

INVITATION FOR BIDS High Street Mill & Overlay Project – 2020 Bid # DPW-20-B-032

I. GENERAL INFORMATION AND PROPOSAL SUBMISSION REQUIREMENTS

• All Bids must be delivered by 11:00 am on Thursday, April 30, 2020 to:

Procurement Department Westwood Town Hall 580 High Street Westwood MA 02090

- Westwood Town Hall is closed to the public due to COVID-19 concerns. To promote the health and safety of bidders and town employees, the following procedures are in effect and may affect your bid submission.
 - o If the bidder is using a delivery service, the package <u>must be signed for</u> by a Westwood Town Hall staff to be considered properly delivered.
 - Bids sent by courier can only be dropped off in the Town Mail Drop Box. The drop box is a green mailbox in front of Town Hall labeled "Town Hall Mail Drop Only."
- Bidders who wish to attend the Bid Opening can do so by telephone conference call. To attend, call 1-888-296-6828. When prompted, enter Participant Passcode #756869. Bids will be publicly read on the conference call.
- Bids will be scanned and posted to the Town website, www.townhall.westwood.ma.us, as soon as practicable after the opening.
- Bids received after the time and date established herein SHALL NOT be accepted or considered, regardless of the cause for delay in the receipt of such proposal(s).
- Submit the proposal in a sealed envelope clearly marked "Bid # DPW-20-B-032, High Street Mill & Overlay Project 2020."
- Bidswill be opened
- The proposal <u>must</u> include a Non-Collusion form, Tax Compliance Certificate and other Attachments listed below.
- The proposal <u>must</u> also include a Bid Signature Form. When the Bid Signature Form is completed, it declares:
 - The only parties interested in this bid are the Principals named herein.
 - No officer, agent or employee of the Town of Westwood has a direct or indirect interest in this bid.



Bid Form

- Each bid shall be accompanied by a bid deposit in the form of a certified, bank, Treasurer's or cashier's check, or a bid bond issued by a surety company licensed by the Commonwealth of Massachusetts, in the amount of (5%) if the total bid price, made payable to the Town of Westwood.
- All bid deposits except that of the lowest responsible bidder shall be returned within five (5) days, Saturday, Sunday and legal holidays excluded, after the opening of the bids.
- The Bidder whose Bid is accepted agrees to furnish the Contract Bonds, each in the sum of the full amount of the Bid and/or Contract Price as determined by the Town, and duly executed and acknowledged by the said bidder as Principal and by a surety company qualified to do business under the laws of the Commonwealth of Massachusetts and satisfactory to the Town, as Surety, for the faithful performance of the Contract and payment for labor and materials. The premiums for such Bonds shall be paid by the Contractor
- The bidder to whom the bid is awarded will be required to execute an Agreement within sixty (60) calendar days from the date when the Notice of Award is received. In the event the bidder fails to execute an Agreement with the Town, the Town may consider the bidder to be in default, in which case the bid deposit shall become the property of the Town.
- Should the bidder fail to fulfill any of his/her agreements as herein above set forth, the Town shall have the right to retain as liquidated damages the amount of the bid check or cash which shall become the Town's property. If a bid bond was given, it is agreed that the amount thereof shall be paid as liquidated damages to the Town by the Surety.
- All prices, except at the extended totals, shall be stated in both words and figures. In the event
 of a discrepancy between the price in words and the price in figures, the written word shall
 govern. In the event of a discrepancy between mathematical totals and the totals stated, the
 mathematical totals shall govern.
- Onbalanced bidding is expressly prohibited and all unit bid prices will be compared for reasonable conformance with the engineer's estimate. The Town has the right to reject award of a bid, or part thereof, to protect the public interest if it is apparent that a bid is mathematically unbalanced, the bidder front-end loads its bid as to amount to an advanced payment, there extreme variations from the engineer's estimate or other bids received, if in the opinion of the Town, the unit prices create a reasonable doubt that that apparent low bidder will actually result in the lowest cost to the Department, and/or if the overall competitive bidding process has been jeopardized.
- The estimated quantities shown are based solely upon a reasonable assessment of the project parameters, thus the Contractor is advised that the actual quantities may vary substantially as field conditions may necessitate. Regardless of the amount of actual quantities, however, the quoted unit prices shall always apply.
- There is no separate labor charge under this bid: unit prices shall include full compensation for all labor, materials, tools and equipment, and all incidentals necessary to complete the work as specified herein.
- In case of death, disability, or other unforeseen circumstances affecting the bidder, which
 materially impairs the bidder's ability to execute an Agreement and perform the required
 service, such bid deposit may be returned to the bidder by the Town.
- The proposal must be signed as follows: 1) if the bidder is an individual, by her/him personally; 2) if the bidder is a partnership, by the name of the partnership, followed by the signature of each general



partner; and 3) if the bidder is a corporation, by the authorized officer, whose signature must be attested to by the Clerk/Secretary of the corporation and the corporate seal affixed.

