

**PROJECT MANUAL FOR**  
**2020 GREENWAY RESURFACING**

July 2020

**CITY OF NORTH AUGUSTA**  
**Engineering Department**

100 GEORGIA AVENUE  
NORTH AUGUSTA, SOUTH CAROLINA 29841  
(803) 441-4220 Fax: (803) 441-4208



*South Carolina's Riverfront*

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## ADVERTISEMENT FOR BIDS

Sealed proposals for the **2020 GREENWAY RESURFACING** will be received by the City of North Augusta in the Engineering Conference Room at the North Augusta Municipal Center, 100 Georgia Avenue, North Augusta, South Carolina 29841 until **11:00 a.m. on Thursday, August 20, 2020** and at that time and place publicly opened and read.

The complete examination and understanding of the construction plans and specifications and the site of the proposed work is necessary in order for the bidder to properly submit a proposal. Copies of the proposal form and contract documents including the specifications and drawings are available **at no charge** from the City of North Augusta Engineering Department, 100 Georgia Avenue, North Augusta, South Carolina 29841

**Each proposal shall be accompanied by a certified check, a bid bond or other acceptable collateral executed by the Bidder and Surety, in the amount of five percent (5%) of the total amount of the bid, made payable to City of North Augusta, and submitted as a proposed guaranty of good faith that the Bidder will enter into a contract with the Owner and execute the work contemplated, if the same is awarded to him.**

The Owner reserves the right to reject any or all bids, and parts of any bid, and to waive formalities and technicalities.

Bids will be required to remain open for acceptance or rejection for thirty (30) calendar days after the date of opening the bids.

Address all bids to the undersigned, marking on outside of envelope "2020 GREENWAY RESURFACING".

ATTN: Mr. Thomas Zeaser, P.E., Director of Engineering & Public Works  
100 Georgia Avenue  
North Augusta, South Carolina 29841  
For inquiries call (803) 442-5700.

## INSTRUCTIONS TO BIDDERS

- A. PROPOSALS: All proposals must be presented in a sealed envelope, addressed to the Owner. **All bids must have their State Contractor's license number clearly posted on the OUTSIDE of the bid package AND marked "2020 Greenway Resurfacing"**. The proposal must be filed with the Owner on or before the time stated in the Invitation for Bids. Mailed proposals will be treated in every respect as though filed in person and will be subject to the same requirements.

Proposals received subsequent to the time stated will be returned unopened. Prior to the time stated any proposal may be withdrawn at the discretion of the bidder, but no proposal may be withdrawn for a period of thirty (30) days after bids have been opened, pending the execution of a contract with the successful bidder.

- B. BID DEPOSIT: Each proposal shall be accompanied by a deposit of cash or certified check for five percent (5%) of the amount of the proposal, and any proposal not accompanied by such deposit shall be absolutely void and will not be considered. Checks shall be drawn on a bank or trust company insured by the Federal Deposit Insurance Corporation and shall be payable to the order of the Owner. The successful bidder, upon his failure or refusal to execute and deliver the contract and bonds required within (10) days after he has received notice of the acceptance of his bid, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with his bid.

In lieu of the bid deposit required herein, the bidder may execute a bid bond for the same amount. The form of Bid Bond required under these bidding documents will be AIA Document A310 Bid Bond, February, 1970 Edition, published by the American Institute of Architects. Surety shall meet all requirements relating to the performance bond required in Paragraph H.

- C. EXAMINATION OF WORK: Each bidder shall, by careful examination, satisfy himself as to the nature and location of the work, the conformation of the ground, the character, quality and quantity of the facilities needed preliminary to and during the execution of the work, the general and local conditions, and all other matters which can in any way affect the work or the cost thereof under the contract. No verbal agreement or conversation with any officer, agent or employee of the Owner, either before or after the execution of the contract, shall affect or modify any of the terms or obligations therein.

- D. ADDENDA AND INTERPRETATIONS: No interpretation of the meaning of the plans will be made to any bidder orally. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be sent by certified mail with return receipt requested to all prospective bidders. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the

Contract Documents. Bidder shall indicate in the space provided on the Bid Form all addenda received.

- E. PREPARATION OF BIDS: Bids shall be submitted on the forms provided and must be signed by the bidder or his authorized representative. The person signing the bid shall initial any corrections to entries made on bid forms.

Bidders must quote on all items appearing on the bid forms, unless specific directions in the advertisement, on the bid form, or in special conditions allow for partial bids. Failure to quote on all items may disqualify the bid. When quotations on all items are not required, bidders shall insert the words "No Bid" where appropriate.

Alternative bids will not be considered unless specifically called for.

- F. BASIS OF AWARD: The bids will be compared on the basis of the total pricing which will include and cover the furnishing of all materials and the performance of all labor requisite or proper, and completing of all work called for under the accompanying contract, and in the manner set forth and described in the specifications.

