If you have printed this bid from the City of Quincy’s Website or through an email, it is your responsibility to check for addenda at www.quincyma.gov before you turn in your proposal.

“Please send an acknowledgment that you have printed out this bid via email to; kimtrillcott@quincyma.gov” The City of Quincy will not be responsible for any bids received omitting any addenda acknowledgement.

Thank you
City of Quincy

Department of Public Works

Invitation for Bid

“Trench Paving, Grind and Inlay for Trenches or Smaller Areas”

Bid #2018-TRENCH1

Opening Date: MAY 3, 2018 @ 11:30 A.M.

DELIVERY NOTICE:

Please Deliver Response/ Submission and Required Copies to:

Kathryn Logan, Chief Procurement Officer
City of Quincy
Quincy City Hall
1305 Hancock Street
Quincy, MA 02169

The City of Quincy reserves the right to reject all responses/submissions
Late Proposals Shall be rejected
The Department of Public Works for the City of Quincy, Massachusetts is seeking sealed bids for **TRENCH PAVING, GRIND AND INLAY FOR TRENCHES OR SMALLER AREAS** until 11:30 a.m. local time **Thursday, May 3, 2018**, in the office of the Purchasing Agent, 1305 Hancock St., Quincy, Massachusetts 02169, at which time and place all bids will be publicly opened and read aloud.

The work under this contract consists of: permanent patching on any defective utility trenches, and/or depressions of bituminous concrete pavements performed in a workmanlike manner substantially to the original condition of the pavement. Minor curb resetting and adjustment of utilities as required and all related work to complete the project.

This contract is for repairs of trenches on an as needed basis for a period of up to one year, with a 2 year extension provision. Funding source will be water and sewer budgets. The bidder must own a Massachusetts Department of Transportation approved Hot Mix Asphalt Plant to enable him/her to bid on this work.

Detailed specifications are available on-line at the City of Quincy’s website, [www.quincyma.gov](http://www.quincyma.gov) and also available at the Office of the Purchasing Agent, Quincy City Hall, 1305 Hancock Street, Quincy, Massachusetts, 02169, between the hours of 8:30 AM and 4:30 PM.

Each bid shall be accompanied by a bid security in the amount of five percent (5%) of the total value of the bid in the form of a bid bond or certified/treasurer’s check.

The bidding and award of this contract shall be in full compliance with Massachusetts General Laws, Chapter 30, Section 39M, as last revised. All Federal, State and City of Quincy regulations in relation to Equal Employment Opportunity, and subject to the minimum wage rates set under the Massachusetts Prevailing Wage Law Chapter 149, §26. The City reserves the right to waive any informality in or to reject any or all bids when such an action is deemed in the best interests of the City.

**Non-responsive and/or unbalanced bids may be rejected.**

Thomas P. Koch
Mayor

Alfred Grazioso
Commissioner of Public Works

Advertise

The Quincy Sun
APRIL 19, 2018
S050318

The Central Register
APRIL 18, 2018
(SEE ATTACHED SPECIFICATION FOR ADDITIONAL DETAIL)

Please check the appropriate box:
☐ Corporation ☐ Partnership ☐ Sole Proprietor ☐ Unincorporated
Include either ☐ Social Security or ☐ Federal Tax Identification Number: ____________

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<th>Name of Firm:</th>
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<td>FID or S.S.#:</td>
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<td>Address:</td>
<td>Print name of Signatory Authorizing Contract:</td>
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</tbody>
</table>

