TOWN OF SIMSBURY

DEPARTMENT OF PUBLIC WORKS
933 HOPMEADOW STREET
SIMSBURY, CT  06070

INVITATION TO BID

FOR

RANDOM CRACK SEALING FOR BITUMINOUS PAVEMENTS
VARIOUS LOCATIONS, SIMSBURY

The Town of Simsbury is soliciting bids for random crack sealing services for bituminous pavement at various locations within the Town of Simsbury. The scope of work is to include furnishing all labor, materials, equipment necessary for the work as specified.

Sealed proposals will be accepted by Joe Mancini, Director of Finance, 933 Hopmeadow Street (Rt. 10/202), Simsbury, CT until 10:00 a.m., Thursday, August 13, 2015

Specifications and bidding documents may be obtained electronically via the Town’s web site at the following link: www.simsbury-ct.gov/finance/pages/public-bids-and-rfp. Bid documents will not be mailed or faxed.
1. Project Overview:

The Town of Simsbury is soliciting bids for random crack sealing on various streets in Town. For bids to be considered, it is required that each street be priced out individually on the bid form. A complete list of streets is included in a table with the bid form.

The scope of work for this project includes furnishing all labor, materials and equipment required to complete the random crack sealing of each roadway within the Town as specified.

2. Key Event Dates:

- Invitation to Bid Issued: July 30, 2015
- Pre-Bid Conference: None
- Bids Due: August 13, 2015
- Commencement of Work: Within ten (10) calendar days of Notice to Proceed

3. Bid Submission Instructions:

A. One (1) original and one (1) copy of all bids must be submitted in a sealed envelope with the bidder’s name on the outside of the envelope and clearly marked “Sealed Bid for Town of Simsbury – Random Crack Sealing”. If forwarded by mail or courier, the sealed envelope must be addressed to “Joe Mancini, Director of Finance, 933 Hopmeadow Street (Rt. 10/202), Simsbury, CT 06070”. Bids must be at the office of the Director of Finance prior to 10 a.m., Thursday, August 13, 2015. Postmarks are NOT an acceptable waiver of this policy. Once the first bid is opened, all bids are deemed final and no corrections or alterations may be made.

B. Ditto marks or words such as “SAME” must not be used for the bid to be considered.

C. All information must be submitted in blue ink or typewritten. Errors, alterations or corrections must be shown on both the original and all required copies and each must be initialed by the person signing the bid.

D. Bids are considered valid for ninety (90) days after bids are opened. Bidders may not withdraw, cancel or modify their bid during this ninety (90) day period after bids are opened.

E. An authorized person representing the legal entity of the bidder must sign bids.
F. The inability to meet any specified requirement(s) must be stated in writing and attached to the bid form, or written on the bid form. If no exceptions are noted, it shall be assumed that the terms of the Invitation to Bid have been accepted.

G. The Town of Simsbury reserves the right to waive any minor informality in a bid when such a waiver is in the best interest of the Town.

4. Questions:

Any questions about this project should be directed to: Mr. Thomas J. Roy, Director of Public Works by fax (860) 408-5416, or by mail Department of Public Works, PO Box 495, Simsbury, CT 06070. To receive consideration, such questions must be received at least four (4) business days before the established date for receipt of bids. No oral interpretations shall be made to any respondent as to the meaning of any of the bid documents. Every request for an interpretation shall be made in writing.

The Town will respond to all appropriate questions received via an addendum available to all prospective bidders. Such addenda will become part of this Invitation to Bid and the resulting contract. At least two (2) days prior to the receipt of bids, the Town will post a copy of any addenda to its website, located at: www.simsbury-ct.gov/finance/pages/public-bids-and-rfp. It shall be the responsibility of each bidder to determine whether addenda have been issued, and if so, to download copies directly from the Town’s website.

5. Presumption of Bidder Being Fully Informed:

At the time the first bid is opened, each bidder is presumed to have read and is thoroughly familiar with all bidding documents as well as all contract documents for this project. Failure or omission of the bidder to receive or examine any documentation or information concerning this bid shall in no way relieve any bidder from obligations with respect to their bid.

6. Pre-Bid Conference:

There is no pre-bid conference scheduled for this invitation to bid.

7. Interpretation of Acceptable Work:

The specifications, bidding and contract documents are to be interpreted as meaning those acceptable to the Town of Simsbury. The Town will issue any substantive changes or interpretations in writing as an addendum.

8. Tax Exemptions:

The bidder shall be aware that the Town of Simsbury is exempt from Federal Excise Taxes and Connecticut Sales and Use Taxes. Appropriate tax exempt forms will be provided to the successful bidder(s) as part of the contract award process.
9. Insurance Requirements:

INSURANCE REQUIREMENTS:

The firm must carry insurance under which the Town is named as an additional insured, as follows:

Such insurance must be by insurance companies licensed to write such insurance in Connecticut against the following risks with the following minimum amounts and minimum durations.

A.  Workman’s Compensation, as required by State Statute & $100,000 employers liability limit.

B.  Public Liability, Bodily Injury Liability and Property Damage Liability as follows:

   Injury or death of one person: $2,000,000
   Injury to more than one person in a single accident: $1,000,000
   Property damage in one accident: $1,000,000
   Property damage in all accidents: $2,000,000

C.  Automobile and Truck (Vehicular) Public Liability, Bodily Injury Liability and Property Damage Liability as follows:

   Injury or death of one person: $1,000,000
   Injury to more than one person in a single accident: $1,000,000
   Property damage in one accident: $1,000,000
   Property damage in all accidents: $1,000,000

Insurance under B, and C above must provide for a 30 day notice to the Town of cancellation/or restrictive amendment.

Insurance under B and C above must be for the whole duration of the contract and for twelve (12) months after acceptance of the project by the Town.

Subcontractors must carry A, B, and C in the same amounts as above for the duration of the project and until acceptance by the Town.