Where estimated quantities are included in certain items of the proposal, they are for the purpose of comparing bids. While they are believed to be close approximations, they are not guaranteed, and settlement will be made for such items upon the basis of the work actually executed at the unit prices in the proposal as accepted. In case of error in the extension of prices in a proposal, unit bid prices shall govern.

- G. BIDDER'S QUALIFICATIONS: No proposal will be received from any bidder unless he can present satisfactory evidence that he is skilled in work of similar nature to that covered by the Contract and has sufficient assets to meet all obligations to be incurred in carrying out the work. If required, he shall submit with his proposal, sealed in a separate envelope, a FINANCIAL, EXPERIENCE AND EQUIPMENT STATEMENT, giving reliable information as to working capital available, plant, equipment, and his experience and general qualifications. The Owner may make such investigations as are deemed necessary to determine the ability of the bidder to perform the work and the bidder shall furnish to him all such additional information and data for this purpose as may be requested. The Owner reserves the right to reject any bid if the evidence submitted by the Bidder, or investigation of him fails to satisfy the Owner that such bidder is properly qualified to carry out the obligations of the Contract and to complete the work contemplated therein. Part of the evidence required above shall consist of a list of names and addresses of not less than five (5) firms or corporations for which the bidder has done similar work.

- H. TIME LIMIT: The time allowed for completion of all work under this Contract, shall be AS SHOWN IN THE SPECIAL CONDITIONS OF THIS CONTRACT (the "Time Limit").
- I. COMMENCING WORK: Immediately upon completion of Contractual agreements, the Contractor shall submit to the Engineer for approval a construction schedule arranged to be within the Contract Time Limit. Actual construction operations shall commence **within 10 days from date specified in the Notice to Proceed**.
- J. PERFORMANCE AND PAYMENT BONDS: At the time of entering into the Contract, the Contractor shall give a performance bond and a labor and material payment bond to the Owner for the use of the Owner and all persons doing work or furnishing skill, tools, machinery or materials under or for the purpose of such Contract, conditional for the payment as they become due, of all just claims for such work, tools, machinery, skill and materials, for the completion of the Contract according to its terms, for saving the Owner harmless from all costs and charges that may accrue on account of the doing of the work specified, and for the compliance with the laws appertaining thereto. Performance and Payment Bond shall be AIA Document A312. Said bonds must be a substantial surety company satisfactory to the Owner and authorized by law to do business in the state in which the work is located.
- Attorneys-in-fact who sign bonds must file with each copy thereof a certified and effectively dated copy of their powers of attorney.
- K. DETERMINATION OF LOW BID: The Contract will be awarded, if it is awarded, to the lowest responsible bidder. The Owner, in its sole discretion, will decide which is the lowest responsible bidder.
- L. REJECTION OF BIDS: These proposals are asked in good faith, and awards will be made as soon as practicable, provided satisfactory bids are received. The right is reserved, however, to waive informalities in bidding, to reject any or all proposals, or to accept a bid other than the lowest submitted if such action is deemed to be in the best interest of the Owner.
- M. SOUTH CAROLINA SALES TAX: Bidders shall include in amounts bid in the Proposal an allowance for payment of State Sales Tax on all taxable materials specified to be furnished by the Contractor and incorporated into the Work under this Contract.
- N. REFERENCE SPECIFICATIONS: In order to reduce the bulk of the Specifications, all construction shall be in accordance with the most recent edition of the South Carolina Standard Specifications for Highway Construction in addition to the Standard and Special Provisions included herewith. Should there be any conflicts between the referenced Standard Specifications and the Specifications of this Contract, the latter prevails.

## **BID PROPOSAL**

The undersigned, as bidder, hereby declares that they are the only person or persons interested in the Proposal as principal, and no other party than those herein mentioned has any interest in this Proposal or in the Contract to be entered into; that this Proposal is made without connection with any other person, company or parties making a bid or Proposal; and that is in all respects fair and in good faith without collusion or fraud.

The Bidder further declares that he has examined the site of the Work and informed himself full in regard to all conditions pertaining to the place where the Work is to be done; that he has examined the Specifications for the Work and all contractual documents relative thereto, and has read all Special Conditions and General Conditions furnished prior to the opening of bids; that Bidder is satisfied he has sufficient information regarding the Work to prepare this proposal.

The Bidder proposes and agrees, if this Proposal is accepted, to contract with the City of North Augusta, South Carolina in the form of Contract specified, to furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation and labor necessary, and to complete the construction of the Work in complete accordance with the Specification to the full and entire satisfaction of the Owner with a definite understanding that no money will be allowed for extra work except as set forth in the Specifications.

