimum two (2) inch compacted thickness of HMA Type C Surface Course along the entire specified area; ensuring that there are no areas where water ponds on the asphalt and making any repairs as needed; surfacing driveway and road intersections with a smooth transition from the new pavement onto the existing apron; tying to existing concrete if applicable; relocating mailboxes and street signs as necessary for construction; cleaning the construction area; restoring and stabilizing disturbed surfaces; placement of erosion and sediment controls as needed; removal of temporary erosion control measures at the end of construction and all other related work.

2" HMA Surface Course, Type C will be used on the following roads in this package for the entire areas specified.

1. Sagrada Dr. - 2,835 SY

### Full Depth Asphalt Pavement Patching - 6" Uniform (if needed)

Full Depth Asphalt Pavement Patching will be measured for payment on the basis of per square yard (SY) of asphalt and base removal and replacement as required to complete the repair in accordance with these specifications.

Payment will be full compensation for providing all materials, equipment, and labor necessary to remove the asphalt and base material to a depth of six (6) inches including removing, hauling, and legally disposing of

unclassified materials off-site; location and protection of existing above and below ground utilities and structures; placing and compacting six (6) inches of HMA Asphalt Binder Course, Type B; or HMA Type C Asphalt Surface Course; and all other related work. Payment for Full Depth Asphalt Pavement Patching shall also include full compensation of repairing, replacing, or relocating any items that are inadvertently damaged during the demolition process which were not scheduled for demolition. York County Engineering staff will locate areas for repair in the field if any is needed during construction.

#### Removal of Unsuitable Material - 2' uniform (If needed)

Backfill Material will be measured for payment on the basis of per square yard (SY) of Geotextile fabric, and ABC stone in accordance with these specifications.

Payment will be full compensation for removing unstable material if any, hauling, and legally disposing of materials off-site, providing geotextile fabric, and adequate ABC stone for backfilling the volume of material removed, and thoroughly compacting in layers not exceeding eight (8) inches with vibratory compactors. York County Engineering staff will locate areas for repair in the field if any are needed during construction.

**END OF SECTION** 

# **SUMMARY OF THE WORK**

#### PART 1 - GENERAL

#### **Related Documents**

Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to work of this section.

### **Project/Work Identification:**

<u>General</u>: Project name is the 2023-2024 Resurfacing Project #23346CF, as shown on Contract Documents prepared by York County Engineering Department.

<u>The Work:</u> The work consists of the FY 23/24 Resurfacing Project #23346CF for twenty-four (24) County maintained roads, three (3) Town of Clover roads, three (3) Town of Fort Mill roads and one (1) Town of Sharon road. The project total estimated length of roadway is 29,720 linear feet, (5.63 miles).

#### **Submittals Quantity**

Where material or equipment submittal data is required, furnish two copies plus the number of approved copies required by the Contractor. Submittals which are not approved by the Engineer will be returned in two copies to the Contractor.

#### **Location of Existing Utilities**

The location of existing utilities, as shown on the Construction Drawings, is approximate. The Contractor is to contact all utility companies for exact location of underground utilities. The Engineer is to be contacted if interference exists.

#### **Restoration and Surface Stabilization**

Utilize construction methods which will minimize damage to existing improvements and vegetation. Avoid any activity which might result in significant ditch siltation. Accomplish these objectives by restricting construction operations to favorable seasons, constructing temporary siltation impoundments, installing of sediment fence, stockpiling and respreading topsoils and vegetation, grassing, and other effective means.

Promptly restore ground surfaces, vegetation and improvements.

Areas disturbed by the new construction are to be final dressed, seeded, fertilized and mulched as soon as construction is completed. Final payment to CONTRACTOR by the OWNER will not be made until permanent vegetation is established and all temporary erosion and sediment control devices are removed.

#### **Accessibility and Maintenance**

For the convenience of the public, the Contractor shall so conduct his operations as to offer the least possible obstruction and inconvenience and he shall have under construction no greater amount of work than he can prosecute properly with due regard to the rights of the public.