TABLE OF CONTENTS

TABLE OF CONTENTS………………………………………………………………………………………………………2
1. INVITATION TO BID………………………………………………………………………………………………………6
2. NOTICE TO PROSPECTIVE BIDDER: ……………………………………………………………………………………7
3. REQUIREMENTS OF BIDDERS (FOR ALL MATERIALS, SUPPLIES, SERVICES AND EQUIPMENT) …………7
4. POSTING OF BID BOND …………………………………………………………………………………………………10
5. POSTING OF PAYMENT BOND/PERFORMANCE BOND ……………………………………………………………10
6. INTRODUCTION………………………………………………………………………………………………………..10
7. DESCRIPTION…………………………………………………………………………………………………………10
   A. GENERAL ………………………………………………………………………………………………………….11
   B. SCOPE OF WORK …………………………………………………………………………………………………11
   C. CONSTRUCTION METHODS ……………………………………………………………………………………..11
   D. CONTRACTOR Definition ………………………………………………………………………………………12
8. METHOD OF AWARD …………………………………………………………………………………………………12
9. TERM OF THE CONTRACT & TERM EXTENSIONS ……………………………………………………………….13
10. BILLING ADDRESS ……………………………………………………………………………………………………13
11. EXCLUSIVITY …………………………………………………………………………………………………………13
12. ADDITIONAL ITEMS ………………………………………………………………………………………………..13
13. ADDENDA AND INTERPRETATIONS………………………………………………………………………………13
14. LAWS AND REGULATIONS ................................................................. 13
15. FUEL/MATERIAL ESCALATION & DE-ESCALATION & ASPHALT PRICE ADJUSTMENTS ....... 14
16. PAY ITEM FORMAT/INVOICING .......................................................... 14
17. INDEMNIFICATION ............................................................................. 14
18. NOTICE OF AWARD ........................................................................... 15
19. SCHEDULING OF WORK ...................................................................... 15
20. SCHEDULING PENALTIES .................................................................. 15
21. LOCATION OF WORK ........................................................................... 15
22. PROOF OF EXPERIENCE ...................................................................... 15
23. QUALITY OF WORK ............................................................................. 15
24. PERSONNEL AND EQUIPMENT ........................................................... 16
25. SUPERVISION AND INSPECTION ...................................................... 16
26. RESPONSIBILITY: .................................................................................. 16
   A. PERMITS, FEES AND NOTICES .......................................................... 17
27. POLICE DETAILS .................................................................................. 17
28. NOTIFICATION TO UTILITY COMPANIES ......................................... 17
29. STORAGE OF MATERIALS AND EQUIPMENT ..................................... 17
30. PROTECTION OF PROPERTY ............................................................... 17
31. SAFETY AND CODE REQUIREMENTS ............................................... 17
32. MAINTENANCE AND PROTECTION OF TRAFFIC ............................... 18
33. CITY SUPPLIED EQUIPMENT AND MATERIALS ................................. 18
34. QDPW REPRESENTATIVE SERVICES .................................................. 18
35. USE OF CITY WATER ........................................................................... 18
36. CLEANUP OF PREMISES AND EQUIPMENT ...................................... 18
37. CONTRACTOR RESPONSIBLE UNTIL WORK IS COMPLETED ............. 18
   A. SUPERVISION AND CONSTRUCTION PROCEDURES .......................... 19
38. NIGHT WORK, CITY HOLIDAYS, AND WEEKEND WORK .................... 19
39. OTHER AGENCIES ............................................................................. 19
40. MOBILIZATION ................................................................................... 19
41. BRAND REFERENCE .......................................................................... 19
42. CONSTRUCTION DOCUMENTS: DRAWINGS AND TECHNICAL SPECIFICATIONS .... 19
43. PERFORMANCE WARRANTY ............................................................... 20
44. INFORMATION NOT GUARANTEED ................................................... 20
45. CONDITION OF WORK ........................................................................ 20
A. REVIEW OF CONTRACT DOCUMENTS ................................................................. 21
B. CUTTING AND PATCHING OF WORK.......................................................... 21
46. OR EQUAL .................................................................................................... 21
47. OWNER’S RIGHT TO STOP THE WORK ....................................................... 21
48. OWNER’S RIGHT TO CARRY OUT THE WORK ........................................... 21
49. OWNER’S RIGHT TO TERMINATE CONTRACT .......................................... 22
50. COMMUNICATIONS ..................................................................................... 22
51. BID ITEMS .................................................................................................. 22
52. QUALITY ASSURANCE ............................................................................... 32
53. SPECIFICATIONS ......................................................................................... 33
   A. PRELIMINARY MATERIAL ACCEPTANCE: ................................................. 33
   B. COMPOSITION OF HMA MIXTURES ......................................................... 33
   C. REQUIREMENTS FOR ALL PLANTS ......................................................... 34
54. HMA CONSTRUCTION .................................................................................. 34
   A. PRE-MILLING & PRE-PAVING CONFERENCE ........................................... 34
   B. WEATHER LIMITATIONS ......................................................................... 35
   C. PREPARATION OF THE UNDERLYING SURFACE ................................... 35
   D. HAULING EQUIPMENT ............................................................................. 36
   E. TACK COAT: .............................................................................................. 36
   F. PAVERS ....................................................................................................... 36
   G. JOINTS ........................................................................................................ 37
   H. ROLLERS & COMPACTION .................................................................... 37
   I. PAVEMENT COMPACTION & TESTING .................................................... 37
   J. TRANSPORTING, PLACING AND FINISHING .......................................... 38
   K. SURFACE SMOOTHNESS ......................................................................... 38
   L. UNIFORMITY .............................................................................................. 39
   M. THICKNESS .............................................................................................. 39
   N. OPENING TO TRAFFIC ............................................................................ 39
   O. REJECTION OF INFERIOR HMA .............................................................. 39
55. PAYMENT MEASUREMENT ......................................................................... 40
   A. METHOD OF MEASUREMENT .................................................................. 40
   B. BASIS OF PAYMENT ................................................................................. 40
56. BID SUMMARY ............................................................................................ 40
57. QUESTIONS MAY BE DIRECTED TO .......................................................... 40
58. STANDARD CONTRACT ARTICLES & CONTRACT SIGNATURE AND DATES................................. 40
59. BID SHEET .................................................................................................................. 43
60. EVIDENCE OF QUALIFICATIONS ............................................................................. 45
61. CERTIFICATE OF AUTHORITY .................................................................................. 46
62. ADDENDA ACKNOWLEDGEMENT ......................................................................... 47
63. STANDARD TESTING REQUIREMENTS DESIGNATIONS ...................................... 48