The Bidder understands that the quantities mentioned below are approximate only and are subject to either increase or decrease and hereby proposes to perform any increased or decreased quantities or work at the Contract unit price and hereby submits the itemized Proposal as follows:

<b>GREENWAY RESURFACING</b>					
<b>SECTION 1: RIVERVIEW PARK TO CYPRESS DRIVE</b>					
<b>ITEM</b>	<b>DESCRIPTION</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT PRICE</b>	<b>TOTAL</b>
1	Mobilization	1	LS		
2	Mix-In-Place, Full-Depth (4"+/-), Incl. Re-grade & Compact Base & Shoulders Flush w/New Pavement	4,000	LF		
3	HMA Surface Course (SCDOT Type D) @ 200 #/SY	550	TON		
4	Root Removal – Contractor to excavate minimum of 18" below milled asphalt and remove any roots found. Backfill with crusher run.		SF		
5	Thermo-Plastic Stop Bar (D1/1)	1	EA		
6	6' Arrow, Straight, Thermo	2	EA		
<b>SECTION 1 SUB-TOTAL:</b>					
<b>SECTION 2: CYPRESS DRIVE TO MARTINTOWN ROAD</b>					
<b>ITEM</b>	<b>DESCRIPTION</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT PRICE</b>	<b>TOTAL</b>
1	Mobilization	1	LS		
2	Mix-In-Place, Full-Depth (4"+/-), Incl. Re-grade & Compact Base & Shoulders Flush w/New Pavement	5,250	LF		
3	HMA Surface Course (SCDOT Type D) @ 200 #/SY	710	TON		
4	Root Removal – Contractor to excavate minimum of 18" below milled asphalt and remove any roots found. Backfill with crusher run.		SF		
5	Thermo-Plastic Stop Bar (D1/1)	1	EA		
<b>SECTION 2 SUB-TOTAL:</b>					
<b>GRAND TOTAL:</b>					



The Bidder declares that he understands the quantities shown, for unit price items, are approximate only and are subject to either an increase or a decrease, and that should the quantities be decreased, the Bidder understands that payment will be made on the basis of actual quantities utilized at the unit price bid. Bidder will make no claim for anticipated profits for any decrease in quantities, and that actual quantities will be determined upon completion of the Work, at which time adjustment will be made to the Contract amount by direct increase or decrease.

**This bid respectfully submitted by:**

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Company

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Business Address

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Name of Bidder

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Title

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Signature of Bidder

**Acknowledgement of the receipt of the following addenda:**

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**NOTICE TO PROCEED**

TO:

PROJECT: 2020 Greenway Resurfacing

You are hereby notified to commence WORK in accordance with the AGREEMENT dated \_\_\_\_\_ and you are to substantially complete the WORK no later than November 30, 2020. Liquidated damages in the amount of \$200 per day will be assessed by the Owner if the work is not completed in this time frame.

You are required to return an acknowledged copy of this NOTICE TO PROCEED to the OWNER.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_  
City of North Augusta  
(Owner)

By: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
Thomas C. Zeaser, P.E.

Title: Director of Engineering & Public Works

**ACCEPTANCE OF NOTICE**

Receipt of the above NOTICE TO PROCEED is hereby acknowledged this the \_\_\_\_\_ day of \_\_\_\_\_, 2020.

By: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print Name)

Title: \_\_\_\_\_

## CONTRACT

THIS AGREEMENT made this Day day of Month, 2020 by and between the City of North Augusta, hereinafter called "OWNER" and an individual doing business as Business Name in the City of City, County of County, and State of State, hereinafter called "CONTRACTOR".

WITNESSETH: that for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the OWNER, the CONTRACTOR hereby agrees with the OWNER to commence and complete the construction described as follows:

### **"2020 Greenway Resurfacing"**

hereinafter called the project, for the sum of:

Contract Amount Dollars (\$Amount) and all extra work in connection herewith, under the terms as stated in the General Conditions of the Contract; and at his own proper cost and expenses to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor insurance and other accessories and services necessary to complete the said project in accordance with the conditions and prices stated in the Proposal, the General Conditions, Plans, Specifications and Contract Documents therefore prepared by the City of North Augusta Engineering Division, herein entitled by the Engineer, all of which are made a part hereof and collectively evidence and constitute the contract.

The CONTRACTOR hereby agrees to complete the project within the time limit specified in the Special Conditions section of this document.

The OWNER agrees to pay the CONTRACTOR in current funds for the performance of the Contract, and to make payments on account therefore as provided in paragraph L, "Payments to Contractor", of the General Conditions.

IN WITNESS WHEREOF, the parties to this presents have executed this Contract in four (4) counterparts, each of which shall be deemed an original, in the year and day first above mentioned.