Certificates of insurance must be submitted to the Director of Public Works prior to the signing of the contract and within ten days of notification of award of contract. Should any insurance expire or be terminated during the period in which the same is required by this contract, the Director of Public Works shall be notified and such expired or terminated insurance must be replaced with new insurance and a new certificate furnished to the Director of Public Works.

Failure to provide the required insurance and certificates may, at the option of the Town, be held to be a willful and substantial breach of this contract.
10. **Substitution for Name Brands:**

Should brand name items appear in this bid, the bidder must attach specifications for any substitutions and explain how the substitution compares with the specifications of the named brand. The decision on whether to use the substitution or the named brand rests solely with the Town of Simsbury.

11. **Awarding the Bid:**

The Town reserves the right to accept any bid or any part of bids, to reject any, all, or any part of bids, and to waive formalities and informalities in the bidding process. The Town at its discretion will award the bid to the lowest responsible bidder. That bidder is the person or firm who is qualified and competent to do the work, whose past performance is satisfactory to the Town and whose bid documents comply with the procedural requirements stated herein.

13. **Rejection and/or Cancellation of Bids:**

The Town reserves the right to reject or cancel any and all bids, or any part of any or all bids, if such action is deemed to be in the best interest of the Town.

14. **Delivery Arrangements:** Not applicable

15. **Bid Bond:** Not applicable

16. **Performance Bond:** Not applicable

17. **W-9 Form**

The successful bidder must provide the Town of Simsbury with a completed W-9 Form prior to commencing work.

18. **Submittals:**

The Bidder shall, as soon as practicable, but not exceed fifteen (15) calendar days, after notification of selection of the award of the bid, furnish to the Owner, in writing the following:

- A. Designation of the Work to be performed by the Contractor’s own forces
- B. Names of the manufacturers, products and suppliers of the principal items of materials proposed for the work
- C. Project work schedule

19. **Agreement Documents:**

The Agreement Documents are defined as:
- The Standard Instructions to Bidders
- The Agreement as executed
- The General Specifications
- Any Addenda, if Issued

END OF STANDARD INSTRUCTION TO BIDDERS
BID FORM
RANDOM CRACK SEALING FOR BITUMINOUS PAVEMENTS

Pursuant to and in compliance with the “Invitation to Bid” and Standard Instructions to Bidders relating thereto, the undersigned, having visited the sites and carefully examined all Bidding Documents and complete General Specifications together with all Addenda issued and received prior to the scheduled closing time for receipt of Bids, hereby offers and agrees as follows:

- To provide all labor, materials, and anything else reasonably necessary to complete all work per the attached specifications.

- If awarded this Contract, we will execute a Contract with the Town of Simsbury, Owner of the properties.

In submitting this BID, the BIDDER acknowledges that:

1. Each lump sum price includes all labor, materials, transportation, hauling, overhead, fees and insurances, profit, and all other costs to cover the finished work called for regarding the specified section of Town as stated in the Contract Documents. No additional payment of any kind in the form of a surcharge will be made for work accomplished under the lump sum prices, as bid.

2. No representation of warranty has been made by the OWNER that the estimated quantities used for comparison of BIDS will even approximate the actual quantities required to satisfactorily complete the WORK required under this CONTRACT.

3. Upon receipt of written notice of acceptance of this BID by the OWNER, the BIDDER shall execute the CONTRACT attached to these documents within ten (10) calendar days and other documents as required in these documents.

4. In regard to all conditions affecting the WORK to be done and the labor and materials to be furnished, this BID is based solely on the BIDDER’S investigations and findings and neither the OWNER nor its officers, employees or agents shall be held responsible for the accuracy of, or be bound by any information contained in these Contract Documents.

Submitted By: __________________________________________________________

Company                  Phone

_______________________________________________________

Street                  City                 Zip

Authorized Signature: _________________________________________

Signature                Printed Name

Random Crack Sealing for Bituminous Pavements, Various Locations
## Crack Seal 2015

<table>
<thead>
<tr>
<th>Name</th>
<th>From Street</th>
<th>To Street</th>
<th>Length in Ft.</th>
<th>Width in Ft.</th>
<th>Square Yards</th>
<th>Cost</th>
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<tbody>
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<tr>
<th>Name</th>
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<th>To Street</th>
<th>Length in Ft.</th>
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<th>Square Yards</th>
<th>Cost</th>
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PRODUCT TO BE USED AS A SEALANT: ______________________________________

ANTICIPATED DELIVERY DATE: ______________________________________
Assuming 8/20/15 notice to proceed

WARRANTY/GUARANTEE: ______________________________________

Submitted By: ________________________________________________________

Company

Authorized Signature: ________________________________________________

Signature
IF A SOLELY OWNED COMPANY:

Company Name ____________________________________________
Address ________________________________________________
Town ____________________________________________________
By ______________________________________________________

(Authorized Signature)

Title _________________________ Date ________________

IF A CORPORATION OR LIMITED LIABILITY COMPANY:

A corporation or limited liability company organized under the laws of
_________________________________, composed of officers as follows:

_________________________ ____________________________
President                Secretary
_________________________ ____________________________
Vice President            Treasurer

IF A PARTNERSHIP:

A partnership doing business under the firm name and style of
_________________________________, composed of partners as follows:

_________________________ ____________________________
Name & Title (if any)     Name & Title (if any)
_________________________ ____________________________
Name & Title (if any)     Name & Title (if any)

This Bill must bear the written signature of the BIDDER. If the BIDDER is a partnership, the Bid must be signed by a partner. If the BIDDER is a corporation or limited liability company, the Bid must be signed by a duly authorized officer of such corporation or Limited Liability Company.

Random Crack Sealing for Bituminous Pavements, Various Locations
The BIDDER shall answer all of the following questions, as part of the Bid, so that the OWNER can judge the BIDDER's ability, experience and facilities for performing the proposed work.