Construction operations shall be scheduled and executed in such a manner as to cause minimal inconvenience to owners of abutting property. Convenient access to all property, roads, highways, sidewalks and driveways along the line of Work shall be maintained. Routes normally used by vehicular traffic shall be safely negotiable without slipping, sliding or loss of traction.

SUMMARY OF WORK 01 11 00 - 1

Maintenance operations are to be performed on a day to day basis as necessary to provide access at all times. Once construction operations have begun, it shall be the Contractor's responsibility to maintain access until final Project acceptance.

No material or equipment shall be stored where it will interfere with the free and safe passage of public traffic. At the end of each work day, and at other times when construction operations are not in progress for any reason, the Contractor shall remove all equipment and other obstructions from that portion of the project intended for public use.

Access to fire hydrants shall be maintained by the Contractor throughout the prosecution of the Work. Hydrants shall be kept clear of obstructions and visible at all times. If visibility cannot be maintained, the Contractor shall provide clearly visible signs showing the location of the fire hydrant.

Utility companies and public agencies having facilities within the limits of the Work shall have access to their facilities at all times for inspection and repair.

The Contractor's ability and intention to maintain access must be demonstrated by his construction schedule, required to be submitted elsewhere in these Contract Documents.

All costs of maintaining access during construction, and before the Project is accepted, shall be considered distributed pro rata among the payment items listed on the Bid Form.

#### **Contractor Use of Premises**

<u>General</u>: During the entire construction period the Contractor shall limit his work and storage areas to areas which include the rights-of-way that have been procured.

PART 2 - PRODUCTS (Not applicable).

PART 3 - EXECUTION (Not applicable).

**END OF SECTION** 

SUMMARY OF WORK 01 11 00 - 2

## **ASPHALT PAVING**

#### **PART 1- GENERAL**

#### RELATED DOCUMENTS

General provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### SUMMARY

This Section includes provisions for preparing subbase, proof-rolling subbase, applying base course, proof-rolling base course (if required) and applying bituminous pavements. The work is to be in accordance with York County Road Design Standards and the SCDOT Standard Specifications for Highway Construction.

#### **QUALITY ASSURANCE**

Some products and execution specified in this Section are reference to the latest edition of published specifications or standards of the following (with respective abbreviations)

- South Carolina Department of Transportation (SCDOT) "Standard Specifications for Highway Construction"
- SCDOT "Manual on Uniform Traffic control Devices for Streets and Highways"

#### SUBMITTALS

<u>General</u>: Submit the following in accordance with Conditions of Contract and Division 1 Specification Sections.

<u>Mix Design or Material Certificates</u> signed by material producer and Contractor, certifying that each material item complies with or exceeds specified requirements of the South Carolina Department of Transportation (SCDOT) "Standard Specifications for Highway Construction."

#### SITE CONDITIONS

<u>Weather Limitations</u>: Apply prime coats, tack coats, hot mix asphalt surface courses, and hot mix aggregate base courses in accordance with the requirements of the SCDOT "Standard Specifications for Highway Construction".

Weather and surface temperature restrictions for placing bituminous pavements are included in section 401.44 – Weather and Surface Temperature Restrictions of the SCDOT "Standard Specifications for Highway Construction". No bituminous pavements are to be applied during restricted periods as stipulated in the specifications.

Do not apply HMA when the existing surface is wet of frozen.

Place HMA in accordance with the following relationship of minimum air temperature and lift thickness:

1.0 inch or less – 55.0 degrees Fahrenheit

1.1 to 3.0 inches – 45.0 degrees Fahrenheit

\*Measuring the ambient air temperature in the shade with a calibrated thermometer, away from artificial heat in compliance with SC-T-84.

HMA asphaltic courses can not be placed during the months of December, January and February, except by written approval from York County Engineering.