ATTEST:

\_\_\_\_\_  
\_\_\_\_\_

OWNER  
By:

\_\_\_\_\_

Title: Director of Engineering & Public Works

Date: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
\_\_\_\_\_

CONTRACTOR  
By:

\_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## GENERAL CONDITIONS

- A. GENERAL: The CONTRACTOR shall comply with all laws, ordinances, rules, orders and regulations relating to the performance of the work and protection of adjacent property.
- B. PERMITS AND LICENCES: The CONTRACTOR shall secure and pay for all permits, licenses and approvals necessary for the execution of this contract. The CONTRACTOR and all SUBCONTRACTORS must possess a current **North Augusta City Business License**. No Aiken County nor City of North Augusta building permits will be required, however.
- C. CONTRACTOR'S INSURANCE: The CONTRACTOR shall comply with all Federal, State and local laws governing compensation insurance and shall procure and maintain adequate public liability and property damage insurance, and shall protect the OWNER from any and all claims resulting in the execution of this contract. Bodily injury and automotive property damage insurance in the amount of \$500,000 to any one person and subject to the same limit for each person, in an amount of not less than \$1,000,000 on account of one accident must be maintained. Property damage in an amount not less than \$500,000 for any one-damage claim, and in an aggregate amount, not less than \$1,000,000 during a period of twelve (12) months must be maintained.
- D. INDEMNITY: The CONTRACTOR shall indemnify and save harmless the OWNER from and against all losses and claims, demands, payments, suits, actions, recoveries and judgments of every nature and description made, brought, or recovered against the OWNER by reason of any act or omission of the CONTRACTOR, his agents or employees, in the execution of the work or in guarding the same.
- E. CONTRACTOR'S BREAKDOWN OF LUMP SUM PAYMENT: The contractor shall, immediately after the contract has been awarded, submit to the Engineer for his approval, a breakdown showing estimates of all costs apportioned to the major elements of equipment, material and labor comprising the total work included under any of the lump sum items shown in the proposal. These estimates, approved, will serve as a basis for estimating payments due on all partial estimates.
- F. SUBCONTRACTING:
- a. Contractor may utilize the services of specialty subcontractors on those parts of the work which, under normal contracting practices, are performed by specialty subcontractors. Prior to beginning any work or prior to award of contract, if requested, Contractor shall submit for approval the name of each specialty subcontractor whose bids were used in the preparation of his proposal and whose services are intended to be employed for the contract work.

- b. Contractor shall not award any work to any subcontractor without prior written approval of the Engineer, which approval will not be given until Contractor submits to the Engineer a written statement concerning the proposed award to the subcontractor, which statement shall contain such information as the Engineer may require.
  - c. Contractor shall be as fully responsible to the Owner for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.
  - d. Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the Contractor by the terms of the General Conditions and other Contract Documents insofar as applicable to the work of the subcontractors and to give the Contractor the same power as regard terminating any subcontract that the Owner may exercise over the Contractor under any provision of the Contract Documents.
  - e. Nothing contained in this contract shall create any contractual relation between any subcontractor and the Owner.
- G. UTILITY COMPANIES: The CONTRACTOR shall cooperate with the OWNER and all other utility companies during the course of this contract and is responsible for the locating of any and all utilities prior to construction.
- H. EXTRA WORK: Without invalidating the contract, the OWNER may order extra work or make changes by altering, adding to or deduction from the work and the contract sum will be adjusted accordingly. No claims for extra work or materials shall be allowed unless the work is ordered in writing by the Engineer acting officially for the OWNER, and the price is stated in such order.
- I. CORRECTION OF WORK: The CONTRACTOR shall remove, at his own expense, all work or materials condemned by the Engineer, and shall rebuild and replace same without extra charge.
- J. ENGINEER'S AUTHORITY: The Engineer in acting as the OWNER'S agent shall give all orders and directions contemplated under this contract and specifications relative to the execution of the work. The Engineer shall determine the amount, quality, acceptability and fitness of the several kinds of work and materials, which are to be paid for under this contract and shall decide all questions which may arise in relation to said work and the construction thereof. The Engineer's estimates and decisions shall be final and conclusive. The Engineer shall decide all questions that may arise as to the interpretation of the plans and specifications relating to the work.

- K. CLEANING UP: The CONTRACTOR shall remove from the site, at his own expense, all temporary structures, rubbish and waste materials resulting from his operation. Suitable waste material may be placed on site as directed by the Engineer.
- L. PAYMENTS TO THE CONTRACTOR:
1. Monthly Estimates and Payments:
    - a. The CONTRACTOR shall submit to the Engineer on the first (1st) day of each month an approved estimate of the work performed during the preceding month under this contract. Monthly estimates shall be prepared in quadruplicate in a form approved by the Engineer.
    - b. The OWNER shall make monthly payments to the CONTRACTOR not later than the fifteenth (15th) day of each month in which an estimate is submitted. Each such payment shall be for an amount equal to 90% of the approved monthly estimate. To insure the proper performance of this contract, the OWNER shall retain 10% of the amount of each estimate until final completion and acceptance of all work by this contract.
  2. Final Estimate and Payment: The CONTRACTOR shall submit an approved final estimate to the Engineer when the work is completed. Final complete payment shall be made to the CONTRACTOR not later than 15 days after formal acceptance of the completed project by the Engineer.
- M. GENERAL GUARANTY: The CONTRACTOR shall remedy any defects in the work and pay for any damage to other work resulting there from, which shall appear within a period of one (1) year from the date of final acceptance of the work. The Contractor shall supply to the City of North Augusta, a suitable one (1) year's written guaranty.
- N. BONDS: Both bid and performance bonds are required on the project.
- O. ACCEPTANCE OF BIDS: The City of North Augusta reserves the right to accept or reject any or all bids and to waive any bidding formalities.
- P. SITE EXAMINATIONS: The Bidder is required to fully examine the work location to fully acquaint himself with the conditions prior to bid time. All bid prices are to accurately reflect this site examination.

