

Town of Montville

INVITATION FOR PROPOSALS COLD IN-PLACE RECYCLING BID # 2020-11

The Town of Montville is soliciting bids for Cold In-Place Recycling.

All proposals are due no later than 6/4/2020 at 10:00 AM and must be received at the Finance Office prior to the due date and time. A proposal must be delivered by regular or overnight mail to the Town of Montville, Finance Office, 310 Norwich/New London Turnpike, Uncasville, Connecticut 06382, with the proposal contained in a sealed envelope marked "COLD IN-PLACE RECYCLING". The proposal must be signed by a Company official. Proposals will be opened and read aloud in the Finance Office, and interested persons may attend the opening remotely under procedures that will be posted on the Town of Montville's website.

In addition to other reservations and conditions contained in the proposal documents, the Town of Montville reserves the right to waive any technical defects in the proposals received; to waive any formalities or irregularities; to reject any and all proposals for any reason, including that it or they do not conform to the terms and conditions described herein, as determined by the Town in its sole discretion; to accept or reject any part of any proposal received; to present and negotiate terms of a contract together or separately with any party submitting a proposal; to determine qualifications exclusively and finally; to request additional qualifications; and to select any proposal or part thereof based on any combination of factors, including the amount proposal, the time of completion, and the Town's best interests. The Town further reserves the right to retain all proposals submitted and to use any ideas in a proposal regardless of whether or not that proposal is selected.

It is the intent of the Town to award this contract to the lowest responsible bidder who is capable of performing work for all listed bid items. All bid items must be filled out to constitute a qualifying bid. The Town of Montville reserves the right to reject any or all bids and waive any informalities or irregularities in the bid procedure or bids.

The Town may hold the bids for a period not to exceed sixty (60) days from the date of the bid opening to review the bids and investigate the bidders' qualifications prior to awarding the contract.

All bidders are advised the Town of Montville has enacted through resolutions the following special conditions concerning Town bids and purchases.

1. For all Town purchases of goods and services not utilizing State or Federal funds, any Town bidder that has submitted a bid not more than 15% (fifteen percent) higher than the low bid may be awarded the project provided such Town based bidder agrees to accept the award of the bid at the amount of the low bid. If more than one Town based bidder has submitted bids not more than 15% (fifteen percent) higher than the low bid, and have agreed to accept the award of the low bid, the lowest responsible bidder shall be the one of such Town based bidders that submitted the lowest bid. That within the bidding process that all businesses claiming to be Montville businesses, provide the Finance Department (Assessor's Section) with sufficient documentation to prove that they are in compliance with property tax assessments, including motor vehicle tax assessments.
2. Seller agrees that as a condition of his sale of goods and/or services to the Town of Montville, the Town of Montville will be authorized to deduct from the proceeds due Seller an amount not to

exceed 25% of the total amount due Seller. Said amount is to be applied against any unpaid and overdue taxes, assessments, fees, or other charges levied by the town of Montville or any agency thereof against the Seller. The Seller further agrees that Seller shall insure that Seller has the right to withhold an amount not to exceed 25% from each subcontractor working for the Seller, and providing goods and/or services to the Town of Montville, and to remit such withheld money to the Town in full or partial satisfaction of any unpaid and overdue taxes, assessments, fees, or other charges levied by the Town of Montville or any agency thereof against such subcontractor.

INSTRUCTIONS TO BIDDERS

Bids shall be submitted on the enclosed forms. Incomplete forms may be cause for disqualification of the Bid. Bids must be signed by an authorized representative/officer/agent of the Bidder.

The Town of Montville shall be the sole judge as to whether any Bid complies with these specifications, and such a decision shall be final and conclusive. Bidders shall state any exceptions taken to the Bid specifications.

The Town of Montville is exempt from the Connecticut sales tax, Federal excise taxes, and the provision of the Federal-Robinson-Patman Act.

CONTRACT PERIOD

The contract period shall be for one year, beginning on July 1, 2020 and ending on June 30, 2021.

The Town reserves itself the option to extend the use, terms, conditions and prices of this bid annually, up to a maximum of two (2) years after the first year in which the contract is awarded. Such extension must be mutually agreed upon between the town and the Contractor.

It is the intent of this Request for Bids that all political subdivisions and districts located in the State of Connecticut be entitled to make purchases of materials, equipment, or supplies from the resulting bid award. Each participating entity shall be billed by and make payment directly to the successful bidder. In the event of a failure or breach in performance of any such bid by a participating entity or the successful bidder, The Town of Montville, specifically and expressly disclaims any and all liability for such defective performance or breach, or failure of either party to perform in accordance with its obligations, covenants.