ATTACHMENT ONE - STANDARD GENERAL CONDITIONS & SUPPLEMENTAL GENERAL CONDITIONS

ATTACHMENT TWO - PREVAILING WAGE RATES
1. INVITATION TO BID

Under MGL Chapter 30 & 39M and Chapter 149, S.S 24 The City of Quincy Massachusetts will accept sealed bids for the "Grind and Inlay of Trenches or Smaller Areas" for City infrastructure. A 5% Bid Bond is required and should be based on the annual estimated value of the contract valued at $400,000 (Four Hundred Thousand Dollars).

Sealed Bid:
Grind and Inlay of Trenches or Smaller Areas
For City Infrastructure
Bid #2018-TRENCH1
City of Quincy, Massachusetts
Office of the Purchasing Agent
1305 Hancock Street
Quincy, MA 02169

All bids must be received no later than MAY 3, 2018 @ 11:30 AM. No late bids or telephone bids will be accepted.

Sets of Bidding Documents may be examined at the Issuing Office beginning at 10:00AM on Tuesday April 17, 2018, 8:30 a.m. to 4:30 p.m., Monday through Friday.

Issuing Office:
Office of the Purchasing Agent
Quincy City Hall
1305 Hancock Street
Quincy, MA 02169

Sets of Bidding Documents may be obtained electronically at no cost by registering at:
http://www.quincyma.gov/Government/PPD/PurchasingBidPage.cfm

Bidders shall send a confirming email to purchasing@quincyma.gov to allow Owner to maintain a plan holders list. If Bidding Documents are downloaded and/or printed from Owner's website, it is Bidder's responsibility to check the website for any addenda before submitting a Bid. The Owner will not be responsible for any Bid that omits addenda acknowledgement. It is the sole responsibility of the bidder to assure that the bidder's information has been received and recorded.

The City is not responsible for requests and/or addenda failing to be "sent or received" as a result of service failure, internet failure, electronic failure, or weather related events. It is the sole responsibility of the prospective bidder to confirm their request and/or information has been received or sent. If a request is made for a bid package and/or addenda electronically the prospective bidder is responsible to confirm receipt. Do NOT submit bids electronically (by email). A 5% bid security (bond or certified check) required. Question must be received via email at purchasing@quincyma.gov April 27, 2018 by 3:00 p.m.

The project is being bid under Massachusetts General Law Chapter 30 & 39M and Chapter 149, and the minimum wage rates as issued by the Director of the Executive Office of Labor and Workforce Development, Department of Labor Standards shall apply. It is the responsibility of the Bidders, before Bid opening, to request if necessary, any additional information on Minimum Wage Rates for those trades people who may be employed for the proposed Work under the resulting Contract.

The Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to not be eligible or responsible. Owner may also reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project or the public to make an award to that Bidder. Owner also reserves the right to waive all informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder.
2. **NOTICE TO PROSPECTIVE BIDDER:**

Enclosed is an invitation for bid issued by the City of Quincy Purchasing Agent. Please read all enclosed instructions and specifications carefully.