- Any bid may be withdrawn prior to the bids submittal due date. However, bidders may not withdraw or modify their bid for a period of ninety (90) days following the opening of bids.
- The contract will be awarded within thirty (30) days after the proposal receipt. The time for award may
 be extended for up to 45 additional days by mutual agreement between the Town and the apparent
 lowest responsive and responsible bidder.
- Questions concerning this invitation for proposals must be submitted in writing to: Procurement
 Department, Westwood Town Hall, 580 High Street, Westwood MA 02090 or by email at
 Procurement@townhall.westwood.ma.us. Questions may be delivered or mailed. Written responses will
 be posted on the Westwood Town Hall website.
- Any and/or all work is subject to available funds. The Town reserves the right to waive any informalities in, or to reject, any or all bids should the Town deem it to be in the Town's best interest to do so.
- The Town of Westwood may cancel this IFB, or reject in whole or in part any and all proposals, if the Town determines that cancellation or rejection serves the best interests of the Town.
- Below is a list of all Attachments. Bidders should note that Attachments C-I <u>must be completed and be</u> submitted with the bid documents.
 - Attachment A Special Provisions
 - Attachment B Wage Rates
 - Attachment C Bid Item Sheet
 - Attachment D Bid Pricing Sheet
 - Attachment E Labor Harmony and OSHA Training
 - Attachment F Certificate of Non-Collusion
 - Attachment G Tax Compliance Certificate
 - Attachment H Signature Page
 - o Attachment I Reference Form
 - Attachment J Maps and Details

II. PURCHASE DESCRIPTION/SCOPE OF SUPPLIES/SERVICE

The work under this contract includes, but is not necessarily limited to providing labor, materials and equipment to mill High Street (Route 109) from 300' east of North Street to Churchill Road, approximately 75,000 SY of an existing bituminous concrete roadway and pave the same with approximately 8,500 Tons of Superpave hot mix asphalt. Work also includes remove and reset curbing, furnish and install new granite curbing, install Portland cement concrete sidewalks and curb ramps, reset/adjust utility and drainage structures, furnish and install decorative crosswalks, apply road striping with recessed pavement markers, install wire loops, and other related work.



Other:

The High Street Mill & Overlay Project service is on an as needed basis and the Town does not guarantee a minimum in the bid period.

The Town of Westwood reserves the right to add or delete from the scope of work.

All work above must be completed between the dates of July 1, 2020 and August 31, 2020.

Unit Quantities Specified:

- Quantities and measurements indicated in this IFB are for bidding and contract purposes only.
 Quantities and measurements ACTUALLY supplied or placed in the Work and verified by the Engineer shall determine payment.
- If the actual Work requires greater or lesser quantities than those quantities indicated in the Bid Form, Contractor shall provide the required quantities at the unit price contracted.

General Conditions: (Incidental to the Contract)

 Temporary Traffic Control shall be the sole responsibility of the Contractor as approved and/or directed by the Engineer. All temporary traffic control shall conform to the applicable requirements of Section 850 of the Standard Specifications, The Manual on Uniform Traffic Control Devices (MUTCD), and/or as directed by the Engineer.

The Contractor shall furnish, erect, maintain, wash, move, adjust, repair, relocate, re-erect, and store all temporary construction signs, sign mountings, portable barricades, traffic cones, delineators, and other warning devices when, where, and as specified.

Temporary Traffic Control devices shall cover all work related to the furnishing, installation, maintenance, and movement of traffic protective devices on the project. The Contractor shall provide a sufficient number of signs and other warning devices as required by the nature of the work as determined by the MUTCD and/or the Engineer. Devices that do not meet or exceed MUTCD standards will not be considered an acceptable means for temporarily controlling traffic.

When, in the opinion of the Engineer, the sign or device shall be so severely damaged as to warrant replacement, the Contractor shall provide a new device.

The Contractor shall keep all signs, barricades, and other protective devices in proper position, clean, and legible at all times. Care shall be taken so that weeds, shrubbery, construction materials and equipment, and spoil are not allowed to obscure any sign, lights, or barricade. Signs that do not apply to existing conditions shall be removed or adjusted so that the legend is not visible to approaching traffic. All signs and markers shall indicate actual conditions existing and shall be moved, removed, or changed immediately, as conditions require. When construction is not in progress, all unnecessary signs will be adequately covered.

No work is to be undertaken until the Contractor has established construction signs and/or safety devices around and about the project zone periphery. To that end, the Contractor shall not commence operations until he has verified that semi-permanent signs (i.e. 'Road Under Construction') and/or daily



signing, (i.e. 'Detour') has been appropriately established. The Contractor shall be responsible for establishing supplemental signage, and/or safety devices, as he deemed necessary in order to further provide for the safety of the pedestrian and the motoring public, as well as for affording the opportunity to move the construction process forward without interruption. Under this clause, the Contractor shall work closely with the Engineer in order to coordinate the signing activities in a timely and reasonable manner. Said devices shall conform to the Temporary Traffic Control section of the most recent version of the Manual on Uniform Traffic Control Devices (MUTCD). Further, due to the nature of this work, the Contractor shall be required, from time to time, to erect, move, relocate, repair, and/or to remove at days end, any site sign in order to either expedite his work or to otherwise accommodate the safety and/or delineate the project zone and/or its active or inactive detour status and route line, and this work shall be done either at his discretion and/or at the request of the Engineer. Non-compliance with any such request, as herein described, shall be grounds for the Engineer to halt work until such remedial measures have been taken, and any such loss of time by the Contractor shall be at his own expense. Any devices provided which are lost, stolen, destroyed or deemed unacceptable while their use is required on the project shall be replaced without additional compensation.

The costs for this item shall be considered incidental to the Contract and include all labor, equipment, materials and incidentals needed to complete the following:

- Fabricating, furnishing, erecting, maintaining, removing and relocating the traffic management devices for the overall project during construction activities, complete-in-place, as directed by the Engineer.
- o Providing additional traffic management devices to provide a clear and visible traffic control through the project area, if required.
- The Contractor shall be required to reposition the traffic control devices as many times as necessary to ensure the safe passage of vehicular traffic and pedestrians. Supplemental signs and traffic control devices directing traffic around and/or through the work zones shall be supplied as operations require or as directed by the Engineer.

At a minimum, traffic control shall include the following:

Temporary Traffic Control Signs including detour signs as required.

- o Channelizing Devices including drum barricades and/or traffic cones.
- Type III Barricades.
- Temporary Barriers.
- Temporary Pedestrian Bypass.

Other work, whether direct or incidental, associated with the traffic control not specifically identified herein.