SPECIFICATIONS

COLD IN PLACE RECYCLING

Description of Goods and Services

1. Scope

Work under this contract shall consist of milling the existing bituminous pavement, pulverizing these millings, adding emulsified asphalt, possibly adding new aggregate, Portland cement, mixing, repaving and compacting the mixture in one continuous operation to the lines, grades, and dimensions shown on the plans.

Contractor shall supply all equipment, including fuel for such equipment, equipment maintenance, equipment repairs, equipment operators and labor.

2. **Materials**

2.1 The asphalt emulsion type shall be called for in the proposal (Either HFMS-2 or CSS- 1H) see enclosed specifications for asphalt emulsion.

2.2 The cold recycled asphalt pavement shall consist of approximately three (3) to four (4) inches of the existing bituminous pavement and meet the following gradation requirement.

<u>SIEVE SIZE</u>	<u>% PASSING</u>
1 1/2"	100
1"	90-100

2.3 The existing bituminous material shall be milled in a manner that does not disturb the underlying material in the existing roadway. The depth of milling shall be adjusted as necessary to avoid mixing soil from under the pavement into the recycling process. Wherever feasible, it is desirable to maintain at least two inches (2.0") of existing pavement after the milling process to support the cold-in-place train and limit the incorporation of the base materials.

2.4 Mix Design and Submission Requirements

Mix designs shall be performed on materials obtained from cores within depth of the range of anticipated milling. The mix design shall be performed at varying rates of emulsion addition to determine the optimal emulsion application rate for the given material.

Cores or laboratory testing Contractor performs to establish the recycled asphalt mix design shall be included in the cold-in-place recycled pavement pay item and not paid for separately.

2.5 Aggregate (New coarse and fine)

New Aggregate may be added to the cold-in-place recycling process to improve the characteristics of the finished product but shall not exceed 20% of the total mass of the finished product being placed. Any new coarse or fine aggregate added to the recycling process must meet the requirements of FORM 816 Section M.04 Bituminous Concrete for coarse aggregate, the nominal maximum aggregate size shall not exceed one-half inch (1/2"). A mix design shall be submitted with the new aggregate incorporated into the design.

2.6 Portland Cement

The use of Portland cement as an additive is acceptable to enhance the characteristics of the finished product. The addition of Portland cement shall not exceed 1.5% of the finished product by weight. If Portland cement is to be used as an additive, it shall be included in the mix design process.

2.7 Fogseal

Due to traffic conditions and surface preparation for the next wearing course, a Fog Seal with cover sand may be required.

3. **Construction Requirements**

3.1 The existing bituminous material shall be cold recycled in a manner that does

not disturb the underlying material in the existing roadway. However, in some circumstances a certain amount of the base material may have to be incorporated. In other instances, it may be necessary for the contractor, with the consent of the highway superintendent, to decrease the depths of cut because of large rocks, ledge or unsuitable materials.

3.2 Recycling operations shall not be performed when the atmospheric temperatures are below 50 degrees Fahrenheit or when the weather is foggy or rainy, or when weather conditions are such that proper mixing, spreading and compacting of the recycled material cannot be accomplished in the judgments of the highway superintendent and the project supervisor.

3.3 When commencing recycling operations, the asphalt emulsion shall be added to the pulverized bituminous material at the initial design rate determined and varied by the project engineer-supervisor as required by existing pavement conditions. This amount will be conveyed to the Town Highway Superintendent before commencement. An allowable tolerance of plus or minus 0.2 percent of initial design rate or project engineer-supervisor direct rate of application shall be maintained at all times. The contractor may add water to the pulverized material to facilitate uniform mixing with the asphalt Emulsion. Said water shall not cause an adverse effect on the addition or the recycled material. In some instances, aggregate will have to be incorporated into the recycled mix to improve the gradation of the in-place mixes. These aggregates shall be crushed stone or gravel conforming to the requirements of ConnDOT M.04.01 1. Coarse Aggregates of the January 2016 Form 817 Specifications for Roads, Bridges, and Incidental Construction, as currently amended. Bank run gravel will not be allowed.

3.4 The contractor shall demonstrate his or her ability to obtain a minimum Density of 95 % of a laboratory specimen prepared in accordance with AASHTO T-245 (50 blows). The Highway Superintendent and or project Engineer- supervisor may require a re-demonstration of rolling capabilities when a change in the recycled material is observed, whenever a change in rolling equipment is made or if densities are not being obtained with the rolling pattern being used.