1. Name of BIDDER: __________________________________________________________

2. Bidder's Tax Identification Number: ____________________________________________

3. What year was company organized/formed? ________________ __________________________

4. How many years has the BIDDER been engaged in business under the present firm or trade name? ______________________________________________________________________

5. What is the general character or type of work you perform? __________________________
                                                                                      ____________________________________________________ ______________________

6. Has a claim ever been brought in court or to arbitration against the BIDDER for failure to complete any contracted work or default on a contract? __________________________________

   If yes, explain with whom and why: _____________________________________________
   __________________________________________________________________________
                                                                                      ____________________________________________________ ______________________

7. For other similar projects you have under contract at the present time: Attach list with description of work; the name of the client/owner with telephone number; and the approximate value of the work to be performed.

   NOTE: The BIDDER is required to have completed a minimum of five (5) similar projects as a demonstration of competency and experience for the project proposed herein. Such projects are to be listed below.

8. Attach a list of all projects that your present organization has completed within the past ten years or is presently working on, including name of project, owner and name and telephone number of the owner’s representative. Indicate here how many additional pages attached: ____pages.

9. Attach a list of the names, addresses and the background/experience of all principal or key members of the BIDDERS organization, including its officers:

   Indicate the number of pages attached: ________pages

   NOTE: If requested, the BIDDER agrees to furnish the OWNER with a detailed financial statement and other relevant information that may be required by the Town of Simsbury to properly evaluate the qualifications of the BIDDER.
PROPOSED SUBCONTRACTORS

BIDDER intends to utilize the following subcontractors on this project:

If none, write “None” here: _______________________

<table>
<thead>
<tr>
<th>NAME AND ADDRESS OF SUBCONTRACTOR</th>
<th>DESCRIPTION OF WORK:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>______________________</td>
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<td>2.</td>
<td>______________________</td>
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<td>3.</td>
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<td>4.</td>
<td>______________________</td>
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<tr>
<td>5.</td>
<td>______________________</td>
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<tr>
<td>6.</td>
<td>_______________________</td>
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</tbody>
</table>
NON-COLLUSION AFFIDAVIT OF BIDDER

State of ________________________________, County of _____________________, being first duly sworn, disposes and says that:

1. He is the owner, officer, representative or agent of: _________________________________ the BIDDER that has submitted the attached BID;

2. The attached BID is genuine; it is not a collusive or sham BID.

3. He is fully informed respecting the preparation, and contents of, and knowledgeable of all pertinent circumstances respecting the attached BID.

4. Neither BIDDER nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived, or agreed, directly or indirectly, with any other bidder, firm or person to submit a collusive or sham BID in connection with the AGREEMENT for which the attached BID has been submitted or to refrain from bidding in connection with any contract, or has in any manner, directly or indirectly, sought by agreement, collusion, communication or conference with any other bidder, firm or person to fix the price or prices in the attached BID or of any other bidder, or to fix any overhead, profit or cost element of the BID prices or the bid price of any other bidder, or to secure through collusion, conspiracy, connivance or unlawful agreement any advantage against the Town of Simsbury or any other person interested in the proposed AGREEMENT.

5. The price(s) quoted in the attached BID are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the BIDDER or any of its agents, representatives, owners, employees, or parties in interest, including this affiant; and

6. That no elected or appointed official or other officer or employee of the Town of Simsbury, who is directly or indirectly interested in this BID, or in the supplies, materials, equipment, work or labor to which it relates, or in any of the profits thereof.

(Signed)_______________________
(Name of Bidder)

Subscribed and sworn to before me this
__________day of ________________, 2015

_______________________________
Title
My Commission expires ___________, 20__
ACKNOWLEDGEMENT FORM

I have read Section 1103 of the Charter of the Town of Simsbury, the Code of Ethics Ordinance, and the Guidelines issued thereunder. I understand my responsibilities as a Contractor retained by the Town of Simsbury, and I am in compliance with the Charter and the Code of Ethics. I have indicated in the space below any areas of conflict should they arise in matters before our board, commission, agency or department, and I agree to report any future conflicts under the provisions of Section 1103 of the Charter.

Areas of Exception

CONFLICTS OF INTEREST
SECTION 1103

CONFLICTS OF INTEREST. It is hereby declared to be the policy of the Town that any elected or appointed officer, any member of any board or commission or any employee of the Town who has a financial interest, direct or indirect, in any contract, transaction or decision of any officer or agent of the Town or any board or commission, shall disclose that interest to the Board of Selectmen, which shall record such disclosure upon the official record of its meetings. Such disclosure of a financial interest, direct or indirect, in any contract, transaction or decision of any officer or agent of the town or of any board or commission shall disqualify such elected or appointed official or such member of a board of commission or such town employee from participation in the awarding, assignment or discussion of said contract, transaction or decision. Violation by any such official, board or commission member or employee of the provisions of this section shall be grounds for his/her removal.

____________________________
Signature

____________________________
Name (Please Print)

____________________________
Date

A copy of the Town Code is available from the Office of the Town Clerk or is available online at http://www.simsbury-ct.gov/sites/simsburyct/files/file/towncode_1.pdf
STATEMENT OF BIDDERS COMPLIANCE WITH
EQUAL EMPLOYMENT OPPORTUNITY LAW AND
REGULATION INCLUDING EXECUTIVE ORDER NO. 3

This statement must be completed by the Bidder and shall accompany his bid for this project.

IT IS HEREBY CERTIFIED THAT:

NAME OF BIDDER: _________________________________________________

BUSINESS ADDRESS: ________________________________________________
____________________________________________________________________

To the extent required by law, the Bidder has complied on past Contracts and will fully comply on
this project with all applicable laws and regulation regarding equal employment opportunities for
minorities and women, and;

Has _____ has not _____ previously performed work under the conditions of the Governor’s
Executive Order No. 3 of the State of Connecticut, or any preceding similar Executive Order with
regards to Non-Discrimination.