If, after notice by the Engineer, signage is determined to be inadequate, the Engineer may withhold payment until it is addressed satisfactorily by the Contractor. Temporary traffic control shall include all labor, materials, and equipment associated with (but not limited to) furnishing, erecting, maintaining, washing, movement, adjustment, repair, relocation, re-erection, storing of all temporary construction signs, sign mountings, portable barricades, traffic cones, delineators, drum barricades, channelizing devices, and all other devices, clean-up, legal disposal of all materials, and all other incidentals required to finish the work, complete and accepted by the Engineer. Any damage shall be the Contractor's responsibility.



Delivery Requirements: All delivery charges shall be included in the price of the service.

• The Delivery should be made to:

Town of Westwood 50 Carby Street Westwood MA 02090

Insurance Specifications:

- Workman's Compensation:

 The Contractor shall, before commencing performances of this contract, provide, by insurance, for the payment of compensation in the furnishing of other benefits under General Laws, Ch. 152 to all persons to be employed under the Contract and shall continue such insurance in full force and effect for the term of the Contract, all in accordance with Massachusetts General Laws, chapter 149, S34A.
- **Bodily Injury Liability Including Death:** The Contractor shall take and maintain during the life of the Contract insurance coverage in the amount of one million dollars on account of any one person and one million dollars on account of any one accident and one million dollars aggregate limit. Extra territorial and guest clause shall be included.
- **Property Damage Liability:** The Contractor shall take out and maintain during the life of the Contract property damage liability insurance in the amount of one million dollars in the aggregate.
- Motor Vehicles Including Hired Vehicles:

 The Contractor shall take out and maintain during the life of the Contract motor vehicle insurance for bodily injury liability including death in the amount of one million dollars on account of any one accident. Additionally, property damage liability in the amount of one million dollars on account of any one accident and one million dollars aggregate. The contractor covenants and agrees to hold the town and its employees, agents and officials, harmless from loss or damage for personal injury and/or property damage arising from or in connection with operations under this Contract.
- Indemnification Clause: The Contractor acknowledges and agrees that he is responsible, as an Independent Contractor, for all operations under this Contract and for all acts of his employees and agents hereunder, and agrees that he will indemnify and hold harmless the Town and its officers, Boards and its employees, from any loss, damage, cost, charge, expense or claim which may be made against it or them or to which it or they may be subject by reason of an alleged act, action, neglect, omission or default on the part of the Contractor or any of his agents, servant, or employees and will pay promptly on demand all costs and expenses of the investigation and defense thereof, including attorney's fees and expenses. And, if any claim is made, the Town may retain out of any payments, then, or thereafter due to the Contractor, a sufficient amount to protect it completely against such claim, costs and expenses. The public liability and property damage insurance and owners contingent policies, as the case may be, shall include the above stated Indemnification Clause



Construction Specifications:

- All items of work shall be referenced to the "Commonwealth of Massachusetts Highway Department Standard Specifications for Highways and Bridges", dated 2020, and shall include all subsequent revisions to this document.
- Items that shall be considered incidental to the contract include, but are not limited to, mobilization, temporary traffic control, saw cutting, fine grading, mechanical compaction, cement concrete curb lock, and any other incidentals as listed. Incidental items shall not be measured for payment and will not be compensated separately, but shall be identified to be included as payment for respective other associated work items.
- Work within or adjacent to school zones shall be scheduled to coordinate with school closings, recesses, and vacations. No work shall be constructed in school zones while in session.
- In areas where the Sidewalk is to be Reconstructed or Constructed, the Sidewalk is to be in place within seven (7) consecutive calendar days after the original sidewalk surface is removed or excavation for the new sidewalk has taken place.
- Work in sidewalk areas shall be performed on one side of the road at a time detouring pedestrians to
 the other side of the street during working hours and leaving pedestrian access at the end of each day
 on both sides of the street. The Contractor shall work on whole blocks at a time to keep the construction
 zone compressed. The length of the construction zone shall be approved by the Engineer before work is
 started.
- For items specific to this contract that differ in their specifications to the above document we provide the following supplemental specifications:

Item 120.1 Unclassified Excavation

The work to be done under this item shall be in accordance with the relevant provisions of Section 120, all the materials obstructing the execution of required work, or as directed, except for those materials for which payment is made inclusive with work specified to be performed under other items of this contract.

The work under this item shall also include removal and disposal (R&D) of concrete, granite, or bituminous curb, edging and/or berm, concrete, rock, drainage pipe, loam/organic matter, and/or unsuitable material to be excavated along the side of the paved road to reestablish roadside drainage/swales.

Item 220.01 Structure Adjusted Item 220.201 Structure Rebuilt

The work to be done under this item shall be in accordance with the relevant provisions of Section 220. In addition to these requirements, the following requirements are part of this item:

When the line or grade or both the line and grade of the stricture changes by 6 inches or less, the structure shall be adjusted to line and grade. The masonry shall be removed to such depth as directed



by the Engineer and new masonry shall be constructed to conform to the proposed design and in conformity with the requirements of the applicable parts of Section 201.

When in the judgement of the Engineer the masonry shows deterioration, the structure shall be rebuilt. The casting and deteriorated masonry shall be removed in a neat manner until a clean sound base is obtained upon which concrete blocks and clay bricks may be set to rebuild the structure. All spoils and debris created from the work shall be protected from falling into the structure, promptly removed, and legally disposed of. Gravel borrow shall be furnished for backfill where required when excavated material is unsuitable. The casting shall be set to line and grade with a concrete collar and surfaced with Class I Bituminous Concrete Top Course as directed.

The new masonry construction, replacing of castings, highly early strength concrete collars filling around structures and other incidental work shall be as specified in Section 201.

The Contractor shall clean each structure adjusted and/or rebuilt as directed by the Engineer, and shall protect each such structure from further construction debris until the project has been final paved and been accepted, at no additional cost to the Owner.