## SPECIAL CONDITIONS

- A. TIME FOR COMPLETION: The work which the Contractor is required to perform under this contract shall be commenced at the time stipulated by the Owner in the Notice to Proceed to the Contractor and shall be fully completed not later than November 30, 2020.
- B. LIQUIDATED DAMAGES: The Contractor shall pay to the Owner as liquidated damages the sum of \$200.00 (dollars) for each calendar day that the Contractor shall be in default of completing the work.
- C. AVAILABILITY OF CONTRACTOR: The Contractor shall insure that an employee in a reasonable position with the company will be available to the Owner 24 hours per day, including weekends, holidays and during extended shutdown periods. Prior to beginning construction, the Contractor shall furnish the Owner a list of such persons, including names, addresses and telephone numbers. The purpose of this requirement is to enable the Owner to contact the contractor in case of emergencies or other problems that may arise during non-working hours.
- D. LOCAL CODES: All work under this contract shall be done between 6:00 a.m. and 6:00 p.m., Monday through Saturday, unless otherwise approved in writing by the Owner.
- E. CONTRACT DOCUMENTS AND DRAWINGS: The Owner will furnish the Contractor without charge two (2) copies of the Contract Documents, including Technical Specifications and Drawings. Additional copies requested by the Contractor will be furnished at cost.
- F. ORDER AND DISCIPLINE: The Contractor shall at all times enforce strict discipline and good among his employees. Any employees of the Contractor who shall appear to be incompetent, disorderly, intemperate or in any other way disqualified for or unfaithful to work entrusted to him, shall be discharged immediately on the request of the Engineer, and he shall not again be employed on the work without the Engineers written consent.
- G. CLEANING UP: The Contractor shall keep the premises free from the accumulation of waste material and rubbish and upon completion of the work, prior to the final acceptance of the completed project by the Owner, he shall remove from the premises all rubbish, surplus materials, implements, tools, etc., and leave his work in a clean condition, satisfactory to the Engineer.
- I. WATER SUPPLY: The Owner will furnish all water necessary for construction operations. All water must be drawn through a meter device provided by the City upon deposit of \$200 at the City's Utility Billing Office.



- J. SCHEDULE: A *detailed schedule shall be submitted to the Engineer prior to the beginning of work on this contract*. The schedule shall include at a minimum the anticipated start date, the order of paving, the time frame for each roadway, and any other items associated with this project.

## ASPHALT RESURFACING

A. GENERAL: The tack coat and hot laid asphaltic concrete surface course shall be constructed in conformance with these specifications.

1. Weather Limitations: Bituminous mixtures shall not be produced or placed during rainy weather, when the subgrade or base course is frozen or shows any evidence of excess moisture, when the moisture on the surface to be paved would prevent proper bond, or when the air temperature is less than 40°F. in the shade away from artificial heat.
2. Conditioning of Existing Surface: The existing surface shall be thoroughly swept and scraped clean and free from dust and foreign material and maintained until the asphalt mixture is superimposed.

B. SURFACE COURSE:

1. Asphalt Concrete: The asphalt concrete mixture shall be composed of mineral aggregate and asphalt cement, mixed in an approved plant and shall conform to SCDOT Standard Specifications for Highway Construction for Type D hot mix asphalt concrete surface course. The job mix shall be approved by the Engineer prior to installation.
2. Transportation and Delivery: The mixture shall be transported from the mixing plant to the point of use in approved vehicles. Loads shall not be of such size or weight as to interfere with the efficient operation of the spreader. Loads shall not be sent out so late in the day as to prevent the completion of spreading and completion of the mixture during daylight, unless artificial light is provided. The mixture shall be delivered at a temperature between 250° and 325°F. and within 20°F. of the temperature set at the mixing plant.
3. Spreading: Upon arrival at the point of dumping, the mixture shall be dumped into the spreader and immediately spread true to line, grade and cross section specified and to the loose depth that will secure the specified application rate of finished compacted material. The hot mixture shall be free from lumps and shall be spread while it is in a workable condition.

After the mixture has been spread and before roller compaction is started, the surface shall be checked, all fat spots and irregular areas removed and replaced with satisfactory material. All irregularities in alignment and grade along the outside edge shall also be corrected by the addition or removal of mixture before the edge is rolled.