_______________________________________
Signature

_______________________________________
Title

Subscribed and sworn to before me this
_______day of______________, 2015

_______________________________________
Title

My Commission expires ________, 20__

**IMPORTANT**: THIS STATEMENT MUST BE SUBMITTED WITH BID

END OF SECTION
RANDOM CRACK SEALING AGREEMENT

This Random Crack Sealing for Bituminous Pavements Agreement (the “Agreement”) is entered into the _____ day of ___________, 2015 (“Effective Date”) by and between the Town of Simsbury, a political subdivision of the State of Connecticut (the “Town”) and _____________, a _________________________ located at ________________________________, ______________, __________ (the “Contractor”).

WHEREAS, the Town has issued an Invitation for Bid (the “IFB”) for Random Crack Sealing for Bituminous Pavements for the Town of Simsbury (the “Work”) on (date)____________— to be located in Simsbury, Connecticut (the “Premises”); and

WHEREAS, Contractor submitted its Bid to the Town on (date)____________, for the Work in accordance with the requirements and specifications of the IFB; and

WHEREAS, the Town has selected Contractor and the Town and the Contractor desire to enter into a formal Agreement for the performance of the Work;

THEREFORE, in consideration of the recitals set forth above and the mutual promises by the parties below, the parties agree as follows:

1. **General.** The Contractor agrees to perform the Work in accordance with this Agreement, Standard Instructions to Bidders and the General Specifications (collectively the “Contract Documents”). The Contract Documents represent the entire and integrated agreement between the Town and the Contractor and supersede all prior negotiations, representations or agreements, whether written or oral.

2. **Duties.** Contractor shall perform the Work described in the Contract Documents except for any work that is specifically prescribed in the Contract Documents to be the responsibility of another vendor or the Town. Contractor shall furnish all labor, equipment, trucks, materials, facilities, supplies, transport, and any other things necessary to carry out the terms of the Agreement Documents.

3. **Permits and Standards.** Contractor shall, at its own expense, obtain all required permits and agreements from the Town, federal, state or other governmental authority for performance of the Work in accordance with the standards prescribed by the federal Environmental Protection Agency, the Occupational Safety and Health Administration, NIOSH, the Department of Energy & Environmental Protection of the State of Connecticut and any other federal, state or local government laws and regulations. In the event of a conflict or overlap of any such laws or regulations, the most stringent provisions shall be applicable.

4. **Compliance with Laws.** Contractor shall comply with all federal, state and local laws and regulations governing the Work whether or not such laws and regulations are fully and properly reflected in the IFB.

Random Crack Sealing for Bituminous Pavements, Various Locations
5. **Term.** The term of this Agreement shall commence on the Effective Date of this Agreement and be in effect until completion, which shall be not later than (date)____________. The contractor shall not start the Work prior to having received a notification to proceed from the Town.

6. **Payment.** The Town will pay the Contractor the sum of ________________________ Dollars ($__________) upon the completion by the Contractor of all Work required to be performed under the terms of the Contract Documents and acceptance of the Work by the Town.

7. **Insurance.** The Contractor shall carry and keep in force during the term of this Agreement insurance as more specifically described in Section 10 of the Standard Instructions to Bidders, by a company or companies authorized to do business in Connecticut. The Company shall provide certificates of insurance specifying such coverage and naming the Town as additional insured prior to the start of the work and shall provide a complete copy of the Owners, Contractors Protective Liability policy.

8. **Liability.** The Contractor agrees to assume full responsibility and liability for damage or injury to persons or real or tangible personal property caused directly or indirectly by the negligent or tortuous actions or inactions of the Contractor, its agents, employees or subcontractors with respect to the Work. The Contractor further agrees to assume full responsibility and liability for the Contractor’s failure to comply with any applicable federal, state or local law or regulation in the performance of Contractor’s duties pursuant to the Contract Documents.

9. **Hold Harmless.** The Contractor agrees to indemnify and save harmless the Town of Simsbury, its agents and employees, from and against all loss or expense, (including costs and attorneys' fees), arising out of or resulting from the performance of the Work by the Contractor by reason or liability imposed upon the Town of Simsbury, its agents and employees, for damages because of bodily injury, including death at any time resulting there from, sustained by any person or persons, (including employees of the Contractor), or on account of damage to property, including loss of use thereof, if such injuries or damages are caused by the negligence or breach of Agreement documents of the Contractor, its' agents and employees or otherwise. The existence of insurance shall in no way limit the scope of this indemnification. The indemnification provision shall be separate and distinct from issuance of a Certificate of Insurance.

10. **Assignment.** This Assignment shall be binding upon each of the Parties, their successors, executors, administrators and assigns. The Contractor shall not assign, sublet, contract, or otherwise transfer its interest, in whole or in part, in this Agreement without the express written consent of the Town. None of the work or services covered by this Agreement shall be subcontracted without the prior written approval of Town.

11. **Termination.** If the Contractor fails to perform the work under the Contract Documents in accordance with its terms, the Town shall have the right, in addition to all other remedies it may have, to declare the Agreement in default and, therefore, terminated and to resubmit the Agreement for further bid. In that event, the Contractor shall pay the Town, as liquidated damages, the amount of any excess of the new Agreement Price over the Agreement Price herein provided for, both prorated to the period of time covered by the unexpired term of the Agreement at the time of default, plus any legal or other costs incurred by the Town in terminating the Agreement and securing a new contractor.
12. **Contract Documents.** The Contract Documents include, without limitation, the following:

   (i) This Agreement; and

   (ii) The IFB, including the Standard Instructions to Bidders, General Specifications and Insurance Coverage and;

   (iii) Any addenda issued prior to the execution of this Agreement or modifications issued after the execution of this Agreement;

13. **Change Orders, Price Modifications, and Other Amendments.** The Town shall have the right to require the Contractor to make alterations of, additions to and deductions from the Scope of Work. All such changes to the Scope of Work shall be made by a written change order written by the Town. The Contractor shall compute the cost of the work under change order upon the Agreement price, subject to review and acceptance by the Town. Any other changes or amendments to the terms of this Agreement and the other Contract Documents may be made only by a written document referencing this Agreement and executed by both parties.

