



Request for Proposals # **274-TM-2-26**

Title: **Asphalt Rejuvenation Service**

Issue Date: **March 25, 2026**

Due Date: **April 22, 2026**
not later than 2:00 PM

Issuing Department: **Transportation**
Street Maintenance Division

Direct all inquiries concerning this RFP to:

Daniel Callahan

Procurement Analyst

Email: daniel.callahan@raleighnc.gov

****LATE PROPOSALS WILL NOT BE ACCEPTED****

Table of Contents

1. Introduction	3
1.1 Purpose.....	3
1.2 Background	3
1.3 RFP Timeline	4
1.4 Pre-Proposal Conference	4
1.5 Proposal Question.....	5
1.6 Proposal Submission Requirements & Contact Information	5
1.7 Business Engagement & Opportunities	6
1.8 Rights to Submitted Material	6
1.9 Communications.....	7
1.10 Lobbying	7
1.11 Conflicts of Interest.....	7
1.12 Proposer Expenses	8
1.13 Proposer Acceptance	8
2. Proposals	10
2.1 Request for Proposals Required Document Format.....	10
2.2 RFP Documents	13
3. Proposal Evaluation	13
3.1 Proposal Evaluation Criteria (Stage 1)	13
3.2 Interview/Demonstration (Stage 2).....	14
3.3 Final Selection	14
3.4 Notice to Proposers Regarding RFP Terms & Conditions.....	15
3.5 Contract Terms	15
4. Scope of Services	15
Appendix I – Proposal Cost Form	29
Appendix II – Proposer Questionnaire	30
Appendix III – Reference Questionnaire (Instructions)	31
Appendix III – Reference Questionnaire Form	32
Appendix IV – Contract Standard Terms & Conditions	34
Appendix V – Street Lists for Bid Alternates	42

1 Introduction

1.1 Purpose

The City of Raleigh (COR) is soliciting proposals from one or more firm(s) with which to contract for the following services:

The City of Raleigh Department of Transportation/Field Services proposes to contract services for the application of an asphalt rejuvenating agent to asphaltic concrete surfaces throughout the City of Raleigh. The successful proposer shall provide all labor, materials and equipment necessary to perform the work required for the rejuvenating services and shall provide a proposal for Maltene Asphalt Rejuvenator with Photocatalytic Titanium Dioxide in accordance with attached treatment list.

A detailed scope of services is provided in Section 4 of this solicitation.

All information related to this solicitation, including any addenda, will be posted to the North Carolina Electronic Vendor Portal at: <https://evp.nc.gov/>.

All questions related to this solicitation must be submitted in writing (via email) to the following individual:

Contact Name	Email Address/Phone
Daniel Callahan	Daniel.Callahan@raleighnc.gov 919-996-2354

1.2 Background

The City of Raleigh, the Capital City of North Carolina, remains one of the fastest growing areas in the country. A great economy, top educational institutions, and exceptional health care facilities are some of the characteristics that attract people to the triangle area. The mild climate, diverse work force and proximity to Research Triangle Park combine to make Raleigh a great place to live.

Raleigh is a 21st Century City of Innovation focusing on environmental, cultural, and economic sustainability. The City conserves and protects our environmental resources through best practice and cutting-edge conservation and stewardship, land use, infrastructure and building technologies. The City welcomes growth and diversity through policies and programs that will protect and enhance Raleigh's existing neighborhoods, natural amenities, history, and cultural and human resources for future generations. The City leads to improve quality of life for neighborhoods and standard of living for all citizens. The City works with universities, colleges, citizens, and local partners to promote new technology, create new job

opportunities, and encourage local businesses and entrepreneurs. The City enlists and prepares 21st Century staff with the skill sets to carry out the duties of the City through transparent civic engagement and by providing the very best customer service to our citizens.

The City of Raleigh Department of Transportation maintains an array of asphalt surfaced streets across our Capital city. The department continues to rejuvenate our streets as part of our greater citywide pavement preservation program. Rejuvenation also provides a unique opportunity to applicate city streets with products that reduce urban heat island and abate the harmful effects of pollution.

1.3 **Request for Proposal (RFP) Timeline**

Provided below is a list of the anticipated schedule of events related to this solicitation. The City of Raleigh reserves the right to modify and/or adjust the following schedule to meet the needs of the service. All times shown are Eastern Time (ET):

RFP Process	Date and Time
RFP Advertisement Date	<i>March 25, 2026</i>
Pre-Proposal Conference (if required)	<i>April 1, 2026 virtual at 11:00am</i>
Deadline for Written Questions	<i>April 8, 2026 by 5:00pm</i>
City Response to Questions (anticipated)	<i>April 13, 2026 by 5:00pm</i>
Proposal Due Date and Time	<i>April 22, 2026 by 2:00pm</i>
Evaluation Meeting (anticipated)	<i>Week of April 20, 2026</i>
Interviews (if required)	<i>Scheduled as Needed week of April 20, 2026</i>
Selection Announced (tentative)	<i>May 5, 2026 City Council Meeting (Consent Agenda)</i>

1.4 **Pre-Proposal Conference**

If the City of Raleigh elects to conduct a Pre-Proposal Conference or Site Visit, attendance by prospective proposers is mandatory. Prospective Proposers are

encouraged to submit written questions in advance. Date, time, and location of pre-proposal conference is shown above in Section 1.3, entitled RFP Timeline.

Contact James Simmons at james.simmons@raleighnc.gov for a virtual invitation to the pre-proposal meeting.

1.5 **Proposal Question**

It is the Proposer's responsibility to ensure that all addenda have been reviewed and considered in the preparation of its proposal. Requests for clarification and questions to this RFP must be received by the City not later than the date shown above in Section 1.3, entitled "RFP Timeline" for the submittal of written inquires. The firm's failure to request clarification and submit questions by the date in the RFP Timeline above shall be considered to constitute the firm's acceptance of all City's terms and conditions and requirements. The City shall issue addenda reflecting questions and answers to this RFP, if any, and shall be posted to North Carolina Electronic Vendor Portal (eVP). No information, instruction or advice provided orally or informally by any City personnel, whether made in response to a question or otherwise in connection with this RFP, shall be considered authoritative or binding. Respondents shall be entitled to rely *only* on written material contained in an Addendum to this RFP.

It is important that all Respondents submitting to this RFP periodically check the North Carolina Electronic Vendor Portal (eVP) for any Addenda. It is the Respondents' responsibility to ensure that all addenda have been reviewed and, if required signed and returned.

All questions related to this solicitation must be submitted in writing (via email) to the following individual:

Contact Name	Email Address
Daniel Callahan	daniel.callahan@raleighnc.gov

Questions submitted via telephone will not be answered.

1.6 **Proposal Submission Requirements and Contact Information**

Proposals must follow the format as defined in Section 2 PROPOSALS, and be addressed and submitted as follows:

<u>DELIVERY ADDRESS BY US POSTAL SERVICE OR OTHER DELIVERY SERVICES</u>
City of Raleigh ATTN: Daniel Callahan 2550 Operations Way Suite 223 Raleigh, NC 27604 RFP No. & Title 274-TM-2-26

Proposals must be enclosed in an envelope or package and clearly marked with the name of the submitting company, the *RFP number* and the *RFP Title*.

Proposers must submit:

- A. one (1) signed original;
- B. one (1) electronic version of the signed proposal and;
- C. Four (4) copies of proposal.

The electronic version of the Proposal must be submitted as a viewable and printable Adobe Portable Document File (PDF) on a Flash Drive. Both hard copy and electronic versions must be received by the City on or before the RFP due date and time provided in Section 1.3. Proposals received after the RFP due date and time will not be considered and will be returned unopened to the return address on the submission envelope or package.

Proposers must respond to the entire Request for Proposals (RFP). Any incomplete proposal may be eliminated from competition at the discretion of the City of Raleigh. The City reserves the right to reject any or all proposals for any reason and to waive any informality it deems in its best interest.

Proposals that arrive after the due date and time will not be accepted or considered for any reason whatsoever. If the firm elects to mail in its response, the firm must allow sufficient time to ensure the City's proper receipt of the package by the time specified in the RFP Timeline (Section 1.3). Regardless of the delivery method, it is the responsibility of the firm to ensure that their proposal arrives at the designated location specified in this Section by the due date and time specified in the RFP Timeline (Section 1.3).

1.7 Business Engagement & Opportunities

The City of Raleigh maintains processes to conduct business with all business enterprises, including small, emerging, growing, under-capitalized, and under-resourced firms or organizations.

1.8 Rights to Submitted Material

All proposals and supporting materials, as well as correspondence relating to this RFP, shall become the property of the City. The content of all submittals will be held confidential until the selection of the firm is made. Proposals will be reviewed by the Evaluation Team, as well as other City staff and members of the general public who submit public record requests. ***Any proprietary data must be clearly marked.*** In submitting a Proposal, each Prospective Proposer agrees that the City may reveal any trade secret materials contained in such response to all City staff and City officials involved in the selection process and to any outside consultant or other third party who serves on the Evaluation Team or who is hired by the City to assist in the selection process.

The City reserves the right to retain all proposals submitted and to use any ideas in a proposal regardless of whether that proposal is selected. Submission of a proposal

indicates acceptance by the Proposer of the conditions contained in this Request for Proposal.

Proposals marked entirely as “confidential”, “proprietary”, or “trade secret” will be considered non-responsive and will be removed from the evaluation process.

1.9 Communications

All communications of any nature regarding this RFP with any City staff, elected City officials, evaluation committee members, are strictly forbidden from the time the solicitation is publicly posted until award. Questions must be submitted in writing to the individual designated in Section 1.1. prior to the deadline provided in Section 1.3. Violation of this provision may result in the firm’s proposal being removed from consideration.