Item 415.3 Pavement Micro Milling

The work to be done under this item shall be in accordance with the relevant provisions of Section 415, Pavement Milling, and will include removal of the existing pavement surface as directed by Engineer. In addition to these requirements, the following requirements are part of this item:

The contractor shall be responsible for transport and disposal of material milled from the existing road in this project. The contractor shall bear all cost associated with the milling, collection, transport, and disposal of the milled material from this project. The disposal shall be done in accordance with all applicable local, state, and federal laws and/or regulations.

Item 450.221 SUPERPAVE Surface Course – 12.5 – Polymer (SSC-12.5-P) Item 472.0 Hot Mix Asphalt for Miscellaneous Work

The work to be done under this item shall be in accordance with the relevant provisions of Section 450 and 472, and in addition to these requirements, the following are considered part of this item:

Measurement shall be determined by the weight slips submitted to the Town. Measurement shall also be verified by use of 0.056 Tons/Sq. Yd. – Inch conversion factor.

Approval by the Town of the cutting of bituminous pavement is required prior to the work being performed. The area to be cut shall be cut in as near a straight line as possible with a saw. Pavement edges shall be trimmed to a vertical face. Sections of bituminous concrete shall be removed to the nearest score line or approved saw cut edge. This item payment shall be included in the cost per ton of bituminous concrete.

Payment for this item shall be at the contract unit price bid per Ton for the HMA at the specified thickness. The price shall be full compensation for all labor, material, equipment and incidental items. The prices shall also include payment for required tack, rubberized joint sealant and/or tack and sand,



and all necessary work done to prepare surface for paving, including street sweeping and disposal of material swept.

Item 506	Granite Curb Type VB – Straight/Curved
Item 509	Granite Transition Curb for Curb Ramps – Straight/Curved
Item 514	Granite Curb Inlet – Straight
Item 580	Curb Removed and Reset
Item 581	Curb Inlet Removed and Reset
Item 590	Curb Removed and Stacked
Item 594	Curb Removed and Discarded

The work to be done under these items shall be in accordance with the relevant provisions of Section 500 and in addition to these requirements; the following are part of this item:

The work under this item shall also include removal and disposal and/or stockpiling of concrete, granite, or bituminous curb, edging and/or berm, concrete, subbase material, loam/organic matter, and/or other material necessary to complete the work of installing new or reset curbing items. The work shall also include all trimming, saw cutting, concrete curb lock, and any other necessary materials and labor needed to properly set curbing to the finish elevations.

Payment for these items shall be at the contract unit price bid per Linear Foot or Each respectively. The price shall be full compensation for all labor, material, equipment and incidental items. The prices shall also include payment for required saw cutting, removal and disposal of existing curbing materials, excavation, furnishing of new curbing where necessary, subbase and base material for setting curb to the proper elevation, mechanical compaction, furnishing of new curb, handling/hauling/stockpiling of existing curbing to be stacked and/or reset, concrete for curb lock where curbing is set adjacent to saw cuts (entire project), and backfill.

Item 701.2 Cement Concrete Curb Ramp

The work to be done under this item shall be in accordance with the relevant provisions of Section 701 and in addition to these requirements; the following are part of this item:

Payment for this item shall be at the contract unit price bid per Square Yard. The price shall include all necessary labor, equipment, materials, excavation, and incidentals necessary to install the cement concrete curb ramp, and tactile warning panel. Tactile warning panel shall be cast iron as manufactured by East Jordan Iron Works, Nenah Foundry, or approved equal.

Ramps will be constructed for, or as directed by the Engineer.

Item 706.01 Remove and Reset Miscellaneous Sidewalk and Driveway Treatments

The work to be done under this item shall be in accordance with the relevant provisions of Section 700 and in addition to these requirements; the following are part of this item:

The work under this item includes the removal and resetting of various treatments such as bricks, cobbles, Belgian blocks, and/or other paver types.



Payment for Miscellaneous Sidewalk and Driveway Treatments shall be at the respective Contract Unit Prices bid per Square Yard complete in place, to the satisfaction of the Engineer, including but not limited to, all excavation, fine grading and compaction of both subbase and existing subgrade, setting beds/slabs, expansion joints, weep holes, protection, and finishing. Payment shall also include temporary removal of obstructions for the purposes of installing sidewalks or driveways.

Item 999.02 Pavement Surface Coating

The work described for this item shall conform to the requirements and provisions of relevant Sections of the Massachusetts DOT Standard Specifications along with the latest Supplemental Specifications, including but not limited to, Sections 860, and the following:

The work under this Item shall include preparation of the pavement surface in conjunction with the application of one or more courses of a polymer modified flexible cement surfacing material that may be used as a complete light, durable, skid resistant, composite wearing surface, or textured and colored on sections of pavement to simulate hand laid brick and/or conventional masonry where shown on the plans or as directed by the Engineer.

The color shall be brick red and pattern shall be standard size brick arranged in a linear running bond, brick orientation.

Preparation

The areas to be surfaced with the specified material(s) must be structurally sound and may consist of either asphalt or cement concrete. When these material(s) are intended for application on a newly paved asphalt surface a curing period will be required to ensure that no concentration of oils are present. A suitable approved pavement heater may be employed to expedite curing when a delayed work schedule is not advisable.

Surface preparation will then be performed in the following general manner:

The pavement surface is to be thoroughly cleaned by approved methods removing all contaminants that may prevent proper adhesion of the new surfacing material(s). A suitable approved pavement heater shall be employed where surface oils, fuel and the like exist on the surface, to remove these incompatible materials. New bituminous concrete shall be added as necessary, thermally bonded to the pavement and compacted to achieve a density equal to the surrounding or adjacent pavement. No work shall be initiated until the surface condition conforms to manufacturer recommended standards for both structure and cleanliness.