<u>Traffic Control</u>: Schedule and conduct Work in a manner which will minimize inconvenience to vehicular and pedestrian traffic. Provide flagmen, barricades, warning signs, warning lights, and other warning means as appropriate. Signing of construction area will comply with the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways".

<u>Site Conditions</u>: Site must be kept in order. No trash or miscellaneous equipment/supplies shall be left on site that may pose a hazard to the residents or traveling public (i.e., asphalt, gravel, sand, oils, gasoline, etc.)

Overnight storage or general parking of equipment must be done within the provided rights-ofway and must not cause damage to adjacent properties. Damage occurring would be the responsibility of the CONTRACTOR.

#### PART 2 - MATERIALS

<u>General</u>: Use locally available materials and gradations that exhibit a satisfactory record of previous installations. Minimum compacted thicknesses are found in the Reference Maps and these specifications.

<u>Base Course Materials</u>: Base course materials are to meet the requirements of Section 305 - Graded Aggregate Base Course of the SCDOT "Standard Specifications for Highway Construction".

<u>Prime or Tack Coat</u>: Prime and/or tack coats are to be in accordance with Section 401.4.18 – Application of Prime or Tack Coat of the SCDOT "Standard Specifications for Highway Construction".

<u>Asphalt (HMA) Pavement</u>: Materials for asphalt pavements are to meet the requirements of Section 401 – Hot Mixed Asphalt (HMA) Pavement of the SCDOT "Standard Specifications for Highway Construction".

Hot Mix Asphalt Intermediate (or Binder) Course: Materials shall conform to Section 402 – Hot Mix Asphalt Binder Course of the SCDOT "Standard Specifications for Highway Construction".

Primary Roadways: Hot Mix Asphalt Binder Course, Type C

**Secondary Roadways, Local Streets and Parking Areas:** Hot Mix Asphalt Binder Course, Type C

<u>Hot Mix Asphalt Surface Course</u>: Materials shall conform to Section 403 – Hot Mix Asphalt Surface Course of the SCDOT "Standard Specifications for Highway Construction". Hot Mix Asphalt Surface Courses are to be as follows:

Primary Roadways: Hot Mix Asphalt Surface Course, Type C

**Secondary Roadways, Local Streets and Parking Areas:** Hot Mix Asphalt Surface Course, Type C

#### PERMANENT PAVEMENT MARKINGS

Cleaning: Sweep and clean surface to eliminate loose material and dust.

Do not apply striping until layout and placement have been verified with Engineer.

<u>Permanent Pavement Markings</u>: Permanent pavement markings are to meet the requirements of Section 625 – Permanent Pavement Markings of the SCDOT "Standard Specifications for Highway Construction", fast-dry waterborne paint.

#### **PART 3- EXECUTION**

#### **Pavement Repair**

<u>Inspection:</u> Examine areas and conditions under which pavement repair will be conducted, giving special attention to stability of subbase. Do not proceed with pavement patching work until unsatisfactory conditions have been corrected in a manner acceptable to personnel or subcontractor doing the paving work.

<u>Preparation:</u> Saw cut any ragged edges of existing pavement or in the case of concrete work, remove existing pavement to nearest joint. Remove all loose material from underlying and adjacent surfaces.

<u>Strength and Stability</u>: Use material and construction techniques as necessary to obtain strength, stability and durability of pavement patch at least equal to that of remaining adjacent pavement of the same type. Do not permit the finished surface to have dips, objectionable roughness or discontinuity or non-draining areas. Do not create any unsafe pavement conditions.

<u>Placing:</u> Construct pavement using methods and equipment in general use for the type of work being performed.

#### Subbase

<u>Subbase</u> is to be prepared in accordance with Division 300 – Bases and Subbases of the SCDOT "Standard Specifications for Highway Construction".

#### **Base Course**

Application of base materials is to meet the minimum depth requirements (if any) as shown on the Drawings. Base course materials are applied in accordance with Section 305 - Graded Aggregate Base Course of the SCDOT "Standard Specifications for Highway Construction".