1.10 Lobbying

By responding to this solicitation, the firm certifies that is has not and will not pay any person or firm to influence or attempt to influence an officer or employee of the City or the State of North Carolina, or any elected official in connection with obtaining a contract as a result of this RFP.

1.11 Conflicts of Interest

City of Raleigh contracts are controlled by three conflict of interest provisions.

First, federal procurement standards are provided in 2 CFR 200.318 (c)(1),

“No employee, officer, or agent may participate in the selection, award, or administration of a contract supported by a Federal award if he or she has a real or apparent conflict of interest. Such a conflict of interest would arise when the employee, officer, or agent, any member of his or her immediate family, his or her partner, or a firm which employs or is about to employ any of the parties indicated herein, has a financial or other interest in or a tangible personal benefit from a firm considered for a contract. The officers, employees, and agents of the non-Federal entity may neither solicit nor accept gratuities, favors, or anything of monetary value from contractors or parties to subcontracts.”

Similarly, the North Carolina General Statutes provides a *criminal* statute for conflicts of interest in public contracting. N.C.G.S. § 14-234(a):

“(1) No public officer or employee who is involved in making or administering a contract on behalf of a public agency may derive a direct benefit from the contract except as provided in this section, or as otherwise allowed by law. (2) A public officer or employee who will derive a direct benefit from a contract with the public agency he or she serves, but who is not involved in making or administering the contract, shall not attempt to influence any other person who is involved in making or administering the contract. (3) No public officer or employee may solicit or receive any gift, favor, reward, service, or promise of reward, including a promise of future employment, in exchange for recommending, influencing, or attempting to influence the award of a contract by the public agency he or she serves.”

City of Raleigh Charter Section 3.9 regulates private transactions between the City and its officials and employees. The Charter states:

No member of the City Council, official, or employee of the City of Raleigh shall be financially interested, or have any personal beneficial interest, either directly or indirectly, as agent, representative, or otherwise, in the purchase of, or contract for, or in furnishing any materials, equipment or supplies to the City of Raleigh, nor shall any official or employee of the City of Raleigh accept or receive, or agree to accept or receive, directly or indirectly, from any person, firm or corporation to whom any contract may be awarded or from whom any materials, equipment or supplies may be purchased by the City of Raleigh, by rebate, gift, or otherwise, any money or anything of value whatsoever, or any promise, obligation or contract for future reward or compensation, for recommending or procuring the uses of any such materials, equipment or supplies by the City of Raleigh; no member of the City Council, official or employee of the City of Raleigh shall for his own personal benefit operate, directly or indirectly, any concession in any building or on any lands of the City of Raleigh, nor shall any official or employee of the City of Raleigh bid for or be awarded any contract granting concessionary rights of any nature or kind from the City of Raleigh; it shall be unlawful for any member of the City Council, official or employee of the City of Raleigh to bid for or to purchase or to contract to purchase from the City of Raleigh any real estate, equipment, materials, or supplies of any nature or kind whatsoever, either directly or indirectly, at either public or private sale, either singly, or through or jointly with any other person.

1.12 Proposer Expenses

The City of Raleigh will not be responsible for any expenses incurred by any Proposer in the development of a response to this Request for Proposal or any other activities associated with this procurement including but not limited to any onsite (or otherwise) interviews and/or presentations, and/or supplemental information provided, submitted, or given to City of Raleigh and/or its representatives. Further, the City of Raleigh shall reserve the right to cancel the work described herein prior to issuance and acceptance of any contractual agreement/purchase order by the recommended Proposer even if the awarding authority for each entity has formally accepted a recommendation.

1.13 Proposer Acceptance

Submission of any proposal indicates a Proposer's acceptance of the conditions contained in this RFP unless clearly and specifically noted otherwise on Appendix VI Exceptions to RFP and submitted with proposal. Furthermore, the City of Raleigh is not bound to accept a proposal on the basis of lowest price, and further, the City of Raleigh has the sole discretion and reserves the right to cancel this RFP, and to reject any and all proposals, to waive any and all informalities and/or irregularities and reserves the right to re-advertise this RFP with either the identical or revised scope and specifications if it is deemed to be in the best interests of the City of Raleigh to do so. The City of Raleigh reserves the right to accept or reject any or all of the items in the proposal, and to award the contract in whole or in part

and/or negotiate any or all items with individual Proposers if it is deemed in the best interest of the City of Raleigh to do so. Moreover, the City of Raleigh reserves the right to make no selection if proposals are deemed to be outside the fiscal constraint or not in the best interest of the City of Raleigh.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

2 PROPOSALS

Submitted proposals must follow the format outlined below. The City may reject as non-responsive at its sole discretion any proposal that does not provide complete and/or adequate responses or departs in any substantial way from the required format.

2.1 Request for Proposals Required Document Format

Proposals should be on 8-1/2" x 11" (A4-sized) paper, printed on both sides, bound with only removable clips or staples (no 3-ring binders), and divided into sections using tabs to easily identify and separate each section as follows:

2.1.1 Section/Tab 1: Cover Letter

Provide an introduction letter summarizing the unique proposal of your firm to meet the needs of this service requirement. This letter should be presented on the firm's official letterhead and signed by an authorized representative who has the authority to enter into a contract with the City on behalf of the firm. Additionally, include the name, address, telephone and email address of the individual who serves as the point of contact for this solicitation.

2.1.2 Section/Tab 2: Corporate Background and Experience

Include background information on the firm and provide detailed information regarding the firm's experience with similar projects. Provide a list of all similar contracts performed in the past five (5) number of years, accompanied by at least three (3) references (contact person, firm, telephone number and email address).

Include the total amount invoiced for each listed project, the length of the project, and list of those involved in the project who are also proposed for the subject project named in this solicitation. Failure to provide a list of all similar contracts in the specified period may result in the rejection of the firm's proposal. The evaluation team reserves the right to contact any or all listed references, and to contact other public entities regarding past performance on similar projects.

2.1.3 Section/Tab 3: Financial Information

Review and provide one of the following three (3) financial statement options:

1. Recent audited or reviewed financial statements prepared by an independent certified public accountant (CPA) that shall include, at a minimum, a balance sheet, income statement (i.e., profit/loss statement)

and cash flow statement **and**, if the audited or reviewed financial statements were prepared more than six (6) months prior to the issuance of this RFP, the Proposer shall submit its most recent internal financial statements (balance sheet, income statement and cash flow statement or budget with entries reflecting revenues and expenditures from the date of the audited or reviewed financial statements to the end of the most recent financial reporting period (i.e., the quarter or month preceding the issuance date of this RFP)).

OR

2. Recent compiled financial statements prepared by an independent CPA that shall include, at a minimum, a balance sheet, income statement (i.e., profit/loss statement) and cash flow statement **and**, if the compiled financial statements were prepared more than three (3) months prior to the issuance of this RFP, the Proposer shall submit its most recent internal financial statements (balance sheet, income statement and cash flow statement or budget with entries reflecting revenues and expenditures to date), and other evidence of financial stability such as most recently filed income tax return, evidence of a line of credit/loans/other type of financing with statement of amount in use/outstanding balance (e.g., a complete copy commitment letter, loan agreement, billing statement reflecting the line of credit or statement from lender acknowledging the commitment to fund the Proposer's stated financing), personal guaranty with copies of personal income tax filing and statement of net worth or such other evidence that is accurate, reliable and trustworthy regarding the Proposer's financial stability.

OR

3. Include a certified, signed statement from a licensed CPA regularly engaged in the review of the firm's financial information verifying the financial viability of the firm.

All financial information, statements and/or documents provided in response to this solicitation shall be kept confidential provided that EACH PAGE is marked as follows: "CONFIDENTIAL – DO NOT DISCLOSE EXCEPT FOR THE EXPRESS PURPOSE OF PROPOSAL EVALUATION. "

"Recent" shall be defined as financial statements that were prepared within the 12 months preceding the issuance date of this RFP.

Consolidated financial statements of the Proposer's parent or related corporation/business entity shall not be considered, unless: (1) the Proposer's actual financial performance for the designated period is separately identified in and/or attached to the consolidated statements,

(2) the parent or related corporation/business entity provides the State with a document wherein the parent or related corporation/business entity will be financially responsible for the Proposer's performance of the contract and the consolidated statement demonstrates the parent or related corporation's/business entity's financial ability to perform the contract, financial stability and/or such other financial considerations identified in the evaluation criteria; and/or (3) Proposer provides its own internally prepared financial statements and such other evidence of its own financial stability identified above.

The firm's failure to provide any of the above-referenced financial statements may result in the proposal being removed from consideration. Proposers are also encouraged to explain any negative financial information, and to provide documentation supporting those explanations and demonstrating the financial strength of the firm.

2.1.4 Section/Tab 4: Project Understanding, Approach and Schedule

This section shall include, in narrative, outline, and/or graph form the offeror's approach to accomplishing the tasks outlined in the Scope of Work section of this RFP. A description of each task and deliverable and the schedule for accomplishing each shall be included.

2.1.5 Section/Tab 5: Team Organization, Experience and Certifications/Qualifications

This section must include the experience for the project superintendent and the rejuvenator applicator to be assigned to this project. The project superintendent and applicator shall have a minimum of five (5) years' experience in applying the product proposed for use on the application. The offer shall provide information as to the qualifications and experience of all personnel to be assigned to this project, citing experience with similar projects and the responsibilities to be assigned to each person.

2.1.6 Section/Tab 6: Cost

Fill out section titled "Pricing". In a separate sealed envelope provide a minimum of 5 complete copies of cost schedule. Hourly rates shall be fully burdened to include all costs, all applicable overhead and profit (including lodging, meals, and transportation). Attach any additional pricing details.