All applications shall be installed in a neat and uniform manner by approved methods. The Contractor shall be responsible for furnishing and placing a sufficient traffic and pedestrian control with caution tape to adequately protect all work zones, and to insure the orderly flow of vehicular and pedestrian traffic.

Residues resulting from this element of the work shall be immediately removed from the jobsite(s) and must be disposed of in a proper manner. There will be no additional compensation for the disposal of excess or unused materials. Pavement sections where the surfacing work is incomplete must be left in a



neat and clean condition, satisfactory to the Engineer at the end of each workday. Areas of pavement outside the limits of application shall be protected from overspill and/or other damage.

Installation

Contractor shall be responsible for the preparation, placement, and patterning of the polymer modified flexible concrete surfacing material(s) for all applications according to the manufacturer's guidelines and subject to the approval of the Engineer. When required, this composite paving material shall be uniformly and homogeneously formulated with color stable pigments and surface textured to simulate hand laid brick and/or masonry.

A simulated mockup consisting of the color(s) and pattern(s) as selected by the Engineer, will be constructed, within a designated section of the overall work area, at least five (5) working days prior to the initiation of this phase of construction. The mockup site will be determined by the Engineer. Weather permitting and only with approval of the completed sample section, the work shall begin. The cost of the mockup shall be included in the unit price for this item and shall encompass a minimum surface area of 3'x3'.

A working knowledge of the specialized technology contained within these specifications is required. Only certified applicators may be employed for this work. In the event that this material and/or surfacing system constitutes, or is claimed to constitute proprietary technology subject to U.S. Patent protection, the Contractor will be required to furnish written evidence satisfactory to the Owner that they are an accredited, authorized and/or licensed installer of the patented material/process.

The installation phase of this work shall be performed in the following general manner:

Using manufacturer prescribed methods and equipment as described herein, the Contractor shall properly blend and mix the water, polymer modified cement, aggregate and pigments (color will be selected by the Owner) to achieve the desired consistency. The polymer modified cement shall be a blend of acrylic based polymers, cement, select fibers and aggregates to be furnished in a dry protected state to prevent the loss of internal strength and bond which may result in cohesive and adhesive failure. The measuring and mixing operation shall be capable of producing a workable, consistent, homogeneous mixture for the intended application. Only then shall the Contractor apply the composite to the surface of a hardened, structurally sound bituminous concrete pavement as directed.

Using specialized equipment and tools as necessary the desired ultra-thin composite mixture shall be sufficiently and uniformly applied to the surface. The finished material must be capable of being spread to a consistent build thickness of as little as 0.0625 inches per layer. Segregation of the mixed material shall be avoided. Should this condition present itself the material and/or application must be corrected immediately or replaced, as determined by the Engineer. When this newly constructed ultra-thin finish is applied over bituminous concrete it shall provide a flexible, fuel, skid, and UV resistant surface which results in a reduction of susceptibility to natural oxidation.

No material shall be applied when precipitation is present or imminent inclement weather will prevent proper curing. No material may be allowed to exceed the workability limitations of the composite mixture.



Hand applications will be utilized for smaller sections when a color distinction and/or surface pattern is required. Patterned applications intended to resemble masonry will be constructed in two (2) layers and colors in accordance with the shown on the plans or as directed by the Engineer. Finish patterns and colors may only be applied after the first course has adequately cured.

Once the newly finished surfaces have cured sufficiently, the application area may be opened to vehicular and/or pedestrian traffic. Any residue resulting from this work shall be removed and disposed of in a proper manner. The completed work area is to be left in a neat and clean condition, satisfactory to the Engineer.

The Contractor shall take reasonable precautions and steps during construction to prevent bodily harm or injury or damage to adjacent structures such as curbing, sidewalks, drainage, or water supply facilities. If during the execution of the work, the Contractor, through willfulness or carelessness, permits or causes any damage to public or private property, the cost of repair or replacement shall be the responsibility of the Contractor at no expense to the Owner.

The Contractor shall maintain minimum 11 foot vehicular travel lanes at all times during this operation unless otherwise approved.

Materials

The composite material(s) used for this polymer modified thin surfacing system must support a documented performance history satisfactory to the Owner that is compatible with the functions and characteristics detailed within these specifications. This material must also be able to demonstrate long term adhesion, flexibility and abrasion resistance characteristics, scrub ability, as well as color stability, chemical and fuel resistance.

The Contactor will be required to furnish to the Engineer five (5) applications that have been placed on main thoroughfares, complete with contact information and locations using the material(s) as specified herein. The ultra-thin layer polymer composite(s) used on these projects must support a documented history of field performance and integrity for the type of work described herein for a minimum period of five (5) years. No waiver of this condition will be allowed.

The composite material shall be flexible with form stability which is compatible with existing bituminous pavements and be formulated using polymer modifications as necessary to suit local traffic and climate conditions. The specified polymer modified composite material(s) when mixed and cured in accordance with manufacturer's guidelines shall demonstrate the physical properties outlined in the following table.

Material Properties

Physical Properties	Test Method	Minimum Test Value
Compressive Strength	ASTM C 39	3,100 PSI
Solar Reflectivity Index	ASTM EI918 ASTM C 1549	>29
Shear Bond Adhesion	ASTM C 1583	>250 PSI



Skid Resistance (mixed) ASTM E-274 >40

Tensile Strength ASTM C 190 615 PSI (3.9 MPa)

Freeze-Thaw Scaling Resistance ASTM C672-98 0

Material Components

Water. The water used in mixing these composite(s) shall be of potable quality and free from soluble salts.

Chemical Admixtures/pigments. All chemical admixtures shall be introduced during the manufacturing process. Pigments may only be added on site to achieve a particular color quality or tint preference as directed.