4. Compaction: While the mixture is hot, it shall be compacted thoroughly and uniformly by rolling. The surface of the compacted mixture shall be

smooth, and true to crown and grade. Any mixture that becomes loose or broken, mixed with dirt or is in any way defective, shall be removed and replaced with fresh hot mixture which shall be immediately compacted to conform to the surrounding area. Any area showing an excess of bituminous materials shall be removed and replaced, and the edges shall be kept to a reasonable straight line and trimmed.

5. Protection of Pavement: The newly finished pavement shall be protected from vehicular traffic of any kind until the pavement has cooled and hardened and in no case less than 6 hours.
  6. Tolerances: The finished surface shall not vary more than 1/8 inch in 10 feet from the true profile and cross section.
  7. Tests: The above work will be subject to thickness and compaction tests as deemed necessary by the Engineer. Such tests will be at the expense of the Contractor.
- C. PROTECTION OF EXISTING IMPROVEMENTS: The contractor shall be responsible for locating all services and utilities of any description and for notifying and coordinating with the appropriate utility companies of work to be performed within the limits of the right-of-way, easement or construction limits. If damaged, the contractor shall bear the cost of repair. This shall include all lines and/or structures.
- D. RESTORATION OF PROPERTY: The Contractor shall restore all property defaced or damaged by operations or acts of any of his agents, employees, or subcontractors. Such restoration shall include seeding, sodding, and transplanting of lawns, hedges, ornamental plantings, and repair or replacement of driveways, walks, fences, steps, or other facilities which are not shown as a unit price item and shall be in like quantity to the original undisturbed work.

## **COLD MILLING/PROFILING ASPHALT PAVEMENT**

- A. **GENERAL**: Cold milling asphalt pavement is the process of removing existing pavement from the roadway to the lines and dimensions shown on the plans or as specified herein. The material produced as a result of cold milling shall be defined as Reclaimed Asphalt Pavement (RAP).

The Contractor shall furnish all materials, equipment and labor necessary to mill/profile existing asphaltic surfaces, roadway preparations and shall consist of one or more passes of milling/profiling existing asphaltic surfaces and roadway preparations in accordance with these specifications and good construction practice.

- B. **MATERIALS**: Applicable Sections

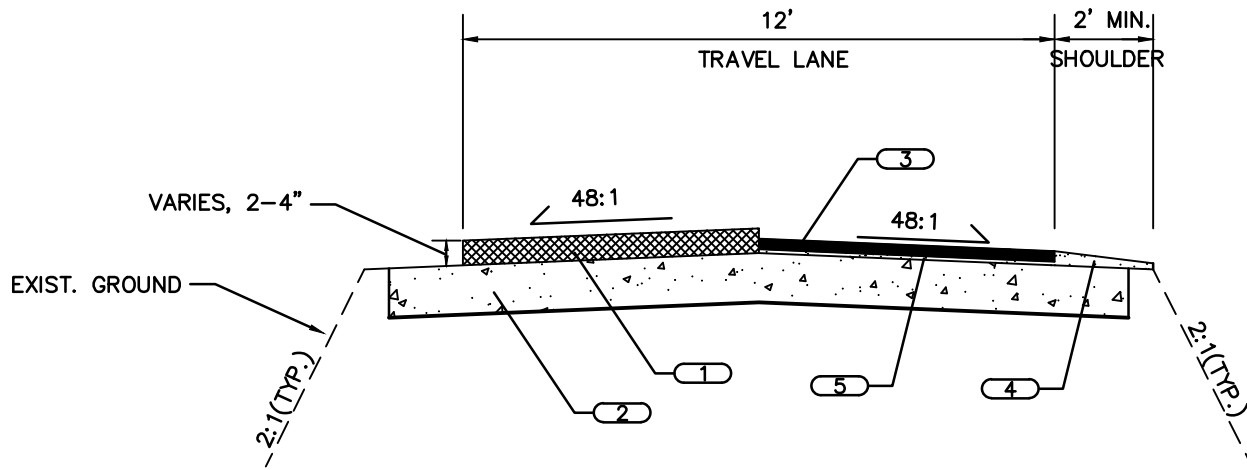
- C. **EXECUTION**: Milling/profiling existing asphaltic surface and roadway preparation shall consist of one or more passes of milling/profiling existing asphaltic surface and roadway preparations in accordance with the Specifications and good construction practice and in addition shall meet the following requirements:






1. Milling/profiling existing asphaltic surface in reasonably close conformity with the grade of profile established by the Engineer.
  - a. The planed surface shall be free from gouges, ridges, sooting, oil film and other imperfections of workmanship and shall have a mosaic appearance suitable as a riding surface.
  - b. The milling/profiling shall incorporate a machine capable of cutting at least two inches deep inflexible pavement while leaving a uniformly cut and drivable roadway surface capable of handling traffic prior to placement of the overlay. The machine must be capable of the following:
    - 1) Ground speed shall be independent of cutter speed.
    - 2) Self-contained water system for control of dust and fine particles.
    - 3) Shall be capable of working in wet and dry conditions down to 32 degrees Fahrenheit.
    - 4) Width shall be such to allow controlled traffic.
2. Road and adjacent area to be cleaned daily of all rubbish, trash and debris.