2.1.7 Section/ Tab 7: Manufacturer Certification

The bidder must submit with their bid the manufacturer's certification that the material proposed for use is in compliance with the specification requirements. The bidder must submit with their bid previous use documentation and test data conclusively demonstrating that; the rejuvenating agent has been used successfully for a period of five years by government agencies such as Cities, Counties, etc.; and that the asphalt rejuvenating agent has been proven to perform, as heretofore required, through field testing by government agencies as to the required change the in asphalt binder viscosity and penetration number. Testing data shall be submitted indicating such product performance on a sufficient number of projects, each being tested for a minimum period of three years to ensure reasonable longevity of the treatment, as well as product consistency.

2.1.8 Section/ Tab 8: Warranty

The Contractor shall provide workmanship and labor warranty for a period of at least 12 months from the date of completion. The material warranty shall be as offered by the manufacturer.

2.2 RFP Documents

This RFP is comprised of the base RFP document, any attachments, and any addenda released before Contract award. All attachments and addenda released for this RFP in advance of any Contract award are incorporated herein by reference.

3 PROPOSAL EVALUATION

3.1 Proposal Evaluation Criteria (Stage 1)

This is not a bid. There will not be a public opening. The Proposals received in response to this RFP will be evaluated and ranked, by the Proposal Evaluation Committee in accordance with the process and evaluation criteria contained below. Responses will be evaluated in light of the material and substantiating evidence presented in the response and not based on what is inferred. After thoroughly reading and reviewing this RFP, each evaluation committee member shall conduct his or her independent evaluation of the proposals received and grade the responses on their merit in accordance with the evaluation criteria set forth in the following table.

The maximum interview/demonstration points a Proposer can receive is five (5) points. The Proposers selected for interviews/demonstrations under this section will be notified in writing of the date and time. The Proposers'

interview/demonstrations shall be based solely upon information provided in each Proposer’s original proposal. No new information may be presented.

Criteria	(a) Weight	(b) Score (0-3)	(a) x (b) Weighted Score
Corporate Background and Experience	20		
Firm Financial Stability	20		
Project Understanding	20		
Project Approach	15		
Team Firm Experience	10		
Proposed Cost	15		
Total Score (without Interview/Demonstrations)			
Interview/Demonstration (if applicable)	1-5		
Final Score (with Interview/Demonstrations)			

Score Points

- 0- Missing or Does Not Meet Expectation
- 1- Partially Meets Expectation
- 2- Meets Expectation
- 3- Exceeds Expectation

Cost Formula: The cost criterion is rated by giving the proposal with the lowest total cost the maximum number of Cost points available. The remaining proposals are rated by applying the following formula:

$$1 - \frac{B - A}{A} \times C = D$$

- A—the lowest Proposer’s cost.
- B—the Proposer’s cost being scored.
- C—the maximum number of cost points available.
- D—Proposer’s cost score (points).

Note: If the formula results in a negative number (which will occur when the Offeror’s cost is more than twice the lowest cost), zero points shall be assigned.

3.2 Interview/Demonstration (Stage 2)

A short-list of firms may be invited to Stage 2 of the evaluation process, the Interview/ Demonstration. Interview/demonstrations are an important aspect of the evaluation process that offers the City an opportunity to see how the proposer’s solution meets the critical components of the RFP.

3.3 Final Selection

Proposals will be evaluated and ranked according to the criteria and weighted values set forth in Section 3.1. Either a final selection for recommendation will be made at this time or the short-list of firms will be invited to participate in Stage 2 of the evaluation process. If Stage 2 is implemented, each firm will be evaluated and assigned a score to determine the best firm for recommendation.

After which negotiations of a contract with the most qualified firm will commence. If negotiations are unsuccessful, the City will then pursue negotiations with the next most qualified firm. All Proposers will be notified of their standing immediately following the City's decision.

The City shall not be bound or in any way obligated until both parties have executed a contract. The City also reserves the right to delay the award of a contract or to not award a contract.

3.4 Notice to Proposers Regarding RFP Terms and Conditions

It shall be the Proposer's responsibility to read the Instructions, the City's contract terms (Appendix IV), all relevant exhibits, attachments, and any other components made a part of this RFP and comply with all requirements and specifications herein. Proposers are also responsible for obtaining and complying with all Addenda and other changes that may be issued in connection with this RFP.

3.5 Contract Term

The contract issued by the City to the awarded proposer will define either a completion date by which the services are to be completed and finished, or a term date by which the services will begin and be provided repeatedly over a specific period. The details of the contract term and any options to renew or extend the contract, will be stated in the contract issued by the City. See Appendix IV for a sample-version of the City's contract for services.

4 SCOPE OF SERVICES

Awarded Contractor shall provide services, all as set forth in this RFP and more particularly described in this Section 4.

4.1 Description

The work specified in this section shall consist of furnishing all labor, material, and equipment necessary to perform all operations for the application of a penetrating asphalt rejuvenating emulsion with photocatalytic titanium dioxide to asphaltic concrete surface courses to create a pollution reducing and solar reflectant pavement surface. See Attachment VII for the list of streets to be included for application.

The rejuvenation of surface courses shall be by spray application of a petroleum maltene based cationic rejuvenator/pollution remediating emulsion composed of petroleum oils and resins emulsified with water and containing photocatalytic titanium dioxide nanoparticles in a minimum parts per million at a specified depth as hereafter required. All work shall be in accordance with the specifications, the applicable drawings, and subject to the terms and conditions of this contract.

Two bid alternates are listed for proposal. Proposers must submit pricing on both alternates to be considered.

4.2 Material Specifications

Asphalt Rejuvenator:

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

Tests	Test Method		Requirements	
	ASTM	AASHTO	Min.	Max.
Tests on Emulsion:				
Viscosity @ 25°C, SFS	D-244	T-59	15	40
Residue, % w ⁽¹⁾	D-244 (mod)	T-59 (mod)	60	65
Miscibility Test ⁽²⁾	D-244 (mod)	T-59 (mod)	No Coagulation	
Sieve Test, % w ⁽³⁾	D-244 (Mod)	T-59 (mod)	---	0.1
Particle Charge Test	D-244	T-59	Positive	
Percent Light Transmittance ⁽⁴⁾	GB	GB	---	30
Cement Mixing	D-244			2.0
Tests on Residue from Distillation				
Flash Point, COC, °C	D-92	T-48	196	---
Viscosity @ 60°C, cSt	D-445	---	100	200
Asphaltenes, %w	D-2006-70	---		0.75
Maltene Distribution Ratio	D-2006-70	---	0.3	0.6
$\frac{PC + A_1}{S + A_2}$ ⁽⁵⁾				
PC/S Ratio ⁽⁵⁾	D-2006-70	---	0.5	---
Saturate hydrocarbons, S ⁽⁵⁾	D-2006-70	---	21	28

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

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

³Test procedure identical with ASTM D-244 60 except that distilled water shall be used in place of two percent sodium oleate solution.

⁴Test procedure is attached.

⁵Chemical composition by ASTM Method D-2006-70:

PC = Polar Compounds, A₁ = First Acidaffins.
A₂ = Second Acidaffins, S = Saturated Hydrocarbons.

Note: For gal/ton conversion use 242 gal/ton.

Note: Data presented are typical. Slight variation may occur from lot to lot.

The asphalt rejuvenating emulsion shall have a record of satisfactory service as an asphalt rejuvenating emulsion and in-depth sealer. Satisfactory service shall be based on the capability of the material to decrease the viscosity of the asphalt binder through the maltene replacement technology method. The asphalt rejuvenating emulsion shall cause a positive increase in the maltene content as a percent of the total volume of binder components as determined by laboratory analysis using testing conforming to ASTM D-2006-70 and provide an in-depth seal to the intrusion of air and water.

The bidder must submit with his bid the manufacturer's certification that the material proposed for use is in compliance with the specification requirements. The bidder must submit with his bid previous use documentation and test data conclusively demonstrating that; the asphalt rejuvenating emulsion has been used successfully for at least five years and that the asphalt rejuvenating emulsion has been proven to perform, as heretofore required, through field testing as to the required change in asphalt binder rheology.

Photocatalytic Titanium Dioxide:

Additionally, the asphalt rejuvenating emulsion, serving as a carrier liquid for titanium dioxide, shall contain catalytic titanium dioxide Nanoparticles in an amount that will impregnate the asphalt pavement to a minimum depth of six (6) millimeters analyzed in two (2) millimeter increments with an average of a minimum of 2000 parts per million catalytic anatase titanium dioxide Nano particles. The described material blend shall hereafter be referred to as the asphalt rejuvenating/pollution abating emulsion.

The titanium dioxide shall be of the anatase type that has been shown to photocatalyze the oxidation of atmospheric pollutants such as oxides of nitrogen (NO_x) and volatile organic compounds (VOCs). The photocatalytic titanium dioxide shall be of a n-type semiconductor containing 99.5% TiO₂ content comprised of no less than 80% anatase crystallite by weight (plus or minus 5%) in a particle size averaging 20nm to 25nm (plus or minus 3nm) with a small portion of rutile crystalline content.

The Bidder must submit with his bid test data from an accredited testing laboratory or qualified university research study indicating that the product proposed for use meets the forgoing requirements.

The Engineer may require treated core samples to be removed from the treated pavement fifteen to thirty days following application of the asphaltic rejuvenating/pollution abating emulsion and tested for asphalt binder rheology adjustment and percentage of pollution reduction. If directed, said testing shall indicate asphalt binder improvement as subsequently specified and the percent of NO_x gas reduction and TiO₂ Nanoparticle impregnated at depth specified. The cores shall be tested by an accredited testing laboratory or university capable of testing the core for depth and amount of Titanium Nanoparticle distribution and required NO_x gas reduction capability.