Surface Sealer. A suitable approved surface sealer, if required, may be applied to the polymer modified composite(s) to provide additional protection in fueling areas, or to prevent surface efflorescence when colors are utilized.

Material Verification. Upon request the Contractor shall provide a Certificate of Analysis (COA) for the polymer modified cement, aggregate and combined dry blend verifying that the materials meet the specific requirements outlined herein.

Questionable product with just cause may be subjected to all of the specified testing procedures. All material testing will be conducted by a third party independent certified laboratory acceptable to the Engineer and will be the financial responsibility of the Contractor. Samples failing in any test category will result in immediate rejection of the material from further consideration or use and may disqualify the contractor from this phase of the work.

Material(s) furnished pursuant to this work shall not be harmful to humans or the environment and must possess a Design for the Environment (DfE) as designated by the United States Environmental Protection Agency (EPA).

No payment will be rendered for any work until a manufacturer's certificate of compliance has been furnished by the Contractor. A Material Safety Data Sheet (MSDS) will also be required before any work is initiated.

Equipment

Contractor must have access to and be familiar with the specialized machinery and tools necessary to perform the procedures as outlined and contained within these technical specifications. These items shall include but not be limited to dedicated surfacing equipment designed exclusively for use in applying thin layer polymer modified composite(s), appropriate trucks, air compressors, miscellaneous dispensers, mixers, applicators, heaters, cutters, and/or specialized tools, etc.

To ensure optimum work site efficiency and project safety considerations, multiple crews may be required when hand applications or custom patterns as described previously are necessary.



Due to the logistical complications inherent to this type of specialized construction, and given the general project size, scope, schedule and public safety concerns, the Contractor may not assume that a single mobilization will be sufficient to complete this entire phase of the work required in a safe and orderly fashion. No separate payment will be made for any additional mobilization or demobilization as may be necessary to complete the project.

Guarantee / Warranty

The Contractor shall warranty all applications from defects resulting from improper workmanship and faulty or inferior materials for a minimum period of three (3) years. All defective materials and/or substandard work will be corrected or replaced within the warranty period as directed by the Engineer.

Method of Measurement and Basis Of Payment

Pavement Surface Coating will be measured for payment by the Square Foot, completed in place.

Pavement Surface Coating will be paid for at the Contract unit price per Square Foot, which price shall include all labor, materials, equipment, mobilization, expansion joint filler, mockup and incidental costs required to complete this work including ancillary preparation of the pavement. No payment deductions will be made for structures within the work area such as manholes, catch basins, or other castings.

III. PRICING AND PAYMENT

Unit Prices

- o Item and the quantity of units completed. Unit prices are to include cost of all necessary materials, labor, equipment, overhead, profit and other applicable costs.
- The Town reserves the right to increase or decrease the scope of the Contract work by up to and including twenty-five percent (25%) of the original scope without adjusting the lump sums or unit prices.
- The Town shall pay and the Contractor shall receive the prices stipulated in the bid made a part hereof
 as full compensation for everything performed and for all risks and obligations undertaken by the
 Contractor under and as required by the Contract.
- Final payment for Work governed by unit prices will be made based on the actual measurements and quantities accepted by the Engineer multiplied by the unit price for work that is incorporated in or made necessary by the Work.

IV. QUALITY REQUIREMENTS

 Bidders must provide all of the items described in Section II: Purchase Description/Scope of Services and comply with all Section I: Proposal Submission Requirements. Missing information may cause the proposal to be considered unresponsive.



- To be considered a responsive bid, the entire project must be bid. The owner intends to award all items to a single contractor. Accordingly, contractors must bid on all items of work, and the low bidder will be the contractor whose total bid price is the lowest. The bid quantities are not guaranteed, and their primary purpose is for the determination of the low bidder.
- All deliveries must comply with the Specifications identified above in Section II, Purchase Description/Scope of Supplies/Services.

V. RULE FOR AWARD

 The responsive and responsible bidder meeting the requirements described in described in Section II: Purchase Description/Scope of Services and offering the lowest <u>Base Bid Price</u> described in Attachment D, Bid Pricing Sheet.



ATTACHMENT C BID ITEM SHEET

The Bidder shall insert unit prices for each item in ink, in both words and figures, and is to show a total bid price (unit price x estimated quantities). In the event a discrepancy between the written words and figures, the written words shall govern. In the event an error in the bidders total bid price, the corrected total bid obtained by the summation of the products of the unit prices multiplied by the respective quantities shall stand as the bidder's total bid price.

Unbalanced bidding is expressly prohibited and all unit bid prices will be compared for reasonable conformance with the engineer's estimate. The Owner has the right to reject award of a bid, or part thereof, to protect the public interest if it is apparent that a bid is mathematically unbalanced, the bidder front-end loads its bid as to amount to an advanced payment, there are extreme variations from the engineer's estimate or other bids received, if in the opinion of the Owner, the unit prices create a reasonable doubt that that apparent low bidder will actually result in the lowest cost to the Owner, and/or if the overall competitive bidding process has been jeopardized.

*The estimated quantities shown here are based solely upon a reasonable assessment of the project parameters, thus the Bidder is advised that the actual quantities may vary substantially as field conditions may necessitate.

There is no separate labor charge under this bid: unit prices shall include full compensation for all labor, materials, tools and equipment, and all incidentals necessary to complete the work as specified herein.