14. **Governing Law/Venue:** The laws of the State of Connecticut shall govern the formation, interpretation, and performance of this Agreement. No lawsuit pertaining to any matter under or growing out of this Agreement shall be instituted in any state other than Connecticut. The Parties agree that the venue for any legal proceeding in respect to this Agreement shall be Connecticut Superior Court, Judicial District of Hartford at Hartford. Venue for mediation shall be Hartford County.

15. **Independent Contractor:** Contractor’s personnel shall be and remain an independent consultant with respect to all services performed hereunder and agrees to and does hereby accept full and exclusive liability for payment of any and all contributions or taxes for social security, unemployment insurances, or old age retirement benefits, pensions, or annuities now or hereafter imposed under any local, state or federal law which are measured by the wages, salaries, or other remuneration paid to persons employed by Contractor for work performed under the terms of this Agreement. Contractor further agrees to obey all lawful rules and regulations and to meet all lawful requirements which are now or hereafter may be issued or promulgated under said respective laws by and duly authorized by state or federal officials. Contractor also agrees to indemnify and hold harmless Simsbury from contributions or taxes or liability.

16. **Payment of Subconsultants:** Contractor shall well, truly and promptly pay or satisfy the just and equitable claims of all persons who have performed labor or furnished materials or equipment for Contractor in the execution of this Agreement, and all bills, costs or claims of whatever kind which might in law or equity become a lien upon said work.

17. **Amendment:** Any changes to the terms and conditions as outlined herein must be mutually agreed upon by and between the Parties shall be incorporated in written amendments hereto, executed with the same formalities as this Agreement. No amendment or modification of this Agreement shall be effective until executed by the Parties.
18. **Execution.** This Agreement may be executed in one or more counterparts, each of which shall be considered an original instrument, but all of which shall be considered one and the same agreement, and shall become binding when one or more counterparts have been signed by each of the parties hereto and delivered (including delivery by facsimile) to each of the parties.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the day and year first written above.

TOWN OF SIMSBURY                      CONTRACTOR

BY______________________________    BY______________________________

Its                                    Its
Duly Authorized                         Duly Authorized
SCOPE OF WORK

JOINT AND CRACK FILLING OF BITUMINOUS CONCRETE PAVEMENT (LUMP SUM)

1. Description: This work consists of furnishing and applying a hot-applied mixture of Performance-Graded (PG) asphalt binder and polyester fibers into bituminous concrete pavement longitudinal paving joints, longitudinal joint-reflection cracks, non-working longitudinal cracks, and raveled transverse joints in flexible or composite pavement. It shall be constructed in accordance with these specifications or established by the Engineer. Joint and Crack Filling of Bituminous Concrete Pavement may be used in conjunction with other joint and crack treatments including (but not limited to) joint and crack sealing and joint or crack repair, and patching in which case the relative sequence of crack treatments will be prescribed in the Plans, a Notice to Contractor, or other Contract documents.

1.1 Definitions:


Crack: For the purposes of this specification, a crack is a void in the pavement structure having the following properties:

- The top of the crack is the pavement surface.
- Its length is measured along the longest dimension of the void.
- Its width is measured at the pavement surface across the length.
- Its depth is measured vertically into the pavement structure from the surface.
- At any point, the depth of a crack is greater than its width.
- The crack length is at least three (3) times the depth of the crack and at least six (6) times the nominal maximum aggregate size of the mix at the surface. (For example, for 0.5-inch pavement mix surfaces on 9 inch thick pavement; this makes the minimum length of a full-depth crack the higher value of 3.0 inches or three times the depth, or 27 inches.)

For purposes of this document, the use of the word “crack,” including all work specified for “cracks” herein, shall also apply to “raveled longitudinal joints” and “raveled transverse joints,” unless otherwise specified. In other words, for example, if this specification specifies that all “cracks” are to be cleaned, then all “raveled longitudinal joints” and all “raveled transverse joints” are to be cleaned in the same way as a “crack.”

Joint: A crack purposely built as part of construction.

Longitudinal joints: Joints formed along the direction of travel (longitudinally) between adjacent paving passes (or by handwork or other means) on the surface lift of a bituminous-concrete pavement structure. This includes joints formed by patching, utility work trenching, widening, new construction, and reconstruction.
**Transverse joints:** Joints formed perpendicular to the direction of travel on the surface lift of a bituminous-concrete pavement structure. This includes joints formed by patching, utility work trenching, widening, new construction, and reconstruction.

**Working crack or joint:** A crack or joint the width of which experiences horizontal contraction or expansion greater than 1/8 of an inch in the course of an annual or seasonal temperature cycle. Cracks or joints experiencing vertical movement under loads are beyond this description and should be treated as deteriorated cracks or joints.

**Longitudinal cracks:** Cracks, the endpoints of which are more distant in the direction of roadway travel than across the width of the pavement.

**Transverse cracks:** Cracks, the endpoints of which are at least as distant across the width of the pavement as they are along the direction of travel.

**Continuous Longitudinal Joints or Cracks:** Longitudinal joints or cracks longer than 100 feet.

**Longitudinal joint-reflection cracks in composite pavement:** Longitudinal cracks formed atop the underlying longitudinal joint of a Portland-cement-concrete pavement which has been surfaced with bituminous concrete pavement.

**Transverse joint-reflection cracks in composite pavement:** Transverse cracks formed atop the underlying transverse joint of a Portland-cement-concrete pavement which has been surfaced with bituminous concrete pavement.

**Double transverse joint-reflection cracks:** Two roughly parallel transverse joint-reflection cracks at a distance of no less than 1.5 inches but no more than six (6) inches from each other form over a single transverse joint in a Portland-cement-concrete pavement slab underlying the bituminous-concrete surface, where the minimum crack length of any of the two cracks is more than 1/4 of the underlying joint length (3 feet out of 12).

**Deteriorated transverse joint-reflection cracks:** Potholed or patched single or double transverse joint-reflection cracks with potholes or patches more than 25 percent of the joint length (more than 3 feet out of 12); also, if double transverse joint-reflection cracks form blocks between them that are less than 3 feet long in their longest dimension, this length shall be considered deteriorated.