4.3 **Material Performance**

The **asphalt rejuvenating emulsion** segment of the asphalt rejuvenating/pollution abating emulsion shall penetrate the asphalt pavement surface. The asphalt rejuvenating emulsion shall be absorbed and incorporated into the asphalt binder. Verification that said incorporation of the asphalt rejuvenating emulsion into the asphalt binder has been affected shall be by analysis of the chemical properties of the asphalt binder rheology, when directed by the Engineer.

Viscosity shall be reduced by a minimum of 20% for a pavement two years or less in age or for pavements previously treated with the rejuvenator and reduced by a minimum of 30% for a pavement greater than two years in age as determined by dynamic shear rheometer (DSR) method for asphalt testing in accord with AASHTO T315-05. This analysis shall apply to extracted asphalt binder, taken from cores extracted fifteen to thirty days following application, from the upper 3/8 inch of pavement. Said viscosity reduction shall be the average of a sampling of the total treated area. In addition, the treated areas shall be sealed in-depth to the intrusion of air and water.

For use in the afore described testing untreated and treated core samples, a minimum of four inches in diameter, shall be removed by the Contractor at locations indicated by the Engineer. The treated core sample shall be taken in the same lane in close proximity to each untreated sample. When directed by the Engineer, a minimum of one untreated and treated core for each test method shall be taken for each pavement type group or one per 30,000 square yards of treated pavement in each pavement type group.

The **pollution abating emulsion** segment of the asphalt rejuvenating/pollution abating emulsion shall penetrate the asphalt pavement surface. The emulsion shall penetrate the pavement a minimum of six (6) millimeters carrying the titanium dioxide Nanoparticles at an average distribution of 2000 parts per million. Verification of said uniform distribution shall be by analysis at a six (6) millimeter depth in three two (2) millimeter increments using XRF analyzer method. The foregoing shall be performed on additional core samples extracted for this purpose from treated and untreated pavement as heretofore outlined and will have a testing frequency as directed by the Engineer.

The NO_x pollution reduction performance shall be verified from cores extracted for this specific evaluation from treated and untreated pavements also as heretofore outlined. The procedure shall be based on the Japanese standard JIS TRT Z 0018 "Photocatalytic materials – Air purification test procedure" ISO equivalent 22197-1. The minimum reduction in NO₂ shall be an average of 25% for all cores evaluated.

4.4 Application Equipment

Asphalt Distributor

The distributor for spreading the emulsion shall be self-propelled and shall have pneumatic tires. The distributor shall be designed and equipped to distribute the asphalt rejuvenating agent uniformly on variable widths of surface at readily determined and controlled rates from 0.04 to 0.08 gallons per square yard of surface, and with an allowable variation from any specified rate not to exceed 5 percent of the specified rate.

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

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

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

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

Aggregate Spreader

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

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

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

When required by the Engineer the contractor shall calibrate the spreader in accordance with ASTM D5624-02, in the presence of the Engineer. The allowable deviation in the amount of aggregate spread on each of the rubber mats shall not exceed plus or minus 1 pound per square yard in the transverse direction, or plus or minus 1 pound per square yard in the longitudinal direction from the design application rate.

4.5 Construction Layout

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

Note** - City streets may contain bikeshare stations, separated bike lanes, or otherwise non-standard pavement widths. Contractor shall survey all contract streets to account for possible non-standard applications and shall plan work accordingly for any small areas or low production/hand work.

4.5.1 Working Time Restrictions

A. Intermediate Contract Time No. 1 :

No work on or street obstruction shall occur during the peak traffic hours 7:00 a.m.-9:00 a.m. or 4:00 p.m.-6:00 p.m., Monday through Friday, on the following streets.

- i. Any street within the City having a marked centerline or having marked lanes.

- ii. All streets with five (5) or more traffic lanes at the point of work, all streets with two (2) traffic lanes in each direction divided by a median, and all streets within the Central Business District (CBD), the area bounded by East Street, West Street, South Street, and Peace Street.

Work adjacent to traffic lanes may occur during these hours if proper signage and safety precautions are affected as described in latest edition of the Manual on Uniform Traffic Control Devices.

The Contractor shall have monies withheld due to public inconvenience, obstruction and delay to traffic, safety and other considerations, for any work performed on time restricted streets during 7:00 a.m.-9:00 a.m. or 4:00 p.m.-6:00 p.m., Monday-Friday at the rate of \$500.00 for every 15 minutes of violation or fraction thereof.

No traffic lane closure (through or turn lane) shall occur on Red Alert Days. Red Alert Days are determined by North Carolina Ozone Forecast Center, Division of Air Quality

The Contractor shall notify the Transportation Director 72 hours in advance of any work scheduled on weekends.

B. Intermediate Contract Time No. 2 :

Streets within school zones shall be resurfaced when schools are not in session. All other work may be performed during hours which do not impact school vehicular and pedestrian traffic. Streets known to, but not limited to, have school zones are the following:

- A. Bedford Ave. - Fred A. Olds Elementary School
- B. Fowler Ave. - Fred A. Olds Elementary School
- C. Homewood Ct. - Carroll Magnet Middle School
- D. Kilgore Ave. - Fred A. Olds Elementary School
- E. Lake Boone Trail (West) - Lacy Elementary School
- F. Northbrook Dr. – Brooks Museum Magnet Elementary

The Contractor agrees to adhere to work hour restrictions as may be reasonably imposed by the Project Engineer in response to local conditions, safety concerns, or public convenience, including but not limited to the proximity of school zones or other sensitive areas. The Transportation Director shall have the discretion to modify or restrict work hours in such cases to ensure compliance with applicable regulations or to minimize disruption to local residents and school operations.

Work at these locations shall only be performed when schools are not in session or during hours that do not interfere with student drop-off, pick-up, or school-related traffic. The last day of the 2025-2026 traditional school calendar is June 11th, 2026 and the first day of the 2026 traditional calendar is August 24th, 2026.

The Transportation Director reserves the right to impose, modify, or restrict work hours at any location based on local conditions, safety concerns, proximity to schools or other sensitive sites, and public convenience. These directives shall be considered binding and are intended to ensure public safety and minimize disruption to residents and school operations.

C. Intermediate Contract Time No.3 :

Contract Time and Weather Limitations/Liquidated Damages

The date of availability for this contract will be June 1, 2026. All work shall be complete within a 14-week timeframe from the commencement of work. Project needs to have 10% completion within the first 30 days. A progress schedule will be evaluated and assessed at the time of each partial payment request based on the Contractor's progress in comparison with the approved progress schedule. In no case shall work extend beyond October 15, 2026. Liquidated damages will be incurred at \$1,000/day for each day set outside the working parameters where the contractor fails to complete the project on time or by these guidelines. For each calendar day in excess of the approved schedule, the contractor will have the appropriate amount withheld.

Failure to comply with these restrictions may result in monetary deductions. The City shall withhold \$500.00 for every 15 minutes of non-compliant work activity, or fraction thereof, when work is performed during restricted hours that adversely impact school traffic or pedestrian safety.

D. Holiday Time Restrictions

The Contractor shall not narrow or close a lane of traffic on any road, detain and/or alter the traffic flow, and/or perform any work on or during holiday weekends, special events, or any other time when traffic is unusually heavy, including the following schedules without first obtaining approval from the City of Raleigh project representative:

- A. For unexpected occurrence that creates unusually high traffic volumes, as directed by the Engineer.
- B. For New Year's Day, between the hours of 6:00 P.M. December 31st and 7:00 A.M. January 2nd. If New Year's Day is on a Friday, Saturday, Sunday or Monday, then until 7:00 A.M. the following Tuesday.
- C. For Easter, between the hours of 6:00 P.M. Thursday and 7:00 A.M. Monday.
- D. For Memorial Day, between the hours of 6:00 P.M. Thursday and 7:00 A.M. Tuesday.
- E. For Juneteenth, between the hours of 6:00 P.M. the day before Juneteenth and 7:00 A.M. the day after Juneteenth. If Juneteenth is on a Friday, Saturday, Sunday, or Monday, then between the hours

of 6:00 P.M. the Thursday before Juneteenth and 7:00 A.M. the Tuesday after Juneteenth.

- F. For Independence Day, between the hours of 6:30 A.M. the day before Independence Day and 8:00 P.M. the day after Independence Day. If Independence Day is on a Friday, Saturday, Sunday, or Monday, then between the hours of 6:30 A.M. the Thursday before Independence Day and 8:00 P.M. the Tuesday after Independence Day.
- G. For Labor Day, between the hours of 6:00 P.M. Thursday and 7:00 A.M. Tuesday.
- H. For Veteran's Day, between the hours of 6:00 P.M. November 10th and 7:00 A.M. November 12th. If Veteran's Day is on a Friday, Saturday, Sunday, or Monday, then between the hours of 6:30 A.M. the Thursday before Independence Day and 8:00 P.M. the Tuesday after Veteran's Day.
- I. For Thanksgiving Day, between the hours of 6:00 P.M. Tuesday and 7:00 A.M. Monday.
- J. For Christmas, between the hours of 6:00 P.M. the Friday before the week of Christmas Day and 7:00 A.M. the following Tuesday after the week of Christmas Day.

Holidays and holiday weekends shall include New Year's, Easter, Memorial Day, Juneteenth, Independence Day, Labor Day, Thanksgiving and Christmas. The Contractor shall schedule his work so that lane closures are not required during these periods, unless otherwise directed by the Engineer.

The time of availability for this intermediate contract work shall be the time the Contractor begins to install all traffic control devices for lane closures according to the time restrictions stated herein and place traffic in the existing traffic pattern.