3. Milled streets to be resurfaced within five (5) consecutive calendar days of milling/profiling operation, unless otherwise directed by the Engineer.
4. Milling/profiling must be completed as close to utility castings as possible, with remaining asphaltic surface to be removed by appropriate equipment or cut out by conventional methods.
5. The milling/profiling work shall be performed with a pavement milling machine of a type that has operated successfully on a considerable mileage of work comparable to that proposed to be performed under this contract.
6. Milling/profiling width and depth will be varied by Engineer's representative to accomplish desired results.


D. MEASUREMENT AND PAYMENT: Cost of all materials, labor and equipment as well as incidental expenses shall be included in the unit price for milling/profiling, roadway preparations and shall be measured and paid for as follows:

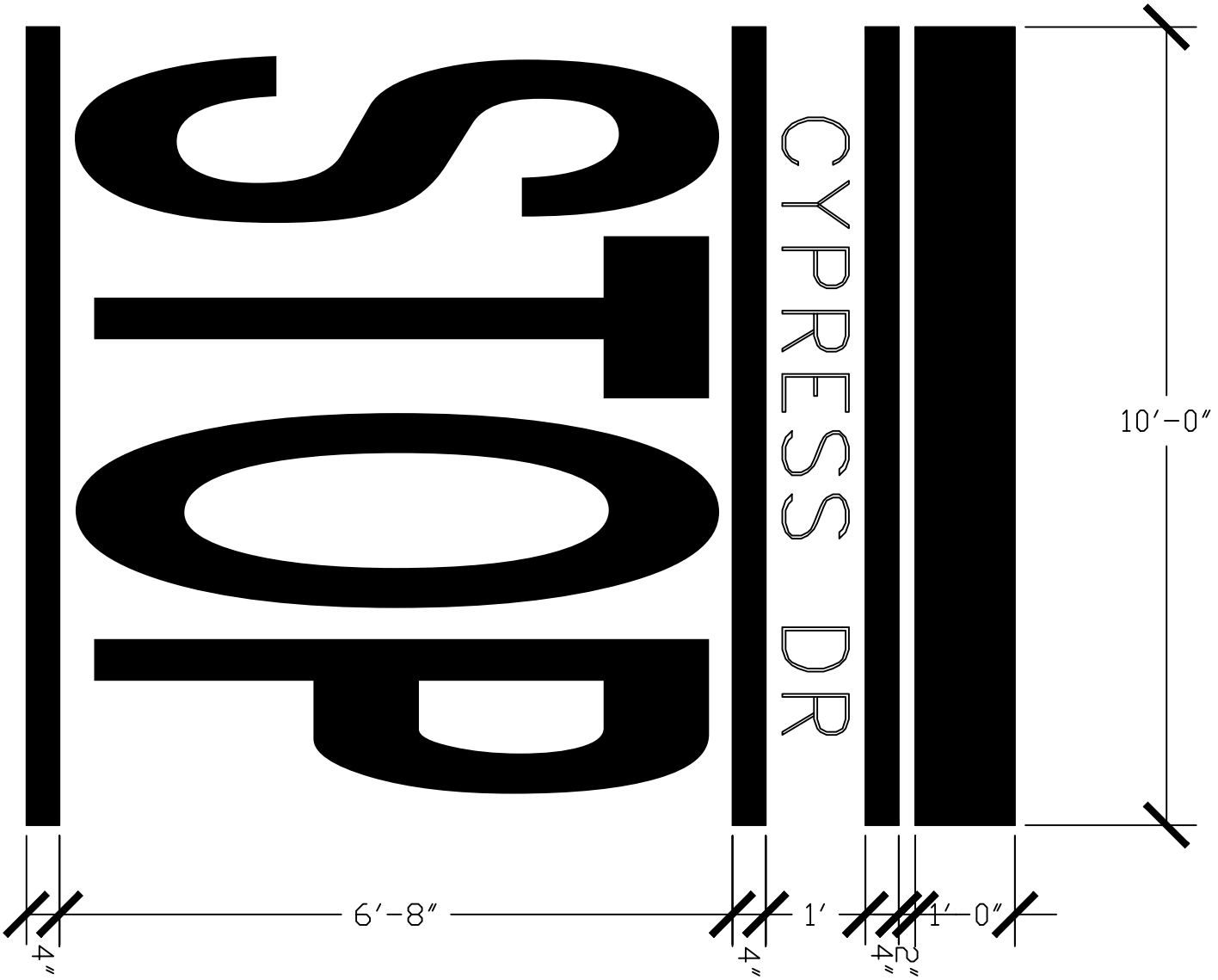
1. Milling/profiling will be measured in square yards of pavement surface yards for the depth specified in the unit price table of the bid proposal.
2. Asphalt Concrete Patching roadway preparation, which results from milling/profiling operations, will be measured and paid in square yards of completed-in-place.