**Associated transverse joint-reflection cracks:** In double transverse joint-reflection cracks, the joint-reflection crack with the lower width. When these two cracks are of equal width and length, one shall be treated as the transverse-joint-reflection crack and the other shall be treated as the associated transverse joint-reflection crack.

**Raveled longitudinal joints:** Defined as longitudinal joints formed between subsequent paver passes (or by handwork or other means) which have lost, due to aging of the pavement surface, at least ½ inch (in depth) of the original pavement surface material placed. This includes joints formed by patching, utility work trenching, widening, new construction, and reconstruction.

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Random Crack Sealing for Bituminous Pavements, Various Locations
Raveled transverse joints: Defined as transverse joints formed between paver passes (or by handwork or other means) which have lost, due to aging of the pavement surface, at least ½ inch (in depth) of the original pavement surface material placed. This includes joints formed by patching, utility work trenching, widening, new construction, and reconstruction.

Pothole: Any length of crack wider than two (2) inches for at least six (6) inches of crack length.

Minimum Width: The minimum width of crack or joint to be included in the work of filling joints and cracks under this item.

Maximum Width: The maximum width of crack or joint to be included in the work of filling joints and cracks under this item.

Potholed Crack or Joint Length: Any length of crack of joint wider than four (4) inches for at least six (6) inches of joint or crack length.

Flush Fill: Filling a crack to refusal such that minimal crack filling material is allowed to overflow onto the adjacent pavement surface immediately around the crack or joint. The total width of a flush fill when observed from above the pavement surface shall be 1.5 inches or less. Any excess material is to be stricken off with a squeegee immediately after placement while the material is still liquid. This shall be accomplished using the appropriate application wand and squeegee to place liquid material in a crack or joint.

Recessed Fill: Method of filling a joint or crack from the bottom up just below the top (1/8 inches below the top, +/- 1/8 inch), such that no crack filling material is allowed to overflow onto the adjacent pavement surface immediately around the crack or joint. This shall be accomplished using the appropriately sized and tipped application wand to place liquid crack filler in a crack or joint.

Surface lift of pavement: The thickness of the last lift of pavement placed prior to performing crack filling. A lift is defined as single bituminous-concrete mixture placed at a defined thickness in a single paver pass (or by handwork.)

Crack width measurement location: Crack width measurement is to be conducted flush with the pavement surface.

Total Project Area: The total surface of pavement receiving joint and crack filling in the project, taken from Table 1 of this Special Provision.

Adjusted Total Project Area: The total surface of pavement receiving joint and crack filling in the project, equal to the Total Project Area in Table 3 of this Special Provision. This area may be adjusted by the Engineer as required to account for unexpected circumstances or rejected work.

2. Materials: The hot-applied crack filling material shall be composed of a mixture of Performance Graded Asphalt Binder and polyester fibers blended to provide 4.5 to 5.5 percent polyester fibers by weight. No field mixing of the fibers is allowed. The crack filling material (with fibers) shall be
prepackaged and arrive on site ready to be placed in the melter applicator. The materials shall meet the following requirements:

2.a Polyester Fibers.
A Material Certification from the manufacturer is required for this material. The polyester fibers must meet the following requirements:

- Length: 6.4 mm ± 0.05 mm (0.25 inches ± 2 mils)
- Crimps: (ASTM D-3937) None
- Tensile Strength, (ASTM D-2256)* 480 MPa (69,600 psi) minimum
- Denier, (ASTM D-1577)* 3.0 to 6.0
- Specific Gravity 1.32 to 1.40
- Melting Temperature 245 °C (473 °F) minimum
- Ignition Temperature 540 °C (1000 °F) minimum
* This data must be obtained prior to cutting the fibers.

2.b Performance Graded (PG) Asphalt binder
The Performance Graded (PG) Asphalt binder shall be Performance Grade 76-22 and shall meet the requirements of AASHTO M-320(M) and AASHTO R-29(M). The Contractor shall submit a Certified Test Report and bill of lading representing each delivery in accordance with AASHTO R-26(M). The Certified Test Report must also indicate the asphalt binder specific gravity at 77°F, rotational viscosity at 275°F and 329°F, and a mixing and compaction viscosity-temperature chart as if the asphalt binder were to be used as binder for the construction of hot-mix asphalt. The blending of PG asphalt binder from different Suppliers is strictly prohibited. Contractors who blend PG asphalt binders will be classified as a Supplier and will be required to certify the asphalt binder in accordance with AASHTO R-26(M).

2.c Optional Filling Barrier Material - Clean, dry sand.
Sand shall conform to the requirements of Standard Specifications Section M.03.01, Fine Aggregate, except that the gradation requirements shall be replaced with the following:

<table>
<thead>
<tr>
<th>Square Mesh Sieve</th>
<th>Percent Passing By Weight:</th>
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<tr>
<td>No. 8</td>
<td>100</td>
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<tr>
<td>No. 50</td>
<td>10-40</td>
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<tr>
<td>No. 100</td>
<td>0-10</td>
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<tr>
<td>No. 200</td>
<td>0-3</td>
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</tbody>
</table>

2.d. Optional Sealing Barrier Material - Backer Rod.
The backer rod shall be a heat resistant material compatible with the joint sealant and acceptable to the manufacturer of the sealant. No bond or reaction shall occur between the sealant and the rod. It shall be of a non-water absorbent material and shall not melt or shrink when hot sealant is poured on it.

The backer rod shall have a maximum of 5% absorption when immersed in water for 24 hours with the ends sealed. The backer rod shall be of such a size that compression is required for installation in the joint, so that it maintains its position during the sealing operation. Backer rod shall be dry.
The contractor must submit to the Engineer all Material Safety Data Sheet documents from the material manufacturer(s) prior to the commencement of work. During work progress, the contractor must submit to the Engineer the manufacturer’s certificate of testing for compliance to applicable specifications for each batch or lot of material utilized on the contract.