The Contractor shall have monies withheld due to public inconvenience, obstruction and delay to traffic, safety, and other considerations, for any work performed during Holiday Time Restrictions at the rate of \$500.00 for every 15 minutes of violation or fraction thereof

E. Weather Requirements

The asphalt rejuvenating/pollution abating emulsion shall not be applied to a wet surface or when rain is occurring, or the threat of rain is present immediately before placement. The surface treatment shall not be applied when the temperature is less than 40° in the shade. When applying emulsions, the temperature of the surface shall be a minimum of 45°F, and no more than 150°F. Climate should remain above 40 degrees for at least 12 hours as well.

If unexpected rain occurs prior to material penetration, the emulsion shall be reapplied at no cost to the Agency. Further, the contractor's traffic control and project monitoring shall continue until the application has penetrated, area has had the aggregate applied and the surface is safe for vehicular travel.

4.6 Handling of Asphalt Rejuvenating/Pollution Abating Emulsion

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

4.7 Resident Notification

The Contractor shall be responsible for notifying, in writing, all property owners/residents directly affected by this project just prior to beginning work. A copy of this notification shall be submitted and approved by the Transportation Director prior to its issuance to the residents. This also includes all businesses whether owned, leased or rented by the property owner of record. Notices are to be mailed and/or hand delivered. Hand delivered notices shall be door-hanger type printed on card stock.

THE CONTRACTOR shall distribute Notice of Schedule to Rejuvenate (prior notifications) a minimum of 1 WEEK in advance of when work is planned. This notification shall include a statement restricting the placement of leaves, tree trimmings, and any other waste in and/or along the edge of pavement/curb during the thirty days prior to work beginning, during the time work is being performed, and until the work has been inspected/accepted by the project engineer. The contractor shall provide notification to the residents along roadways upon inspection and acceptance of the work.

The CONTRACTOR shall distribute Notice of Work to be performed a minimum of 24 HOURS prior to performing such work.

In the event rejuvenation is scheduled for a weekend or holiday, the notices and signs shall be distributed a minimum of 72 HOURS prior to the rejuvenation.

The CONTRACTOR shall also post “No Parking” signs in conspicuous places facing traffic a minimum of 24 HOURS prior to actual rejuvenation with a maximum spacing of 100’ of center required. A closer spacing may be required as directed by the Raleigh Police Department. Contractor shall provide all stakes and fasteners.

The time of day that No Parking signs and Notices of Work are posted should be recorded along with the license numbers of cars parked on the street at that time and a copy made available for the TRANSPORTATION DIRECTOR and the POLICE DEPARTMENT if towing is necessary.

If towing is necessary, the City of Raleigh Police Department will make the final decision if the vehicles are to be towed. The time and location in which the “No Parking” signs were posted, and the Notices of Work were distributed will be a considering factor for the towing of vehicles.

On the day of actual work, any necessary towing may be carried out under CITY OF RALEIGH Codes Section 11-2181 and Section 12-7006, Section A, Paragraph 6. Police contact number is 919-829-1911.

Special permission will be required by agencies performing work within the street right-of-way under the following conditions. This permit will be required when:

1. When the traveled portion of the roadway is obstructed between the hours of 7 a.m. to 9 a.m. and 4 p.m. to 6 p.m. if the street involved is marked with either painted center lines or lane lines.
2. Any street which is totally closed to through traffic.
3. Any streets within the Central Business District.

This permit may be obtained from the Transportation Field Services Division, Right-of-Way Services, in advance. The TRANSPORTATION DIRECTOR has the authority to approve or deny issuance of any permit.

4.8 Application of Asphalt Rejuvenating/Pollution Abating Emulsion

4.8.1 The asphalt rejuvenating/pollution abating emulsion shall be applied by a distributor truck at the temperature recommended by the manufacturer and

at the pressure required for the proper distribution. The emulsion shall be applied so that uniform distribution is obtained at all points of the areas to be treated. Distribution shall commence with a running start to ensure full rate of spread over the entire area to be treated. Areas inadvertently missed shall receive additional treatment as may be required by hand sprayer application.

- 4.8.2 Application of asphalt rejuvenating/pollution abating emulsion shall be on one-half width of the pavement at a time. When the second half of the surface is treated, the distributor nozzle nearest the center of the road shall overlap the previous application by at least one-half the width of the nozzle spray. In any event, the centerline construction joint of the pavement shall be treated in both application passes of the distributor truck.
- 4.8.3 Before spreading, the asphalt rejuvenating/pollution abating emulsion shall be blended with water at the rate of two (2) parts rejuvenating agent to one (1) part water, by volume or as specified by the manufacturer. The combined mixture of asphalt rejuvenating/pollution abating emulsion and water shall be spread at the rate of 0.04 to 0.08 gallons per square yard, or as approved by the Engineer following field-testing.
- 4.8.4 Where more than one application is to be made, succeeding applications shall be made as soon as penetration of the preceding application has been completed and approval is granted for additional applications by the Engineer.
- 4.8.5 Grades or super elevations of surfaces that may cause excessive runoff, in the opinion of the Engineer, shall have the required amounts applied in two or more applications as directed.
- 4.8.6 After the street has been treated and as directed by the Engineer, the area within one foot of the curb line or edge of pavement on both sides of the road shall receive an additional treatment of the asphalt rejuvenating emulsion. Said treatment shall be uniformly applied by a method acceptable to the Engineer.
- 4.8.7 The Contractor shall furnish a quality inspection report showing the source, manufacturer, and the date shipped, for each load of asphalt rejuvenating/pollution abating emulsion. When directed by the Engineer, the Contractor shall take representative samples of emulsion for testing.

4.9 Test Strip for Application Rate

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

The test strips shall be applied at a minimum width of 6 feet and for a length of 50 feet. A total of three test strips shall be applied at application rates of 0.04, 0.06 and 0.08 gallons per square yard, respectively. The time, in minutes, for essentially complete absorption of the asphalt rejuvenating/pollution abating emulsion shall be

recorded for each test strip. The optimal rate to be used in a given area shall be that rate essentially absorbed within 20 minutes.

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

Upon completion of the test strips for each pavement group, the Engineer will determine the final application rate to be applied to each pavement group. All tests for rate of application shall be completed and the rates for each similar pavement group approved by the engineer prior to the start of the actual project.

4.10 Aggregate Application

4.10.1 After the asphalt rejuvenating/pollution abating emulsion has penetrated, and when recommended by the Contractor and approved by the Engineer, a coating of dry rock dust aggregate shall be applied to the surface in sufficient amount to protect the traveling public as required.

4.10.2 All aggregate used during the treatment must be removed no later than 24 hours after treatment of a roadway. This shall be accomplished by a combination of hand sweeping and vacuuming. All turnouts, cul-de-sacs, etc. must be cleaned of any material to the satisfaction of the Engineer. Mechanical sweepers will not be permitted, however a vacuum truck with sweeping capability will be tolerated.

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

4.11 Vacuuming

The Contractor shall be responsible for vacuuming and cleaning of the streets prior to, and after treatment. Prior to treatment, the street will be cleaned of all standing water, dirt, leaves, foreign materials, etc. This work shall be accomplished by vacuuming or other approved methods in order to prevent materials from entering driveways and lawns. Mechanical sweepers will not be permitted, however a vacuum truck with sweeping capability will be tolerated. The collected material shall be disposed of at an approved landfill. The surface shall be clean and dry prior to application. Vacuuming will be included in the price bid per square yard for asphalt rejuvenating/pollution abating emulsion.

4.12 Traffic Control

The Contractor shall furnish all necessary traffic control, barricades, signs and flagmen, to ensure the safety of the traveling public and to all working personnel in accordance with these project guidelines, local ordinances, the most current edition

of the NCDOT Standard Specifications for Roads and Structures, and the latest Manual on Uniform Traffic Control Devices (MUTCD). **Traffic shall not travel on fresh Asphalt Rejuvenator / Pollution Abating Emulsion until penetration, in the opinion of the Engineer, has become complete and the area is suitable for traffic.** Devices shall be checked daily and periodically throughout the project for compliance; and where adjustments or corrections are needed, prompt revisions shall be made. Costs for traffic control shall be accounted for in the per square yard price of asphalt rejuvenator, no direct payment shall be made.

4.13 Method of Measurement

Asphalt rejuvenating/pollution abating emulsion shall be paid at the Contract bid unit prices for the actual square yards of pavement treated as field measured. Said payment is compensation in full for all costs of furnishing and applying the material as specified, including mobilization, traffic control, cleaning the existing pavement, purchase of aggregate, delivery of aggregate, all labor, equipment, and materials necessary for the placement of the asphalt rejuvenating emulsion, vacuuming of any loose material after construction and other requirements as specified.

Payment for removal of untreated and treated cores, when directed by the Engineer, shall be paid for as each at the unit price bid for Test Core Removal. Payment for laboratory analysis of untreated and/or treated test cores, when directed by the Engineer, shall be paid for as each at the unit price bid for Test Core Laboratory Analysis. Pollution Remediation Performance Testing, when directed by the Engineer, shall be paid for as each at the unit price for Pollution Remediation Performance Testing.

4.14 Basis of Payment:

List A /Item 1 – Maltene Asphalt Rejuvenator with Titanium Dioxide
\$_____ Price Per Square Yard

*Note: Cost for testing and traffic control associated with the project shall be included in the price per square yard above to complete the work.

APPENDIX I

PROPOSAL COST FORM

Awarded Contractor shall perform the services to be performed as set forth in this RFP and more particularly described in Section 4 for a not to exceed total amount of

See attached Street List and Submit Cost In Line with Specified Scope
\$ _____.

Proposer shall attach proposal cost breakdown to this Appendix I Proposal Cost Form.

Firm Name: _____

Authorized Signature _____ Date _____

Signed by: _____
[Type or Print Name]

Title of Signer: _____

APPENDIX II

PROPOSER QUESTIONNAIRE

The following questions must be answered, and data given must be clear and comprehensive. If necessary, questions may be answered on separate sheets. The Proposer may submit any additional information desired.