Signature of individual submitting bid or proposal	
Printed Name of individual submitting bid or proposal	Business Phone Number
Printed Name of company submitting bid or proposal	Business Email



ITEM DESCRIPTION & BID PRICE	EST QTY.*	UNIT	TOTAL
ITEM 120.1: UNCLASSIFIED EXCAVATION			
THE SUM OF:DOLLARS	1,380	CY	\$
ANDCENTS	1,360	Ci	۶
(\$) PER UNIT			
ITEM 151: GRAVEL BORROW			
THE SUM OF:DOLLARS	570	CY	\$
ANDCENTS			
(\$) PER UNIT			
ITEM 220.01: STRUCTURE ADJUSTED			
THE SUM OF:DOLLARS			
ANDCENTS	218	EA	\$
(\$) PER UNIT			
ITEM 220.201: STRUCTURE REBUILT			
THE SUM OF:DOLLARS			
ANDCENTS	101	VF	\$
(\$) PER UNIT			



ITEM DESCRIPTION & BID PRICE	EST QTY.*	UNIT	TOTAL
THE SUM OF: DOLLARS ANDCENTS (\$) PER UNIT	22	EA	\$
THE SUM OF:	12	EA	\$
THE SUM OF: DOLLARS ANDCENTS (\$) PER UNIT	48	EA	\$
THE SUM OF:	5	EA	\$



ITEM DESCRIPTION & BID PRICE	EST QTY.*	UNIT	TOTAL
ITEM 381.3: SERVICE BOX ADJUSTED			
THE SUM OF:DOLLARS	20	ΓΛ	ć
AND CENTS	20	EA	\$
(\$) PER UNIT			
ITEM 415.3: PAVEMENT MICRO MILLING			
THE SUM OF:DOLLARS ANDCENTS	74,720	SY	\$
(\$) PER UNIT			
ITEM 450.231: SUPERPAVE SURFACE COURSE – 12.5 – POLYMER (SSC-12.5-P)			
THE SUM OF:DOLLARS	8,420	TON	\$
ANDCENTS			
(\$) PER UNIT			
ITEM 452: ASPHALT EMULSION FOR TACK COAT			
THE SUM OF: DOLLARS ANDCENTS	5,300	GAL	\$
(\$) PER UNIT			



ITEM DESCRIPTION & BID PRICE		EST QTY.*	UNIT	TOTAL
ITEM 472: HOT MIX ASPHALT FOR MISCELLANEOUS WORK		-		
THE SUM OF:	OLLARS			
AND		170	TN	\$
(\$) PER UNIT				
ITEM 506: GRANITE CURB TYPE VB – STRAIGHT/CURVED				
THE SUM OF:DO	OLLARS	2 502	F.T.	\$
AND	CENTS	2,582	FT	۶
(\$) PER UNIT				
ITEM 509: GRANITE TRANSITION CURB FOR CURB RA STRAIGHT/CURVED	AMPS –			
THE SUM OF:	OLLARS	1,781	FT	\$
AND	_ CENTS			
(\$) PER UNIT				
ITEM 514: GRANITE CURB INLET - STRAIGHT				
THE SUM OF:DO	OLLARS	14	EA	\$
AND	_CENTS	±-T	LA	¥
(\$) PER UNIT				



ITEM DESCRIPTION & BID PRICE	EST QTY.*	UNIT	TOTAL
ITEM 580: CURB REMOVED AND RESET			
THE SUM OF: DOLLARS			
AND CENTS	345	FT	\$
(\$) PER UNIT			
ITEM 581: CURB INLET REMOVED AND RESET			
THE SUM OF:DOLLARS	26	F.A.	
AND CENTS	26	EA	\$
(\$) PER UNIT			
ITEM 590: CURB REMOVED AND STACKED			
THE SUM OF:DOLLARS			
AND CENTS	467	FT	\$
(\$) PER UNIT			
ITEM 594: CURB REMOVED AND DISCARDED			
THE SUM OF:DOLLARS			
AND CENTS	1,228	FT	\$
(\$) PER UNIT			



ITEM DESCRIPTION & BID PRICE	EST QTY.*	UNIT	TOTAL
ITEM 697.1: SILT SACK			
THE SUM OF: DOLLARS			
AND CENTS	90	EA	\$
(\$) PER UNIT			
ITEM 701: CEMENT CONCRETE SIDEWALK			
THE SUM OF: DOLLARS			
AND CENTS	330	SY	\$
(\$) PER UNIT			
ITEM 701.1: CEMENT CONCRETE SIDEWALK AT DRIVEWAYS			
THE SUM OF: DOLLARS			
AND CENTS	750	SY	\$
(\$) PER UNIT			
ITEM 701.2: CEMENT CONCRETE CURB RAMP			
THE SUM OF: DOLLARS			
AND CENTS	810	SY	\$
(\$) PER UNIT			



ITEM DESCRIPTION & BID PRICE		EST QTY.*	UNIT	TOTAL
ITEM 706.01: REMOVE AND RESET SIDEWALK/DRIVEWAY TREATMENT THE SUM OF: AND	DOLLARS	120	SY	\$
(\$) PER UNIT				
ITEM 751: LOAM BORROW THE SUM OF: AND		440	CY	\$
THE SUM OF: AND		3,880	SY	\$
THE SUM OF: AND (\$) PER UNIT	DOLLARS CENTS	630	FT	\$



ITEM DESCRIPTION & BID PRICE		EST QTY.*	UNIT	TOTAL
ITEM 819.831: WIRE LOOP INSTALLED IN ROADWAY				
THE SUM OF:	_ DOLLARS			
AND		2,330	FT	\$
(\$) PER UNIT				
ITEM 864.07: PAVEMENT ARROWS AND LEGENDS (EPOXY)				
THE SUM OF:	_ DOLLARS	900	SF	\$
AND	CENTS	900	31	γ <u></u>
(\$) PER UNIT				
ITEM 864.35: SLOTTED PAVEMENT MARKER YELLOW/YELLOW	TWO-WAY			
THE SUM OF:	_ DOLLARS	250	EA	\$
AND	CENTS			<i>-</i>
(\$) PER UNIT				
ITEM 868.06: 6 INCH REFLECTORIZED WHITE LINE (EPOXY)				
THE SUM OF:	_ DOLLARS	20 700		
AND	CENTS	29,790	FT	\$
(\$) PER UNIT				