3.5 After the recycled material has been spread and compacted, an additional hour of curing may be allowed prior to area being opened to traffic. Before placing bituminous surfacing, the recycled material shall be allowed to cure such that the free of moisture content is reduced to 1.5% or less or for a minimum of 7 days.

3.6 Manholes and Other Structures: Contractor will not be responsible for lowering or cutting asphalt or removing asphalt for manholes, the town may lower and plate manholes or saw cut up to but not more than 5' before and after and at least halfway across the road and remove asphalt with backhoe prior to COLD IN PLACE RECYCLING. The Municipality shall be responsible for covering all storm drains and catch basins on the project and have the location of each clearly marked prior to commencement of recycling. Any downtime of the Recycler and affiliated equipment caused by damage due to striking underground utilities that have been left un-marked, shall be compensated at an hourly rate for all hours lost. HMA may be placed in front of milling machine for use.

3.7 The responsibility of ensuring that the cold-in-place recycled mix is not damaged by traffic will be determined by who is in control of Maintenance and Protection of Traffic (municipality or contractor).

3.8 Traffic, including construction traffic, shall be kept off freshly placed Cold-in-

place recycled mix for a minimum of one hour or whatever time is required to prevent damage to the surface.

3.9 The decisions of what traffic control will be needed will be made by the highway superintendent and the contractor prior to starting the project. The maximum speed of traffic on the fresh recycled mix shall be 30 km/h (20 mph). This speed must be posted and enforced.

4. Equipment

4.1 The contractor shall furnish a self-propelled down cutting milling machine capable of pulverizing the existing bituminous materials to the specified depth in one pass. Said machine shall have a minimum rotor cutting width of 10.5 feet with the capability of widening to 13.5 feet, standard automatic depth controls and must maintain a constant cutting depth.

4.2 A positive displacement pump, capable of accurately metering the required Quantity of emulsion down to a rate of 4 gal/minute, shall be used.

4.3 Placing of recycled bituminous base course shall be accomplished with a self-propelled bituminous paver having sufficient hopper capacity of (15 ton minimum) to temporarily store surges of materials due to variations in the pavement and milling depths. Ensure that a continuous flow of material is deposited into the paver hopper. Material should not overflow the hopper and spill over the sidewalls, nor should the hopper be under filled such that the drag slats in the bottom of the hopper are exposed. The bituminous recycled material shall be spread in one continuous pass, without segregation.

When a pick-up machine is used to feed the windrow into the paver hopper, the pick-up machine shall be capable of picking up the entire windrow to the underlying materials

In instances where a large surplus of RAP is produced, the equipment shall have provisions for off loading this processed material prior to its being mixed with emulsion. Where deficiencies of material exist due to pavement conditions such as rutting or thin pavement, the off loaded RAP may be added back into the process.

Rolling Procedure

4.4 The number, weight, and type of rollers shall be sufficient to obtain the required compaction of a minimum of 95% while the mixture is a workable condition except that the pneumatic roller(s) shall be 20 ton minimum weight.

Initial rolling is to be done with a rubber tired roller(s) and continued until no displacement is observed or until the pneumatic rollers have "walked out". Final rolling to eliminate pneumatic tire marks and achieve density shall be done by steel wheel roller(s), either in static or vibratory mode, as required to achieve required density.

Rollers shall not be started or stopped on encompassed recycled material. Rolling shall be established so that starting and stopping will be on previously compacted recycled material or on the existing bituminous roadway or shoulder. Any type of rolling that results in cracking, excessive movement, or other types of pavement distress shall be discontinued until such time the problem can be

resolved. The highway superintendent and project engineer- supervisor have sole discretion of discontinuation and commencement of rolling operations.

Compaction should begin when the mix begins to break (30 minutes-2 hours).

- Ensure that the rollers are the correct distance behind the paver in accordance with the requirements of the emulsion manufacturer.
- Ensure that rollers are not operating at more than 6.4 km/h (4 mi/h).
- Ensure that there is no damage from potential overrolling.
- Communicate daily with the roller operators to review the developed rolling pattern.
- Ensure that stops, starts, and turns are gradual.
- Ensure that finish rolling is completed within the time specified in the contract documents.
- Ensure that water (or an approved wetting agent if permitted by the contract documents) is lightly sprayed onto the roller drums and tires to prevent pickup. Under no circumstances should diesel or other solvents be used to prevent pickup.