Company Name:		d/b/a (if applicable)	
Street / PO Box:			
City:		State:	Zip:
Phone:	Fax:	E-Mail:	
Website (if applicable):			
<input type="checkbox"/> Sole Proprietor <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Other			
Number of years in business under company's present name:			
Fed Tax ID #:		DUNS #	
Are you certified with the North Carolina Secretary of State to conduct business (if required)? (Check One) YES: <input type="checkbox"/> NO: <input type="checkbox"/> Not Applicable: <input type="checkbox"/>			
Are you properly licensed/certified by the Federal and/or State of North Carolina to perform the specified work? YES: <input type="checkbox"/> NO: <input type="checkbox"/> Not Applicable: <input type="checkbox"/> ATTACH COPY OF ALL APPLICABLE LICENSING/CERTIFICATION DOCUMENTS			
Are/will you be properly insured to perform the work? YES: <input type="checkbox"/> NO: <input type="checkbox"/>			
Contact for this Contract:		Title:	
Phone:	Fax:	E-Mail:	
Have you ever defaulted or failed on a contract? (If yes, attach details) YES: <input type="checkbox"/> NO: <input type="checkbox"/>			
List at least three (3) references for which you have provided these services (same scope/size) in the past three years - preferably government agencies. Do not include City of Raleigh as a reference to meet the requirement of listing at least (3) references. PROPOSERS ARE RESPONSIBLE FOR SENDING REFERENCE QUESTIONNAIRE (APPENDIX III) TO THEIR REFERENCES.			
1.	Company:		
	Contact Person:	Title:	
	Phone:	Fax:	E-Mail:
Describe Scope of Work:			
2.	Company:		
	Contact Person:	Title:	
	Phone:	Fax:	E-Mail:
Describe Scope of Work:			
3.	Company:		
	Contact Person:	Title:	
	Phone:	Fax:	E-Mail:
Describe Scope of Work:			
4.	Company:		
	Contact Person:	Title:	
	Phone:	Fax:	E-Mail:
Describe Scope of Work:			
5.	Company:		
	Contact Person:	Title:	
	Phone:	Fax:	E-Mail:
Describe Scope of Work:			
The undersigned swears to the truth and accuracy of all statements and answers contained herein:			
Authorized Signature:		Date:	

APPENDIX III

REFERENCE QUESTIONNAIRE (Instructions)

274-TM-2-26

The City of Raleigh, as a part of the RFP, requires proposing companies to submit a minimum of three (3) business references as required within this document. The purpose of the references is to document the experience of the proposer relevant to the scope of services and assist in the evaluation process.

- The Proposer is required to send the reference form (the following two pages) to each business reference listed on Proposer Questionnaire.
- The business reference, in turn, is requested to submit the Reference Form directly to the City of Raleigh Point of Contact identified on the Reference Questionnaire form for inclusion in the evaluation process.
- The form and information provided will become a part of the submitted proposal. The business reference may be contacted for validation of the response.
- It is the Proposer's responsibility to verify their references have been received by the City of Raleigh Point of Contact by the date indicated on the reference form.

APPENDIX III

REFERENCE QUESTIONNAIRE FORM

274-TM-2-26

(Name of Business Requesting Reference)

This form is being submitted to your company for completion as a business reference for the company listed above.

This form is to be returned to the City of Raleigh, Daniel Callahan, via email to Daniel.Callahan@raleighnc.gov no later than **2 p.m. EST, April 22, 2026** and **MUST NOT** be returned to the company requesting the reference.

For questions or concerns regarding this form, please contact the City of Raleigh, Point of Contact above.

Company Providing Reference

Contact Name and Title/Position _____

Contact Telephone Number _____

Contact Email Address _____

Questions:

1. In what capacity have you worked with this company in the past? If the company was under a contract, please acknowledge and explain briefly whether or not the contract was successful.

Comments:

2. How would you rate this company's knowledge and expertise?

3= Excellent

2= Satisfactory

1= Unsatisfactory

0= Unacceptable

Comments:

3. How would you rate the company's flexibility relative to changes in the scope and timelines?

3= Excellent

2= Satisfactory

1= Unsatisfactory

0= Unacceptable

Comments:

4. What is your level of satisfaction with hard-copy materials, e.g. reports, logs, etc. produced by the company?

3= Excellent 2= Satisfactory 1= Unsatisfactory 0= Unacceptable

Comments:

5. How would you rate the dynamics/interaction between the company and your staff?

3= Excellent 2= Satisfactory 1= Unsatisfactory 0= Unacceptable

Comments:

6. Who were the company's principle representatives involved in providing your service and how would you rate them individually? Would you comment on the skills, knowledge, behaviors or other factors on which you based the rating?

(3= Excellent; 2= Satisfactory; 1= Unsatisfactory; 0= Unacceptable)

Name: _____	Rating: _____
Name: _____	Rating: _____
Name: _____	Rating: _____
Name: _____	Rating: _____

Comments:

7. With which aspect(s) of this company's services are you most satisfied?

Comments:

8. With which aspect(s) of this company's services are you least satisfied?

Comments:

9. Would you recommend this company's services to your organization again?

Comments:

APPENDIX IV

CONTRACT STANDARD TERMS AND CONDITIONS

The contract terms provided herein shall become a part of any contract issued as a result of this solicitation. Any exceptions to the contract terms must be stated in the submittal. Any submission of a proposal without objection to the contract terms indicates understanding and intention to comply with the contract terms. If there is a term or condition that the firm intends to negotiate, it must be stated in the proposal. The successful firm will not be entitled to any changes or modifications unless they were first stated in the proposal. The City of Raleigh reserves the right, at its sole discretion, to reject any or all submittal package(s) containing unreasonable objections to standard City of Raleigh contract provisions.

1. Compensation; Time of Payment

The standard City of Raleigh payment term is NET 30 days from the date of invoice. For prompt payment all invoices should be emailed to (accountspayable@raleighnc.gov) or mail to the City of Raleigh, Accounts Payable, PO Box 590, Raleigh, North Carolina 27602-0590. All invoices must include the Purchase Order Number. Invoices submitted without the correct purchase order number will result in delayed payment.

2. Workmanship and Quality of Services

All work performed under this Contract shall be performed in a workmanlike and professional manner, to the reasonable satisfaction of the City, and shall conform to all prevailing industry and professional standards.

3. Non-discrimination

To the extent permitted by North Carolina law, the Parties for themselves, their agents, officials, directors, officers, members, representatives, employees, and contractors agree not to discriminate in any manner or in any form based on actual or perceived age, mental or physical disability, sex, religion, creed, race, color, sexual orientation, gender identity or expression, familial or marital status, economic status, veteran status or national origin in connection with this Contract or its performance.

The Parties agree to conform with the provisions and intent of Raleigh City Code §4-1004 in all matters related to this Contract. This provision is incorporated into the Contract for the benefit of the City of Raleigh and its residents and may be enforced by an action for specific performance, injunctive relief, or any other remedy available at law or equity. This section shall be binding on the successors and assigns of all parties with reference to the subject matter of the Contract.

4. Minority and Women Owned Business Enterprise

The City of Raleigh prohibits discrimination in any manner against any person based on actual or perceived age, race, color, creed, national origin, sex, mental or physical disability, sexual orientation, gender identity or expression, familial or marital status, religion, economic status, or veteran status. The City maintains an

affirmative policy of fostering, promoting, and conducting business with women and minority owned business enterprises.

5. Assignment

This Contract may not be assigned without the express written consent of the City.

6. Applicable Law

All matters relating to this Contract shall be governed by the laws of the State of North Carolina, without regard to its choice of law provisions, and venue for any action relating to this Contract shall be Wake County Civil Superior Court or the United States District Court for the Eastern District of North Carolina, Western Division.

7. Insurance

Contractor agrees to maintain, on a primary basis and at its sole expense, at all times during the life of this Contract the following coverages and limits. The requirements contained herein, as well as City's review or acceptance of insurance maintained by Contractor is not intended to and shall not in any manner limit or qualify the liabilities or obligations assumed by Contractor under this Contract.

Commercial General Liability – Combined single limit of no less than \$1,000,000 each occurrence and \$2,000,000 aggregate. Coverage shall not contain any endorsement(s) excluding nor limiting Product/Completed Operations, Contractual Liability or Cross Liability.

Automobile Liability – Limits of no less than \$1,000,000 Combined Single Limit. Coverage shall include liability for Owned, Non-Owned and Hired automobiles. In the event Contractor does not own automobiles, Contractor agrees to maintain coverage for Hired and Non-Owned Auto Liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Auto Liability policy. Automobile coverage is only necessary if vehicles are used in the provision of services under this Contract and/or are brought on a COR site.

Worker's Compensation & Employers Liability – Contractor agrees to maintain Worker's Compensation Insurance in accordance with North Carolina General Statute Chapter 97 with statutory limits and employees liability of no less than \$1,000,000 each accident.

Additional Insured – Contractor agrees to endorse the City as an Additional insured on the Commercial General Liability, Auto Liability and Umbrella Liability if being used to meet the standard of the General Liability and Automobile Liability. The Additional Insured shall read '**City of Raleigh is named additional insured as their interest may appear**'.

Certificate of Insurance – Contractor agrees to provide COR a Certificate of Insurance evidencing that all coverages, limits and endorsements required herein are maintained and in full force and effect, and Certificates of Insurance shall provide a minimum thirty (30) day endeavor to notify, when available, by

Contractor's insurer. If Contractor receives a non-renewal or cancellation notice from an insurance carrier affording coverage required herein, or receives notice that coverage no longer complies with the insurance requirements herein, Contractor agrees to notify the City within five (5) business days with a copy of the non-renewal or cancellation notice, or written specifics as to which coverage is no longer in compliance. **The Certificate Holder address should read:**

**City of Raleigh
Post Office Box 590
Raleigh, NC 27602-0590**

Umbrella or Excess Liability – Contractor may satisfy the minimum liability limits required above under an Umbrella or Excess Liability policy. There is no minimum Per Occurrence limit of liability under the Umbrella or Excess Liability, however, the Annual Aggregate limits shall not be less than the highest 'Each Occurrence' limit for required policies. Contractor agrees to endorse City of Raleigh as an 'Additional Insured' on the Umbrella or Excess Liability, unless the Certificate of Insurance states the Umbrella or Excess Liability provides coverage on a 'Follow-Form' basis.