In order for your submission to be considered eligible, you must complete the following:

- The proposal must be properly completed (in ink or typewriter);
- Be signed by an authorized contracting agent of your company;
- The Bid must be submitted to the OFFICE OF THE PURCHASING AGENT, 1305 Hancock Street, Quincy, MA 02169, at the time indicated on the Bid Cover Sheet;
- The bid must contain certain required paperwork. We have enclosed the following checklist to assist you in your submission. Any forms or documents that have been R-Required marked must be completed and returned with your bid package or your bid may be rejected: Any forms or documents in the check list that have been PQ-Pre-Qualified marked will indicate a requirement to bid. NR-Not Required does not have to be returned with your bid package and is being supplied for information purposes. Any forms or documents in the check list that have been U-Upon Award marked will be required upon award notice prior to entering into contract. I-Informational

<table>
<thead>
<tr>
<th>BID CHECKLIST</th>
<th>please provide the items that are marked R in your submittal</th>
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<tr>
<td>R</td>
<td>SEALED BID ENVELOPE</td>
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<td>R</td>
<td>5% BID SECURITY</td>
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<td>R</td>
<td>BID COVER</td>
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<tr>
<td>U</td>
<td>100% PERFORMANCE BOND FOR LABOR AND MATERIALS (required upon award notice)</td>
</tr>
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<td>U</td>
<td>100% PAYMENT BOND (required upon award notice)</td>
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<td>U</td>
<td>CERTIFICATE OF INSURANCE LIABILITY (required upon award notice)</td>
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<tr>
<td>R</td>
<td>ARTICLES OF AGREEMENT (SIGNATURE SHEET MUST BE SIGNED)</td>
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<td></td>
<td>1. Standard Contract Articles &amp; Contract Signature And Dates</td>
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<td></td>
<td>2. Bid Tabulation Sheet</td>
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<td></td>
<td>3. Evidence of Qualification Form</td>
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<td>4. Certificate of Authority Form</td>
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<tr>
<td>I</td>
<td>TECHNICAL SPECIFICATIONS</td>
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<tr>
<td>NR</td>
<td>PREVAILING WAGE LAW/SCHEDULE</td>
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<td>R</td>
<td>Addenda Acknowledgement (if issued)</td>
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The successful bidder will be required to provide a performance bond, or other acceptable security, as indicated on the sheet. Please refer to the proposal package for more information. If any of the forms listed in the checklist are missing, please contact the CITY OF QUINCY PURCHASING DEPARTMENT, Quincy City Hall, 1305 Hancock Street, Quincy, MA 02169; Tel # (617) 376-1060 or email: purchasing@quincyma.gov

3. **REQUIREMENTS OF BIDDERS (FOR ALL MATERIALS, SUPPLIES, SERVICES AND EQUIPMENT)**
Pursuant to the Commonwealth of Massachusetts, General Laws, and the General By-Laws of the City of Quincy, Massachusetts, any vendor entering into a contract with the City of Quincy is required to certify certain facts and supply the City with necessary documentation. If the City of Quincy Purchasing Agent determines that the vendor or contractor is not in compliance the City may refuse to issue, reissue, renew or extend such contract or agreement.

The bidder must own a Massachusetts Department of Transportation approved Hot Mix Asphalt Plant to enable him/her to bid on this work.

All bids for this project are subject to applicable public bidding laws of Massachusetts, including General Laws Chapter 30, Section 39M as amended. Attention is directed to the minimum wage rates to be paid as determined by the Commissioner of Labor and Industries under the provisions of Massachusetts General Laws, Chapter 149, Section 26 and 27D inclusive.