### <u>Preparation of Base Course for Bituminous Pavement</u>

General: Remove loose material from compacted base surface immediately before applying prime coat.

Adjust utility and valve box elevations so that the top of the casting will match surrounding finished pavement surface grades.

<u>Proof-roll</u> prepared macadam base surface to check for unstable areas and areas requiring additional compaction. Proof-roll with a tandem dump truck having a minimum load weight ticket of fifteen (15) tons. The proof-rolling procedure should consist of the following:

- <u>1. Parking areas:</u> Two complete passes of the area being tested, with each pass being in a direction perpendicular to the previous one.
- <u>2. Roadways:</u> Complete coverage of the area receiving pavement. The first pass should be completed with the wheels of the truck adjacent to the curb (if curb is present) or a minimum distance of 1 foot outside the limits of pavement where curb is not present. Subsequent passes shall be completed with the truck located adjacent to the previous pass. Number of

passes shall be determined by the proposed pavement width, and the proof-roll shall be conducted until the entire width of the area to be paved is tested.

If any area deflects, ruts, or pumps excessively during proof-rolling or fails to "tighten up" after successive passes, determine cause for failure, make repairs (at Contractor's expense) and repeat proof-roll. Contractor is responsible for obtaining good proof-roll test of the site.

Emphasis shall be placed on uniform mixing and cement distribution across the entire roadway paving width, in addition to ensuring compliance with the desired cross-section with designed crown.

Do not begin paving work until deficient base areas have been corrected and are ready to receive paving.

<u>Prime Coat</u>: Apply at rate of 0.10 to 0.18 gallons per square yard (targeting 0.14 gallons per square yard). Apply material to penetrate and seal, but not flood, surface. Cure and dry as long as necessary to attain penetration and evaporation of volatile. In areas where residences are inhabited, apply the prime coat directly in front of the bituminous course being placed, allowing as much time as possible for the prime or tack coat to "break," so as to avoid the tracking of prime material on adjacent paved surfaces, including curb and gutter, and driveways. Remove and clean damaged surfaces.

<u>Tack Coat:</u> Apply a tack coat to all contact surfaces, to include curb, existing asphalt and existing structures, per SCDOT specifications.

#### **Placing Mix**

<u>General</u>: Place hot-mixed asphalt mixture on prepared surface, spread, and strike off. Spread mixture at minimum temperature of the design mix, customarily 275 deg F. Place areas inaccessible to equipment by hand. Place each course to required grade, cross-section, and compacted thickness.

<u>Paver Placing</u>: Place in strips not less than 10 feet wide, unless otherwise acceptable to Engineer. After first strip has been placed and rolled, place succeeding strips and extend rolling to overlap previous strips. Complete base course for a section before placing surface course.

Immediately correct surface irregularities in finish course behind paver. Remove excess material forming high spots with shovel or lute.

<u>Joints</u>: Make joints between old and new pavements, or between successive days' work, to ensure continuous bond between adjoining work. Construct joints to have same texture, density, and smoothness as other sections of hot-mixed asphalt course. Clean contact surfaces and apply tack coat.

#### Rolling

<u>General</u>: Begin rolling when mixture will bear roller weight without excessive displacement. Shall be in compliance with SCDOT Section 401.3.11 Rollers.

Compact mixture with hot hand tampers or vibrating plate compactors in areas inaccessible to rollers.

<u>Breakdown Rolling</u>: Accomplish breakdown or initial rolling immediately following rolling of joints and outside edge. Check surface after breakdown rolling and repair displaced areas by loosening and filling, if required, with hot material. Between 8 and 12 ton rollers.

<u>Second Rolling</u>: Follow breakdown rolling as soon as possible, while mixture is hot. Continue second rolling until mixture has been evenly compacted. Between 8 and 12 ton rollers.

<u>Finish Rolling</u>: Perform finish rolling while mixture is still warm enough for removal of roller marks. Continue rolling until roller marks are eliminated and course has attained 95 percent laboratory density (D-698). Pneumatic-Tire rollers with a minimum effective width of 60 inches.