Professional Liability – Limits of no less than \$1,000,000 each claim. This coverage is only necessary for professional services such as engineering, architecture or when otherwise required by the City.

All insurance companies must be authorized to do business in North Carolina and be acceptable to the City of Raleigh's Risk Manager.

8. Indemnity

Except to the extent caused by the sole negligence or willful misconduct of the City, the Contractor shall indemnify and hold and save the City, its officers, agents and employees, harmless from liability of any kind, including all claims, costs (including defense) and losses accruing or resulting to any other person, firm, or corporation furnishing or supplying work, services, materials, or supplies in connection with the performance of this Contract, and from any and all claims, costs (including defense) and losses accruing or resulting to any person, firm, or corporation that may be injured or damaged by the Contractor in the performance of this Contract. This representation and warranty shall survive the termination or expiration of this Contract.

The Contractor shall indemnify and hold and save the City, its officers, agents and employees, harmless from liability of any kind, including claims, costs (including defense) and expenses, on account of any copyrighted material, patented or unpatented invention, articles, device or appliance manufactured or used in the performance of this Contract.

9. Intellectual Property

Any information, data, instruments, documents, studies, reports or deliverables given to, exposed to, or prepared or assembled by the Contractor under this Contract shall be kept as confidential proprietary information of the City and not divulged or made available to any individual or organization without the prior

written approval of the City. Such information, data, instruments, documents, studies, reports or deliverables will be the sole property of the City and not the Contractor.

All intellectual property, including, but not limited to, patentable inventions, patentable plans, copyrightable works, mask works, trademarks, service marks and trade secrets invented, developed, created or discovered in performance of this Contract shall be the property of the City.

Copyright in and to any copyrightable work, including, but not limited to, copy, art, negatives, photographs, designs, text, software, or documentation created as part of the Contractor's performance of this project shall vest in the City. Works of authorship and contributions to works of authorship created by the Contractor's performance of this project are hereby agreed to be 'works made for hire' within the meaning of 17 U.S.C. 201.

10. Force Majeure

Except as otherwise provided in any environmental laws, rules, regulations or ordinances applicable to the parties and the services performed under this Contract, neither party shall be deemed to be in default of its obligations hereunder if and so long as it is prevented from performing such obligations by an act of war, hostile foreign actions, nuclear explosion, earthquake, hurricane, tornado, or other catastrophic natural event or act of God. Either party to the Contract must take reasonable measures and implement reasonable protections when a weather event otherwise defined as a force majeure event is forecast to be eligible to be excused from the performance otherwise required under this Contract by this provision.

11. Advertising

The Contractor shall not use the existence of this Contract, or the name of the City of Raleigh, as part of any advertising without the prior written approval of the City.

12. Acknowledgement of City Brand and Tree Logo Ownership and Restrictions

The City of Raleigh has developed proprietary branding (the "City Brand") centered around the Raleigh tree mark logo (the "Tree Logo"). The City's exclusive rights and ownership in and to the Tree Logo are protected under trademark and copyright, including U.S. Copyright Reg. No. VAU1-322-896, N.C. State Trademark Registration Reg. No. T-23070 and Federal Trademark Registration Reg. No. 5,629,347, as well as under other federal and state laws.

Contractor acknowledges and understands that the City is not conferring any license to Contractor under this Agreement to use or depict the Tree Logo or other aspects of the City Brand.

Contractor shall not make any use or depiction of the Tree Logo or other aspects of the City Brand without the prior express written approval of the City. In this regard, should any materials being produced by Contractor for the City under this Agreement contemplate use or depiction of the Tree Logo, including, but not limited to, printed materials, digital media, signage and/or display materials, Contractor shall proceed under the auspices and direction of the City's

Communications Department and shall comply with all guidelines and restrictions governing use or depiction of the Tree Logo.

13. Cancellation

The City may terminate this Contract at any time by providing thirty (30) days written notice to the Contractor. In addition, if Contractor shall fail to fulfill in timely and proper manner the obligations under this Contract for any reason, including the voluntary or involuntary declaration of bankruptcy, the City shall have the right to terminate this Contract by giving written notice to the Contractor and termination will be effective upon receipt. Contractor shall cease performance immediately upon receipt of such notice.

In the event of early termination, Contractor shall be entitled to receive just and equitable compensation for costs incurred prior to receipt of notice of termination and for the satisfactory work completed as of the date of termination and delivered to the City. Notwithstanding the foregoing, in no event will the total amount due to Contractor under this section exceed the total amount due Contractor under this Contract. The Contractor shall not be relieved of liability to the City for damages sustained by the City by virtue of any breach of this Contract, and the City may withhold any payment due to the Contractor for the purpose of setoff until such time as the City can determine the exact amount of damages due the City because of the breach.

Payment of compensation specified in this Contract, its continuation or any renewal thereof, is dependent upon and subject to the allocation or appropriation of funds to the City for the purpose set forth in this Contract.

14. Laws/Safety Standards

The Contractor shall comply with all laws, ordinances, codes, rules, regulations, safety standards and licensing requirements that are applicable to the conduct of its business, including those of Federal, State, and local agencies having jurisdiction and/or authority.

All manufactured items and/or fabricated assemblies subject to operation under pressure, operation by connection to an electric source, or operation involving a connection to a manufactured, natural, or LP gas source shall be constructed and approved in a manner acceptable to the appropriate state inspector which customarily requires the label or re-examination listing or identification marking of the appropriate safety standard organization, such as the American Society of Mechanical Electrical Engineers for pressure vessels; the Underwriters' Laboratories and/or National Electrical Manufacturers' Association for electrically operated assemblies; or the American Gas Association for gas operated assemblies, where such approvals of listings have been established for the type(s) of devices offered and furnished. Further, all items furnished by the Contractor shall meet all requirements of the Occupational Safety and Health Act (OSHA), and state and federal requirements relating to clean air and water pollution.

Contractor must comply with *North Carolina Occupational Safety and Health Standards for General Industry 13 NCAC 07F (29CFR 1910)*. In addition,

Contractor shall comply with all applicable occupational health and safety and environmental rules and regulations.

Contractor shall effectively manage their safety and health responsibilities including:

- a. Accident Prevention
Prevent injuries and illnesses to their employees and others on or near their job site. Contractor managers and supervisors shall ensure personnel safety by strict adherence to established safety rules and procedures.
- b. Environmental Protection
Protect the environment on, near, and around their work site by compliance with all applicable environmental regulations.
- c. Employee Education and Training
Provide education and training to all contractors' employees before they are exposed to potential workplace or other hazards as required by specific OSHA Standards.

15. Applicability of North Carolina Public Records Law

Notwithstanding any other provisions of this Contract, this Contract and all materials submitted to the City by the Contractor are subject to the public records laws of the State of North Carolina and it is the responsibility of the Contractor to properly designate materials that may be protected from disclosure as trade secrets under North Carolina law as such and in the form required by law prior to the submission of such materials to the City. Contractor understands and agrees that the City may take any and all actions necessary to comply with federal, state, and local laws and/or judicial orders and such actions will not constitute a breach of the terms of this Contract. To the extent that any other provisions of this Contract conflict with this paragraph, the provisions of this section shall control.

16. Miscellaneous

The Contractor shall be responsible for the proper custody and care of any property furnished or purchased by the City for use in connection with the performance of this Contract and will reimburse the City for the replacement value of its loss or damage.

The Contractor shall be considered to be an Independent Contractor and as such shall be wholly responsible for the work to be performed and for the supervision of its employees. Nothing herein is intended or will be construed to establish any agency, partnership, or joint venture. Contractor represents that it has, or will secure at its own expense, all personnel required in performing the services under this Contract. Such employees shall not be employees of or have any individual contractual relationship with the City.

This Contract may be amended only by written agreement of the parties executed by their authorized representatives.

17. Right to Audit and Access to Records

1. The City may conduct an audit of any services performed and fees paid subject to this Contract. The City, or its designee, may perform such an audit throughout the contract period and for three (3) years after termination thereof or longer if otherwise required by law.
2. The Contractor and its agents shall maintain all books, documents, papers, accounting records, contract records and such other evidence as may be appropriate to substantiate costs incurred under this Contract. The City, or its designee, shall have the right to, including but not limited to: review and copy records; interview current and former employees; conduct such other investigation to verify compliance with contract terms; and conduct such other investigations to substantiate costs incurred by this Contract.
3. "Records" shall be defined as data of every kind and character, including but not limited to books, documents, papers, accounting records, contract documents, information, and materials that, in the City's sole discretion, relate to matters, rights, duties or obligations of this Contract.
4. Records and employees shall be available during normal business hours upon advanced written notice. Electronic mail shall constitute written notice for purposes of this section.
5. Contractor shall provide the City or its designee reasonable access to facilities and adequate and appropriate workspace for the conduct of audits.
6. The rights established under this section shall survive the termination of the Contract, and shall not be deleted, circumvented, limited, confined, or restricted by contract or any other section, clause, addendum, attachment, or the subsequent amendment of this Contract.
7. The Contractor shall reimburse the City for any overcharges identified by the audit within ninety (90) days of written notice of the City's findings.
8. Contractor shall, upon request, provide any records associated with this engagement to the North Carolina State Auditor that are necessary to comply with the provisions of G.S. § 147-64.7.