Certificate of Insurance Liability:
Each successful bidder (for services only) will be required to present to the City a Certificate of Insurance, which is to include coverage for General Liability; Automobile Liability, Excess Liability, Property Damage, and Worker Compensation and Employers Liability. The City of Quincy, Massachusetts shall be named as a certificate holder on the company’s Certificate of Insurance. Certificates are required from each successful bidder within ten days from the award of the bid.
## INSURANCE REQUIREMENTS

<table>
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<th>General Liability</th>
<th>Automobile Liability</th>
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<tr>
<td>• Comprehensive form</td>
<td>• All Owned Vehicles</td>
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<tr>
<td>• Premises/Operations</td>
<td>• Hired Vehicles</td>
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<tr>
<td>• Underground Explosion &amp; Collapse Hazard</td>
<td>• Non-owned Vehicles Bodily Injury &amp; Property Damage Combined $1,000,000</td>
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<tr>
<td>• Products / Completed Operations</td>
<td>• Independent Contractors</td>
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<tr>
<td>• Independent Contractors</td>
<td>• Broad from Property Damage</td>
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<tr>
<td>• Broad from Property Damage</td>
<td>• Personal Injury</td>
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<tr>
<td>• Each Occurrence $1,000,000</td>
<td>• Each Occurrence $1,000,000</td>
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<tr>
<th>Workers Compensation &amp; Employers Liability</th>
<th>Additional Insurance / Requirements</th>
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<tr>
<td>As Required by State of Massachusetts:</td>
<td>• The City of Quincy Shall be named as Additional Insured</td>
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<tr>
<td>• Each Accident $100,000</td>
<td>• Aggregate $2,000,000</td>
</tr>
<tr>
<td>• Bodily Injury by Disease (Policy Limit) $500,000</td>
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<tr>
<td>• Bodily Injury by Disease (Each Employee) $100,000</td>
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- **a) Prevailing Wage Law/Schedule:**
  All wages paid for labor on the work to be performed under each service contract for a public works construction project shall not be less than those prescribed by the Commissioner of Labor and Industries in accordance with the Massachusetts General Laws; Chapter 149, Section 26 and 27, as amended. Employers must submit weekly payroll records to the awarding authority for all employees who have worked on the project. The City will not process invoices without prevailing wage records. Pursuant to the provision of, as amended, the Contractor (and his Sub-Contractors), will be obligated to pay all workers in the covered classes the applicable prevailing wage rates and supplements. The minimum hourly wage rate to be paid the various classes of labor performing work under this contract shall be in accordance with schedules which have been established, or may hereafter be established or increased, by the Massachusetts Department of Labor during the contract term.

- **b) Contractors Certification for Equal Employment Opportunity:**
The bidder certifies that it is an Equal Opportunity Contractor, as adopted by the Commonwealth of Massachusetts Supplemental Equal Employment Opportunity, Anti-Discrimination and Affirmative Action Program.

- **c) Certificate as to a Corporate Bidder:**
The bidder Certifies as being a Corporate Bidder.

- **d) Record Keeping:**
The Contractor shall make, and keep, at least six (6) years after final payment, books, records, and accounts which, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the Contractor, and until the expiration of six (6) years after final payment, the Office of the Inspector General, and the Deputy Commissioner of Capital Planning and Operations shall have the right to examine any books, documents, papers or records of the Contractor or of his/her Subcontractors that directly pertain to, and involve transactions relating to the Contractor of his/her Subcontractors.
All record keeping shall be in full compliance with the Massachusetts General Law, Chapter 30, Section 39R.

4. **POSTING OF BID BOND**

Each bid must be accompanied by a bid security consisting of a BID BOND, or CERTIFIED CHECK issue by a responsible bank or trust company in the amount of 5% of the bid price payable to the City, in the amount of the bid. Such checks will be returned to all except the three (3) lowest responsible and eligible bidders within five (5) days, Saturday, Sundays, and legal holidays excluded, after the opening of bids, and the remaining surety will be returned promptly after the Owner and the accepted bidder have executed the Contract.

5. **POSTING OF PAYMENT BOND/PERFORMANCE BOND**

A payment bond in the sum of fifty percent (50%) of the Bid/Contract Price, from a surety company qualified to do business under the Laws of the Commonwealth and satisfactory to the CITY will be required of each successful bidder for services provided to the CITY within ten days from the award of the bid for the faithful payment by the Contractor of all subcontractors, materials suppliers and other obligations of the Contractor associated with this Contract.

Prior to the beginning of any scheduled, non-emergency work under this contract, the contractor shall post a performance bond in the amount of the bid. A performance bond with a surety company satisfactory to the Owner, in an amount equal to fifty percent (50%) of the total amount of the bid will be required for the faithful performance of the contract. The performance bond shall remain in effect for the duration of the work. All but 10 percent of the surety can be eliminated from the job within 30 days substantial completion of the job. The remaining 10 percent can be eliminated 365 days after substantial completion of the job.