2.e Optional Sealing Material – Hot-Applied Asphalt
Crafco 34221 (Roadsaver 221) is approved for use as an alternate material.

2.f Bulk Delivery
Town will allow blending of materials off-site as long as product arrives on-site in fully blended condition. No on-site (field) mixing of materials will be allowed. Contractor must supply material certification for each shipment. Town of Simsbury reserves the right to take samples and test at any time during the project and test to ensure compliance with specifications. If sample fails to meet specifications, contractor is responsible for mitigation of work and additional testing.

3. Equipment: The equipment used by the contractor shall include, but not be limited to, one or more of each of the following:

(1) Melter Applicator: The unit shall consist of a boiler kettle equipped with pressure pump, hose, and applicator wand; the boiler kettle may be a combination melter and pressurized applicator of a double-boiler type with space between the inner and outer shells filled with heat transfer oil. Heat transfer oil shall have a flash point of not less than 600°F. The kettle shall include a temperature control indicator and a mechanical agitator. The kettle shall be capable of maintaining the treatment material at the manufacturer’s specified application temperature range. The kettle shall include an insulated applicator hose and application wand. The hose shall be equipped with a shutoff control. The kettle shall include a mechanical full sweep agitator to provide continuous blending. The unit shall be equipped with thermometers to monitor the material temperature and the heating oil temperature. The unit shall be equipped with thermostatic controls that allow the operator to regulate material temperature up to at least 425 °F.

(2) Application Wand and Squeegee Applicator: The material shall be applied with a wand followed by a squeegee applicator. The squeegee applicator shall be of commercial/industrial quality designed with a “U” shaped configuration. It shall be of a size adequate to strike off, flush with the surrounding pavement surface and without overflow around the sides, all hot joint and crack filler placed to fill joints and cracks. This tool shall be either attached to the applicator wand or used separately as its own long handled tool.

(3) Hot Air Lance: The unit shall be designed for cleaning and drying the pavement surface cracks. Minimum compressed air capacity shall be 100 psi. The compressed air emitted from the tip of the lance shall be flame free and be capable of achieving a temperature of at least 1500°F.

4. Construction Methods: The crack filling operation shall proceed in accordance with the requirements of the “Maintenance and Protection of Traffic” and “Prosecution and Progress” specifications.
(1) Weather Requirements: Work will not be performed unless the pavement is dry. No frost, snow, ice or standing water may be present on the roadway surface or within the cracks. No work shall be done if the ambient temperature is below 40°F during the field application operations.

(2) Selection of Cracks for Preparation and Filling

All pavement surface cracks and joints between the Minimum Filling Width and the Maximum Filling Width listed in Table 1 below shall be prepared in this manner, subject to the criteria in Table 2.

<table>
<thead>
<tr>
<th>Table 1 – Nominal Minimum and Maximum Filling Width</th>
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<tbody>
<tr>
<td>Minimum Filling Width</td>
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<tr>
<td>Maximum Filling Width</td>
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</table>

Cracks and Raveled Longitudinal and Transverse Joints to be filled: The width and depth requirements for “cracks” and “raveled longitudinal and raveled transverse joints” to be filled are not the same. The requirements for cracks and raveled joints are stated below.

All crack and raveled joint width determinations shall be made by measuring the pavement crack or joint width flush at the surface of the pavement to be filled. A straightedge shall be used whenever necessary to establish the location or limits of the “flush” surface of the pavement. Note: The width determinations made to identify joints and cracks to be filled may not be the same as the finished width after placement of the filler material. The act of striking off all filler placed may cause the finished appearance of a filled joint or crack to be wider than what was initially measured. This final width is not the width to be used to determine whether a crack or joint should be filled under this specification. It is the width measured before placement of any filler that is to be used to determine the appropriate widths of cracks and joints to be filled.

<table>
<thead>
<tr>
<th>Table 2 - Criteria for Selecting Cracks/Joints to Fill</th>
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<tbody>
<tr>
<td><strong>Type</strong></td>
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<tr>
<td>Crack</td>
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<td>Crack</td>
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<td>Raveled Joint</td>
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</tr>
<tr>
<td>Raveled Joint</td>
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</table>

(3) Preparation:

Cracks/joints shall be prepared to a depth of at least 0.75 inches for cracks between \(\frac{1}{8}\) inches and \(\frac{3}{4}\) inches in width, and to a depth of 1.25 inches for cracks between \(\frac{3}{4}\) inches and 1.5 inches in width.

In the event that cracks are packed tightly with debris, dirt, vegetation, or other material except previously placed sealant or filler that cannot be removed by a hot air lance, the Contractor shall use a vertically mounted power driven wire brush to remove debris and vegetation and burnish the sides of the crack. Cracks treated with the wire power brush shall subsequently be treated with a hot air lance as described below. The conjunction of the use of the wire power brush and the hot-air lance treatment shall result in the complete removal of all material in the crack (except previously placed sealant or filler) such that the sides of the crack are completely free and clean of any debris and moisture as described in this section.

Pavement surface cracks and, raveled longitudinal joints, and raveled transverse joints to be filled shall be treated with a hot-air lance prior to application of the crack fill material. Two passes, minimum, shall be made with the hot-air lance. The hot air lance operation shall proceed at a rate no greater than 120 feet per minute. There shall be no more than a 10 minute time lapse between the second hot-air lance treatment and the material application. Should this time be exceeded the Contractor shall make an additional pass(es) with the hot air lance.

The use of the hot air lance is not intended to heat the crack; it is to remove any latent moisture or dampness from inside the crack until the inside of the crack is completely dry. “Moisture” does not include standing water. The hot air lance is not to be used to “boil off” or blow standing water from the bottom of a crack or joint. If standing water is present in the bottom of any crack or joint, the filling operation shall be postponed until such time that the standing water evaporates naturally. The Contractor may be allowed to use compressed, oil-free, air (not heated) to blow standing water from a crack to help accelerate the natural evaporation of any standing water. If this is done, the crack must be allowed to dry naturally until all standing water is visibly gone. Then the hot air lance may be used. If a crack is already completely dry, in the opinion of the Engineer, the hot air lance should be operated at its lowest temperature possible.