- |   |  |
|---|--|
| <p>1        EXIST. PAVEMENT</p> <p>2        EXIST. GABC</p> | <p>3        200 psy HMA SURFACE (SCDOT TYPE "D")</p> <p>4        VAR. DEPTH SHOULDER BACKFILL USING RECLAIMED ASPHALT (LEVEL W/NEW SURFACE)</p> <p>5        INCORPORATE EXCESS RECLAIMED ASPHALT INTO EXIST. BASE, GRADE/COMPACT</p> |
|---|--|

## GREENEWAY TYPICAL SECTION

	REVISION		REFERENCE
	6/26/20		N.T.S.
DATE	SCALE		
PROJECT NAME	2020 GREENEWAY RESURFACING		
<p>The City of North Augusta          ENGINEERING DEPARTMENT          P.O. BOX 6400 100 GEORGIA AVENUE          NORTH AUGUSTA, S.C. 29861          (803) 441-6223</p>			
			



PAVEMENT MARKING DETAIL

NOT TO SCALE

NOTES:

THIS DETAIL TO BE USED AT THE CROSSING AT "CYPRESS DRIVE"

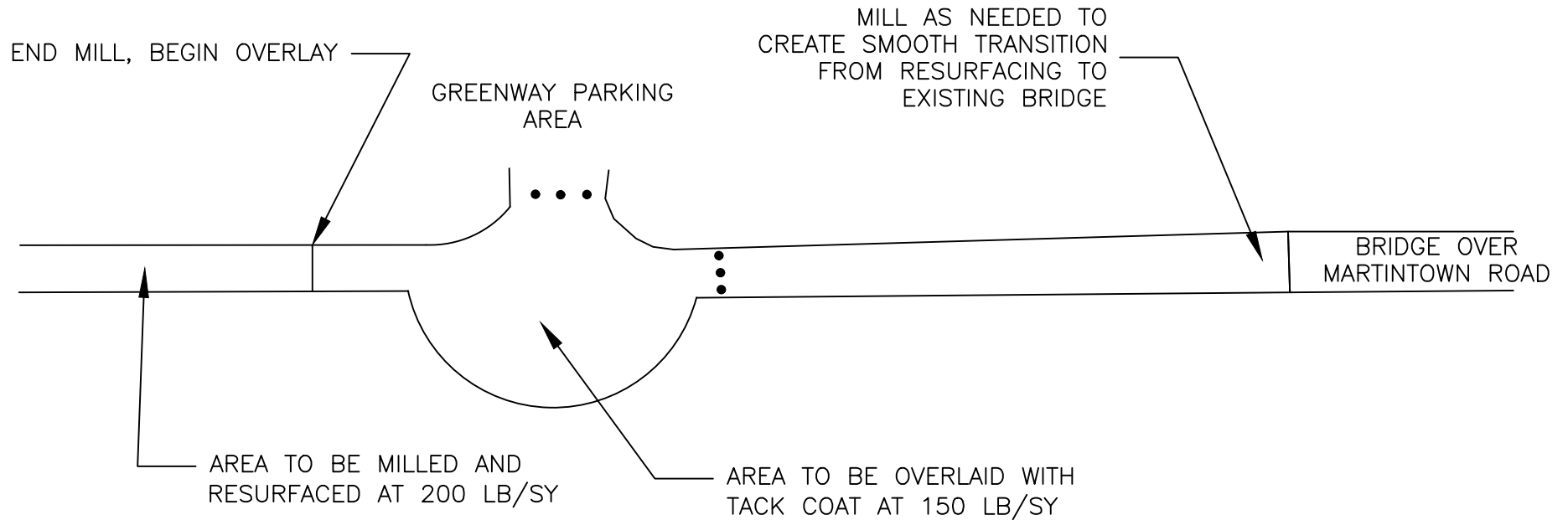


REVISIONS		
DATE	BY	DESCRIPTION

PREPARED BY:  
**The City of North Augusta**  
 • ENGINEERING DEPARTMENT •

P.O. BOX 6400 400 E. BUENA VISTA AVENUE  
 NORTH AUGUSTA S.C. 29861  
 (803) 441-4223

**GREENWAY  
 RESURFACING  
 STOP  
 MARKING  
 DETAIL**



REVISIONS		
DATE	BY	DESCRIPTION
7/28/20	BGM	CREATED DETAIL

*PREPARED BY:*

**The City of North Augusta**

• ENGINEERING DEPARTMENT •

P.O. BOX 6400 400 E. BUENA VISTA AVENUE  
NORTH AUGUSTA S.C. 29861  
(803) 441-4223

**GREENWAY  
RESURFACING  
MARTINTOWN  
ROAD BRIDGE  
AREA DETAIL**