18. E – Verify

Contractor shall comply with E-Verify, the federal E-Verify program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program used to verify the work authorization of newly hired employees pursuant to federal law and as in accordance with N.C.G.S. § 64-25 et seq. In addition, to the best of Contractor's knowledge, any subcontractor employed by Contractor as a part of this contract shall be in compliance with the requirements of E-Verify and N.C.G.S. § 64-25 et seq.

19. Iran Divestment Act Certification

Contractor certifies that, as of the date listed below, it is not on the Final Divestment List as created by the State Treasurer pursuant to N.C.G.S. § 147-86.55, *et seq.* In compliance with the requirements of the Iran Divestment Act and N.C.G.S. § 147-86.59, Contractor shall not utilize in the performance of the contract any subcontractor that is identified on the Final Divestment List.

20. Companies Boycotting Israel Divestment Act Certification

Contractor certifies that it has not been designated by the North Carolina State Treasurer as a company engaged in the boycott of Israel pursuant to N.C.G.S. § 147-86.81.

APPENDIX V
Street List (4 pages)

Street Name	From	To	Length (ft)	Square Yards
ALABASTER CT	CDS	CDS	179	817
ANN CAROL CT	JOANNE DR	JOANNE DR	75	539
ARDEN BRANCH LN	RIVERPORT RD	RIVERPORT RD	564	1,641
ATLANTIC AVE - NORTH	SPRING FOREST RD	SPRING FOREST RD	4,767	31,598
ATLANTIC AVE - SOUTH	HIGHWOODS BLVD	HIGHWOODS BLVD	3,307	26,444
BAILEY DR	GARNER RD	GARNER RD	1,553	3,910
BEDFORD AVE	BROOKS AV	BROOKS AV	850	1,995
BENNETTWOOD CT	MILLBROOK RD	MILLBROOK RD	816	2,342
BOAZ RD	BAILEY DR	BAILEY DR	314	792
BOLERO CIR	CDS	CDS	209	785
BOND ST	SUMMERDALE DR	SUMMERDALE DR	610	1,423
BROOKHURST PL	CDS	CDS	735	2,151
BROWNING PL	SIX FORKS RD	SIX FORKS RD	1,467	6,245
BUCKEYE CT	TAMARACK CT	TAMARACK CT	84	659
CARTIER RUBY LN	SOUTHGATE DR	SOUTHGATE DR	949	3,312
CHAPEL COVE LN	WAYNICK DR	WAYNICK DR	208	940
CHARLES DR	BAILEY DR	BAILEY DR	805	2,282
CHARLES B ROOT WYND	DURALEIGH RD	DURALEIGH RD	640	3,184
CHRISDALE CT	CDS	CDS	187	806
COBBLESTONE CT	RIDGE RD	RIDGE RD	943	2,675
COLONNADE CENTER DR	SIX FORKS RD	SIX FORKS RD	1,034	5,026
COLVILLE CT	WAYNICK DR	WAYNICK DR	115	724
CREPE MYRTLE CT	WINTERGREEN DR	WINTERGREEN DR	724	2,173

DACIAN RD	PEYTON ST	PEYTON ST	1,449	3,348
DARBY ST	HADLEY RD	HADLEY RD	1,545	4,067
E. DAVIE ST	CHAVIS WY	CHAVIS WY	2,777	8,250
DELTA LAKE DR	DURALEIGH RD	DURALEIGH RD	4,855	19,336
DOBY CIR	CDS	CDS	347	973
DUNN RD - EAST	FALLS RIVER AVE	FALLS RIVER AVE	496	1,455
DUNN RD - WEST	FALLS OF NEUSE RD	FALLS OF NEUSE RD	3,469	23,058
EAGLE TRACE DR	SOUTHALL RD	SOUTHALL RD	3,137	14,126
EDGEVIEW CT	HAVERSHIRE DR	HAVERSHIRE DR	253	1,343
ELLERBE LN	PEYTON ST	PEYTON ST	967	2,310
FAIR VALLEY CT	WAYNICK DR	WAYNICK DR	110	712
FIELDS OF BROADLANDS DR	HILL ST	HILL ST	720	1,869
FIESTA WAY	HARPS MILL RD	HARPS MILL RD	2,920	6,996
FOWLER AVE	BROOKS AV	BROOKS AV	982	2,322
FULTON CT	SOUTHGATE DR	SOUTHGATE DR	158	900
GALA CT	FIESTA WY	FIESTA WY	196	795
HARDIMONT RD	COLBY DR	COLBY DR	1,737	8,211
HARRIS ST	FOWLER AV	FOWLER AV	402	978
HARVARD ST	PRVT PROP	PRVT PROP	1,248	3,060
HAVERHILL CT	CDS	CDS	196	914
HAVERSHIRE DR	CREEDMOOR RD	CREEDMOOR RD	586	1,717
HOMWOOD CT	NORTHBROOK DR	NORTHBROOK DR	283	1,584
JOANNE DR	HENSLOWE DR	HENSLOWE DR	886	2,600
KELWAY DR	WAKEFIELD PLANTATION DR	WAKEFIELD PLANTATION DR	2,430	9,444
KENTFORD CT	CDS N.	CDS N.	191	1,326

KILGORE AVE	BROOKS AV	BROOKS AV	813	2,242
LAKE BOONE TRL - EAST	CAMBRIDGE RD	CAMBRIDGE RD	1,258	5,188
LAKE BOONE TRL - WEST	RIDGE RD	RIDGE RD	1,824	15,201
E. LENOIR ST	S. EAST ST	S. EAST ST	3,304	14,192
LEONARD ST	BANBURY RD	BANBURY RD	951	2,765
LORRAINE RD	MEDLIN DR	MEDLIN DR	755	1,904
LYNNOAK DR	KENDRICKS CT	KENDRICKS CT	862	2,383
MADIERA CT	FIESTA WY	FIESTA WY	506	1,711
MELLOW FIELD DR	E. SIX FORKS RD	E. SIX FORKS RD	1,244	4,828
MILBURNIE RD	RALEIGH BLVD	RALEIGH BLVD	5,137	23,179
MONTCASTLE CT	VALLEY ESTATES DR	VALLEY ESTATES DR	425	1,061
NEWBY CT	RAINFORD CT	RAINFORD CT	149	670
NORTHBROOK DR	HOMWOOD CT	HOMWOOD CT	979	3,490
OLD MILLCREST CT	PURDUE ST	PURDUE ST	687	1,980
OLDE BIRCH DR	SLIPPERY ELM DR	SLIPPERY ELM DR	1,655	6,896
PINE TREE CT	WINTERGREEN DR	WINTERGREEN DR	290	1,122
PLAZA PL - NORTH	W MILLBROOK RD	W MILLBROOK RD	774	3,144
PLAZA PL - SOUTH	THENDARA WAY	THENDARA WAY	1,377	5,524
POOLE RD	NEW BERN AVE	NEW BERN AVE	1,735	8,135
PURDUE ST	LATIMER RD	LATIMER RD	2,139	6,156
QUAIL VIEW TRL	CDS S.	CDS S.	526	1,864
RADCLIFF RD	PRINCETON ST	PRINCETON ST	2,154	6,253
RAINFORD CT	TRAILWOODS HILLS DR	TRAILWOODS HILLS DR	815	2,810
RED BANKS CT	ARDEN BRANCH LN	ARDEN BRANCH LN	123	615
RIVERPORT RD	PEACHFORD LN	PEACHFORD LN	1,933	5,898

SEDGEFIELD DR	MILLBROOK RD	MILLBROOK RD	626	1,862
SMOKY TOPAZ LN	CARTIER RUBY LN	CARTIER RUBY LN	469	1,117
SOUTHGATE DR	ROCK QUARRY RD	ROCK QUARRY RD	6,492	23,243
SPANISH BAY CT	CDS	CDS	394	1,249
SPRINGHOUSE LN	BLAKEHURST DR	BLAKEHURST DR	540	1,740
N. STATE ST	OAKWOOD AV	OAKWOOD AV	3,826	14,122
STONECHASE DR	EBENEZER CHURCH RD	EBENEZER CHURCH RD	566	1,778
SUMMERDALE DR	LAKE WOODARD DR	LAKE WOODARD DR	895	2,542
TADLEY CT	RAINFORD CT	RAINFORD CT	235	915
TAMARACK CT	VALLEY ESTATES DR	VALLEY ESTATES DR	561	2,001
THISTLEDOWN DR	GORMAN ST	GORMAN ST	1,940	10,978
TRALEE PL	CDS	CDS	501	2,339
TROONE CT	PLAZA PL	PLAZA PL	210	989
TULARE CT	BENNETTWOOD CT	BENNETTWOOD CT	121	738
VALLEY ESTATES DR	LEAD MINE RD	LEAD MINE RD	4,899	19,448
VENTANA LN	TURTLE POINT DR	TURTLE POINT DR	914	2,151
WAKEFIELD CROSSING DR	WAKEFIELD PINES DR	WAKEFIELD PINES DR	1,303	4,852
WAKEFIELD PINES DR	FALLS OF NEUSE RD	FALLS OF NEUSE RD	665	2,865
WATERCHASE CT	STONECHASE CT	STONECHASE CT	433	1,489
WAYNICK DR	CDS	CDS	1,255	3,800
WILD WOOD FOREST DR	PERRY CREEK RD	PERRY CREEK RD	1,503	8,061
WINSTON DIAMOND CT	PURPLE GARNET WY	PURPLE GARNET WY	548	1,679
WINTERGREEN DR	CDS	CDS	1,027	2,898
WOODLAND AVE	FAIRVIEW RD	FAIRVIEW RD	1,060	2,790

TOTAL 116,873.00 469,013 SY