#### Roller specifics and guidance:

**Steel-Wheel Rollers** – As specified, use steel wheel rollers that are between 8 and 10 tons in weight, which develop a minimum pressure of 250 psi of compression per inch of roller width under working conditions. Ensure rollers are in good working condition, without leaks, and capable of reversing without backlash. Ensure the rollers have adjustable scrapers to keep the rollers clean and with effective means of keeping the wheels/drums wet to prevent mixes from sticking to the rollers. Ensure the surface of the rollers are free of flat areas, openings and projections which could mar the pavement surface.

**Vibratory Rollers** – Utilize vibratory rollers of a minimum 8-ton size, with 1 or 2 vibrating wheels/drums. The vibratory roller shall be operated at a speed, frequency and amplitude that yields the desired maximum compaction and a smooth pavement. Care should be given to vibratory operations during direction changes to prevent heaving and shoving.

**Pneumatic-Tire Rollers** – The pneumatic-tire rollers shall be self-propelled and have an effective rolling width of not less than sixty (60) inches. The roller shall be equipped with pneumatic tires of equal size and diameter that will be capable of providing uniform contact pressures. The desired contact pressure is 60psi to 80 psi, which will be achieved by monitoring the ballast and tire inflation pressures. The roller shall be operated so that the wheels will provide complete coverage of the rolling width of the machine in one pass. Ensure that the wheels are tight, do not wobble and provide a minimum ¼ inch overlap with the tracking wheels. The roller shall be designed and maintained to ensure that the contact pressure is uniform on all wheels and the tire pressures do not vary more than 5 psi. The pneumatic-tire roller shall be constructed with enough ballast weight to provide the required uniform wheel loading. Be capable of varying the total operating weight and tire pressure on the roller, at the direction of the QC/QA inspector, in order to achieve the desired contact pressures and the required compaction.

<u>Patching</u>: Remove and replace paving areas mixed with foreign materials and defective areas. Cut out such areas and fill with fresh, hot hot-mixed asphalt. Compact by rolling to specified surface density and smoothness.

<u>Protection</u>: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.

Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

#### FIELD QUALITY CONTROL

<u>General</u>: Testing in-place hot-mixed asphalt courses for compliance with requirements for thickness and surface smoothness will be done by Contractor's testing laboratory. The CONTRACTOR must have a Quality Control inspector present during all paving installation. The Quality Control inspector shall demonstrate to the York County inspector that asphalt has been compacted per SCDOT 401.4.20 and 401.4.21.

Repair or remove and replace unacceptable paving as directed by the county. CONTRACTOR shall make provisions for all testing required by the <u>South Carolina State Highway Department Standard Specifications for Highway Construction</u>, latest edition, and in accordance with the General Conditions. CONTRACTOR will submit SCDOT approved mix design or material specifications prior to placement. In the event of a significant failure of the roadway or related materials, additional core density testing per SCDOT SC-M-400 may be required at the expense of the CONTRACTOR. Testing results shall be provided to the OWNER and ENGINEER for review.

Asphalt cores will be required for each project. The core sampling must be performed during the asphalt inspection with a York County Inspector present and will be up to the CONTRACTOR to provide these to York County at no cost. The frequency and location of the cores is noted in the South Carolina State Highway Department Standard Specifications for Highway Construction. All core holes must immediately be properly cleaned out, repaired with hot mix asphalt, and be properly compacted after being inspected or it will not pass the inspection.

All asphalt courses provided in the contract must meet the minimum required compacted depth. Areas not meeting this minimum depth will require an asphalt overlay. Areas of repair with less than 150 feet in length and/or less than the entire road width will require extended overlays to reduce the impact to the appearance of the roadway surface. The extent of the areas will be determined by the ENGINEER. In cases where minimum depths are not met for longer areas of repair, the entire roadway may require overlays to ensure the minimum required depth is provided.