In the event that existing cracks are open or void to depths greater than 2 inches below the pavement surface, the Contractor may, at his own option, use backer rod or clean dry sand to fill the bottom of the crack as specified below. If sand or a backer rod is used it shall be placed so the top of it is 1.25 inches below the elevation of the pavement surface.
A backer rod or filling sand will not be allowed for cracks wider than 1.5 inches in width or for cracks less than 0.5 inches wide.

**Filling Barrier Material - Clean, dry sand.**
Sand shall conform to the requirements of Standard Specifications Section M.03.01, Fine Aggregate, except that the gradation requirements shall be replaced with the following:

<table>
<thead>
<tr>
<th>Square Mesh Sieve</th>
<th>Percent Passing By Weight:</th>
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<tbody>
<tr>
<td>No. 8</td>
<td>100</td>
</tr>
<tr>
<td>No. 50</td>
<td>10-40</td>
</tr>
<tr>
<td>No. 100</td>
<td>0-10</td>
</tr>
<tr>
<td>No. 200</td>
<td>0-3</td>
</tr>
</tbody>
</table>

(4) Crack Filling: Cracks are to be filled to refusal along their entire length. The treatment material shall be maintained at the manufacturer’s specified application temperature range at all times. The filling operation shall be suspended if the temperature of the crack filling material falls outside the specified/recommended temperature range and shall remain suspended until the crack filling material is brought within the specified temperature range. Cracks must not be overfilled since this may detrimentally affect any planned overlay treatment. If any portion of the crack is overfilled it shall be squeegeed immediately following application of the crack filler material, striking excess material as flat to the adjacent pavement surface as possible. Filled cracks are to be squeegeed immediately following application of the crack filling material, striking excess filler flat to the adjacent pavement surface. There shall be no build-up of treatment material above or adjacent to the crack at any time. In cases where the initial application of filler material fails to fill the crack or shrinks upon cooling such that there is a depression formed of at least one quarter of an inch or greater, a second application of filler shall be placed over the first application to fill the crack adequately as described above.

**Protection of Filled Cracks and Joints:** No traffic shall be permitted on the pavement until the crack fill material is set and the material does not track and is not deformed or pulled out by traffic. If plans call for placing a bituminous surface treatment (e.g. overlay) over the crack filler, a detackifier (sand or liquid or spray or other) or blotter may not be used. Use of any detackifier may interfere with the bonding of any material placed over the material. If a detackifier is used, it shall be one recommended by the supplier of the filler material and shall be used as recommended by the supplier. However, no paper, cotton, or other organic materials shall be allowed for either blotting or detackifying. Information on the type and usage of a detackifier shall be presented to the Engineer in writing. Any acceptance of the detackifier shall be granted by the Engineer in writing.

(5) Surplus Treatment Material: Treatment material remaining in the contractor’s kettle at the close of the daily work session shall be discarded. At no time shall treatment material be re-heated for use in subsequent crack filling applications unless permitted by the Engineer following a review of field operation circumstances.
(6) All debris generated from the operations described above shall be removed from the roadway by the Contractor and disposed in accordance with State of Connecticut law.

(7) Replacement of existing pavement markings obliterated by the crack and joint treatment work: Existing pavement markings obliterated by the crack and joint treatment work shall be replaced with temporary pavement markings before the roadway is opened to traffic. All costs associated with repair of work damaged by traffic and placement of temporary pavement markings will be borne by the Contractor.

(8) Required Project Documentation. Provide the Engineer, on a daily basis, a report with the following information:
   1. Job number and route number.
   2. Date, air temperature (°F), a.m. and p.m. weather.
   3. Beginning and ending locations for the day, including lane(s) and direction.
   4. Unique or different situations on the project.
   5. Contractor’s signature.

(9) Material Mixing Procedure: Field mixing of the Performance Grade Binder and the Polyester Fibers is not allowed. The prepackaged material shall be added to the melter applicator. It shall then be heated and mixed/circulated to the recommended application temperature. The crack fill material shall never exceed 400 °F.

5. **Acceptance of Work:** When work is complete on the project, or on a project location if multiple locations are included in the project, an inspection of the work shall be scheduled with the Engineer. The Engineer will note all deficiencies including areas exhibiting adhesion failure, cohesion failure, tracking of filler material, missed cracks or joints, and/or other factors that show the work is not acceptable. Work identified by the Engineer as not acceptable shall be re-done at the Contractor’s expense. The Contractor shall notify the Engineer upon completion of required corrective work so he/she can inspect it. All inspections are to take place before applying any subsequent surface treatments.

6. **Method of Measurement:** Each Street section is to be paid for as a lump sum. The limits of each Street section are indicated with the From/To intersections, with the termini as the curblines of the From/To streets. The estimated project area for each section, in square yards of pavement area in which cracks or joints are filled, are for reference only. Sections may be removed at the Engineer’s discretion.

7. **Basis of Payment:** Pavement joints and cracks joints filled, as verified and accepted by the Engineer, shall be paid for at the contract Lump Sum price per section for Sections A and B. Pavement joints and cracks joints filled, as verified and accepted by the Engineer, shall be paid for at the contract linear foot price for Additional Crack Filling. The price shall include all materials, equipment, tools, and labor incidental thereto. Mobilization and Maintenance and Protection of Traffic are incidental to this work and will not be paid for as a separate item. No payment will be issued to the contractor prior to document submittals required.

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
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<tbody>
<tr>
<td>0406196A - Joint and Crack Filling of Bituminous Concrete Pavement</td>
<td>Lump Sum</td>
</tr>
</tbody>
</table>

Random Crack Sealing for Bituminous Pavements, Various Locations
8. Measurement and Payment

All work will be paid as a Lump Sum for work complete and in place according to the contract documents on a street by street basis. No payments will be made for mobilization, materials or other costs. The Town reserves the right to hold a 5% retainage on all progress payments.