ITEM DESCRIPTION & BID PRICE	EST QTY.*	UNIT	TOTAL
ITEM 868.12: 12 INCH REFLECTORIZED WHITE LINE (EPOXY)			
THE SUM OF:			
DOLLARS	5,480	FT	\$
AND CENTS	·		
(\$) PER UNIT			
ITEM 869.06: 6 INCH REFLECTORIZED YELLOW LINE (EPOXY)			
THE SUM OF:			
DOLLARS	20.000		ć
AND CENTS	29,060	FT	\$
(\$) PER UNIT			
ITEM 999.01: ALLOWANCE FOR PAYMENT OF TRAFFIC CONTROL PERSONS			
THE SUM OF:			
One Hundred Eighty-Five Thousand DOLLARS	1	ALL	\$ 185,000
AND <u>Zero</u> CENTS			
(\$) PER UNIT			
ITEM 999.02: PAVEMENT SURFACE COATING			
THE SUM OF:			
DOLLARS	7,470	SF	\$
AND CENTS) JF	7
(\$) PER UNIT			



ITEM DESCRIPTION & BID PRICE				UNIT	TOTAL
		TOTAL BID:			
_					DOLLARS
	AND				_CENTS
	(\$)
		Amount in Figures			



ATTACHMENT D BID PRICING SHEET

Bid form must be completed in ink or by typewriter. The bid price for each item on the form shall be stated in figures. Discrepancies between indicated sum of any column(s) and the correct sum of any column(s) will be resolved in favor of the correct sum. Please Attach Additional Sheets if necessary.

BASE BID PRICE

The Bidder submits this bid proposal to perform all of the work (including labor and materials) as described in the solicitation for this Base Bid Price (including the costs for all Allowances, Incidentals, Bonds, and Addenda):

	Total Bid in figures	\$			
	Total Bid in words	\$			
ADD AL	TERNATE PRICE				
	Total Bid in figures	\$	N/A		
	Total Bid in words	\$	N/A		
Cion other	un af in dividual automi	utio a bia			
Signatu	re of individual submit	tting bit	i or proposai		
Printed	Name of individual su	bmittin	g bid or proposal	Business Phone Number	
 Printed	Name of company sul	 omitting	z bid or proposal	Business Email	



ATTACHMENT E LABOR HARMONY AND OSHA TRAINING

The undersigned hereby certifies that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work; that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; and that he will comply fully with all laws and regulations applicable to awards made subject to section 44A.

(Signature of authorized individual submit	ting proposal)		
(Printed Name)			
(Name of Bidder (if different than name))			
(Date)			



ATTACHMENT F CERTIFICATE OF NON-COLLUSION

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

Signature of individual submitting bid or proposal	
Printed Name of individual submitting bid or proposal	
Name of husiness	



ATTACHMENT G TAX COMPLIANCE CERTIFICATION

Pursuant to M.G.L. c. 62C, §49A, I certify under the penalties of perjury that, to the best of my knowledge and belief, I am in compliance with all laws of the Commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support.

Signed under the penalties of perjury.

Signature of individual submitting bid or proposal
Printed Name of individual submitting bid or proposal
Name of husiness



ATTACHMENT H SIGNATURE PAGE

This Bid must bear the written signature of the Bidder or authorized agent of the Bidder. If the Bidder is a corporation or a partnership, the Bid must be signed by a duly authorized officer of such corporation or by a partner; the title of such officer must be stated.

The bidder hereby acknowledges the receipt of, and has included in this BID, the following Addenda:

(To be filled in by Bidder, if Addendums are issues.)

Addendum No. ________, dated ______

Addendum No. _______, dated ______

Signature

Name of Corporation, Company or Individual

Printed Name of Person Authorized to Sign

Title

Email Address



ATTACHMENT I REFERENCE FORM

Bidder:									
work, a notariz When a	as bid ed. All assessi	upon, in acco questions mus ng bidder's qua	rdance with th st be answered alification, the T	e contract drawings . Additional data ma	and specification y be submitted or ted to information	ualifications to performs. This statement means separate attached separate because the provided herein. The	ust be sheets.		
1.	Name	of Bidder							
2.	Perm	anent Main Offi	ice Address						
3.	Official Mailing Address for This Contract								
4.	Wher	Organized?							
5.	Wher	e Incorporated,	If a Corporation	n					
6.	Years	Contracting un	der Present Nar	ne					
7.	List co	ontracts on han	d, and those co	mpleted similar in nat	ture to this kind of រុ	project.			
Owner		Engineer	Contract	Description	Contract Amount	Completion Date			
									



If you have <u>ever</u> defaulted	on any contract, state where	e and why.
List full names of all princip	pals (i.e. Officers, Directors, I	Partners, Owners) interested in th
Name	Title	Firm
State name(s) and qualifica	ations of resident supervisor	(s) for this project.
List major equipment avail	able for this project and ider	ntify ownership or rental.

13.

List bank references for verifying financial ability of your company.



Name 		Addro	ess 	·	
information red	-	er and/or its d	equests any person, f esignated agents relat	•	
Dated at	this	day of		20	
			(Name of Bidder)		-
			Ву:		-
			(Title)		-
State of					
County of					
		being duly	sworn in person, depo	ses and says	
that he is		of	ame of Bidder)		
(Title))	(N	ame of Bidder)		
that he is the fir	m's duly authorized a	gent to execute	these contract docume	nts, and that the	
answers to the	foregoing questions a	nd all statement	s therein contained are	correct and true.	
Subscribed and	sworn to before me t	his	day of	20	
(SEAL)					
•			(Notary Public)		



ATTACHMENT J MAPS AND DETAILS