5. Fog Seal Specification

5.1 This work shall consist of furnishing all materials, equipment, labor and preparation necessary for the application of a light coating of asphalt emulsion to the recycled material

5.2 Asphalt emulsion CSS-1H Fogseal will be used

5.3 Provide equipment conforming to the requirements of this section.

- Use equipment for asphalt emulsion distribution ensure that it has a computerized rate control that automatically adjusts the emulsion pump to the unit ground.
- Furnish accurate thermometers for determining any of the applicable temperature requirements of this specification.

5.4 Do not place fog seal if any of the following conditions exist:

- Impending weather conditions do not allow for proper curing or if temperatures are forecasted below 50°F (10°C) within 24 hours from the time of work
- Existing pavement temperature is 140°F (60°C) or above
- Pavement surface is wet or rain is forecasted within 24 hours of placement

5.5 The Contractor shall follow the construction methods as described:

- Apply the asphalt emulsion at the target rate(s) established during the test strip.
- Maintain the asphalt emulsion temperature from 150 to 185°F (65 to 85°C) during construction, including the start of each day.
- If the target application rates are not the optimum application rates to achieve proper coating of the recycled material or the break time is too long or short, immediately notify the Engineer.
- Do not allow the asphalt emulsion to streak on the road surface. If the Engineer determines that streaking is occurring, cease operations until the Engineer is satisfied that streaking has been eliminated.

5.6 Asphalt Emulsion Application Rates

- Gallons per Square Yard
- 50% Diluted Emulsion 0.03 – 0.11 0.06 – 0.15

5.7 During the application of the fog seal, inspect the fog seal for deficiencies resulting from poor workmanship, flushing, tracking from equipment, surface patterns, and sweeping. Inspect workmanship for untreated areas, minimum overlap on longitudinal joints, and minimum overlap on construction joints.

5.8 Cover Sand will be applied at a rate between two (2) to three (3) pounds per square yard.

6. Contractors Requirements

6.1 The contractor is required to present to the Town a history of 5 years of experience in cold-in place pavement recycling. This history must be included with bid submission.

6.2 The contractor shall own or show the ability to own, rent or subcontract the equipment with properly trained personnel and experience which he or she intends to complete the contract, if so awarded.

6.3 The contractor shall show the ability to properly supply the project with ample access to liquid asphalt as required by the cold in place process.

6.4 The contractor is required to provide a project engineer-supervisor on the job and the name of project engineer-supervisor will be supplied prior to project.

7. Method of Measurement

7.1 Quality controlled cold-in-place recycling shall be measured by the square yard. The depth of cut of the milling operation shall be designated by the engineer/supervisor and highway superintendent.

7.2 Any additional aggregate or additive placed by the contractor will be measured by the ton.
and the terms and conditions of this bid.

TRAFFIC CONTROL – ALL PROCESSES

If Municipality is in charge of traffic control:

Municipality shall be responsible for traffic control patterns throughout the term of Contract. Municipality shall be responsible for providing traffic control personnel, as well as supplying, erecting, maintaining, moving and removing all signs, sign supports, barricades, traffic cones, traffic delineators, and any other materials necessary to establish the traffic patterns.

If Contractor is in charge of traffic control:

Contractor shall be responsible for traffic control patterns throughout the term of Contract. Contractor shall be responsible for providing traffic control personnel, as well as supplying, erecting, maintaining, moving and removing all signs, sign supports, barricades, traffic cones, traffic delineators, and any other materials necessary to establish the traffic patterns. Contractor controlled traffic includes 3 flaggers. Should additional flaggers be needed, there will be an "additional flagger" pay item by the day.

PRICE PAGE

Cold In-Place Recycling

3" Depth Cold In Place Recycling

<u>Total Square Yards</u>	<u>Price per Square Yard</u>
10,000 -24,999	
25,000 -49,999	
50,000 +	

4" Depth Cold In Place Recycling

<u>Total Square Yards</u>	<u>Price per Square Yard</u>
10,000 -24,999	
25,000 -49,999	
50,000 +	

Portland Cement: \$ _____/ton

Aggregate: \$ _____/ton

Fog Seal: \$ _____/sq. yd.

Fog Seal, Municipality Supplies Sand/Sand Truck: \$ _____/sq. yd.

Fog Seal, Contractor Supplies Sand/Sand Truck: \$_____ /sq. yd.

Traffic Control, Contractor Supplies: \$_____ /sq. yd.

Additional Flagger \$_____ /day

BIDDER

SIGNATURE

COMPANY NAME

DATE

TITLE

PHONE

ADDRESS

FAX