<u>Thickness</u>: In-place compacted thickness tested in accordance with ASTM D3549 will not be acceptable if exceeding following allowable variations:

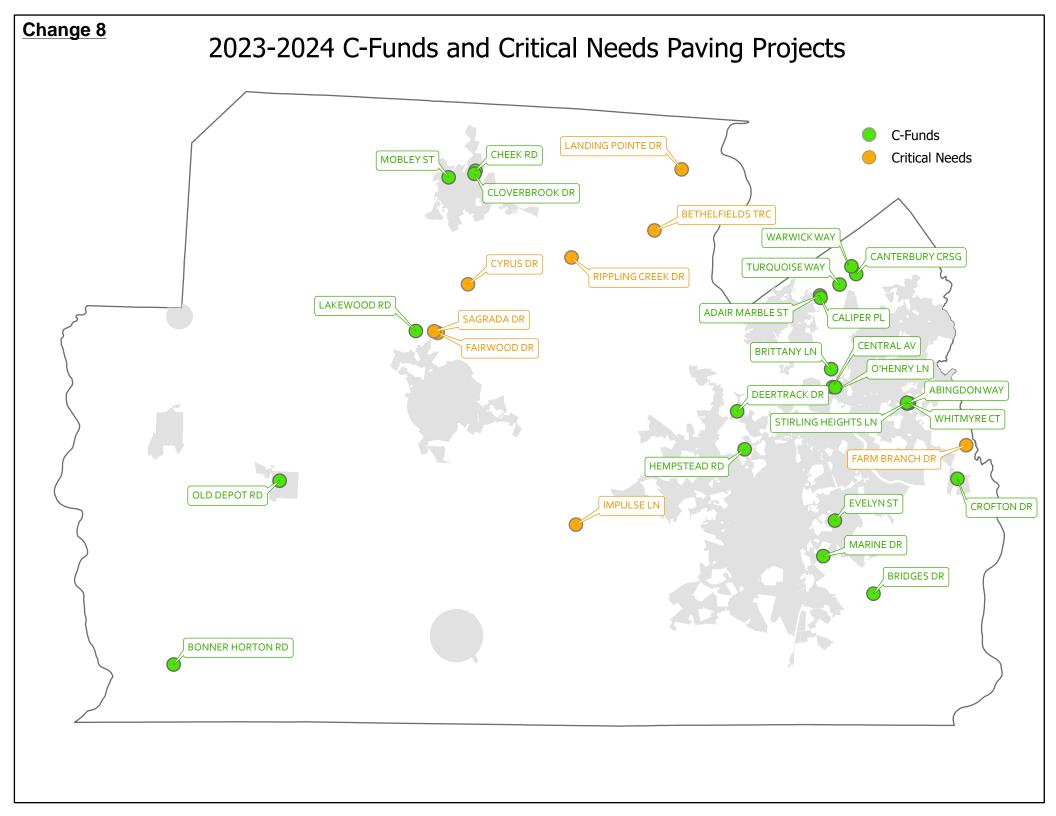
Intermediate Course: Plus or minus ¼ inch.
 Surface Course: Plus or minus ¼ inch.

<u>Surface Smoothness</u>: Test finished surface of each hot-mixed asphalt course for smoothness, using 10-foot straightedge applied parallel with and at right angles to centerline of paved area. Surfaces will not be acceptable if exceeding the following tolerances for smoothness:

Intermediate Course: 1/4 inch.
 Wearing Course Surface: 3/16 inch.

Check surface areas at intervals as directed by Engineer.

**END OF SECTION** 







July 02, 2024

# 2023-2024 Resurfacing Project

all quantities are estimates and need field verification by bidding contractor (highlighted areas are for reference only) Central Avenue H4-067 400 LF 18' Wide





July 02, 2024

# 2023-2024 Resurfacing Project

all quantities are estimates and need field verification by bidding contractor (highlighted areas are for reference only)

O'Henry Lane H4-068 530 LF 17' Wide