6. **INTRODUCTION**

Periodically, the City of Quincy, Massachusetts Department of Public Works (herein referred to as Quincy DPW or QDPW) has the need perform Paving and related work on infrastructure projects.

The intent of this bid is to have available to Quincy DPW the appropriate contractor who will supply the equipment and qualified personnel material necessary to perform the work in accordance with specifications contained herein. Any items not specified in the technical portion of this bid document shall default to the specifications prescribed in the MassDOT at contract issuance.

7. **DESCRIPTION**

The City of Quincy, Massachusetts, also called the Owner, acting through its QDPW, will receive sealed Bids for new Trench Paving, Grinding and Inlay of Trenches or Small Areas, it will include all materials, associated labor and equipment required to undertake Controlled Cold Planing (Milling/Grinding), installation of pavement as well as Structure Adjustment (if necessary) and at various locations within the City. Work includes excavation of and replacement of existing surface patches as well.

The Contractor shall furnish all labor, services, materials, equipment, plant, machinery, apparatus, appliances, tools, supplies, and all other things necessary to do all work required for the completion of each item of the Work as specified. The Work to be done shall be paid for under each item and shall not be limited to the item described but shall include all incidental work necessary or customarily done for the completion of that item.

The Contractor is required to employ sufficient skilled, unskilled, and supervisory labor, and equipment as may be considered necessary by the City DPW Commissioner or his Representative to permit or enable the Contractor to expeditiously execute the work at such a uniform rate of progress which will permit the completion of the work within the time limits which will be specified.
The City DPW Commissioner or his Representative may request a specific piece of equipment to complete a specific task or provide the scope of work to the contractor to complete the task. All equipment, labor and material shall be paid according to the bid schedule provided.

A. GENERAL
The purpose of this Contract is to perform work necessary for the permanent repair of pavement distresses and failures such as rutting, cracking, potholes, etc. Areas to be repaired are located in various roadways throughout the CITY OF QUINCY. These distresses and failures are typically over 5 square yards in area and require the removal by cold planing of the existing top course of asphalt and the replacement of the top course by the use of self-propelled paver.

B. SCOPE OF WORK
The work under this portion of the Contract shall include all labor, equipment, and materials necessary for the cold planing and paving of distressed areas in various roadways located in the CITY OF QUINCY. If work requiring Police Detail is scheduled and subsequently cancelled by the Contractor for any reason, it shall be up to the Contractor to cancel the Detail 1 hour prior to originally scheduled start time. Failure to cancel will result in Contractor paying for Detail.

Contractor shall be responsible for providing and placing any and all traffic safety signage as required by the QUINCY Police Department and the Manual of Uniform Traffic Control Devices (MUTCD). Such signage may be, but is not limited to, road closed, detour, construction ahead, etc., and shall be of proper size, color, etc. to be clearly legible. Contractor shall provide, place and remove traffic cones for the safety of workers and the general public as required by the CITY OF QUINCY Police Department.

Contractor shall make a best effort to allow access to adjacent properties, and shall not close roadways unless absolutely necessary. No roadways shall be closed unless a Police Detail is present and an acceptable detour route is determined.

C. CONSTRUCTION METHODS
Contractor shall notify the QDPW representative prior to the start of work and perform a site visit to locations where work is proposed, and produce suitable means and methods to perform the work, along with a schedule for approval. Following approval Contractor shall notify DigSafe of the proposed cold planing and patching locations, and obtain markouts for all locations. Contractor shall notify CITY OF QUINCY Water and Sewer Division for mark-out of CITY utilities.

In areas directed by the QDPW representative, wearing course shall be removed to the limits as marked to a depth between two (2") and three (3") by the cold planing method. The cold planer shall be designed and built for flexible pavements with a minimum planing width of 36", be fully adjustable to match cross slope, be equipped with a conveyor to load directly into trucks, have a self-contained water tank for dust control, and be in proper working condition to provide the desired result in a minimum of passes. The operator shall possess the skill and ability to maintain line and grade, and shall not tear, gouge, shove, break, or excessively groove the remaining surface. Care shall be taken around castings that may be present within the area to be cold planed. Pavement around castings shall be removed in such a way as to not damage casting. Any castings damaged due to the pavement removal process shall be replaced at the Contractor's expense.

All material removed shall become the property of the Contractor, and shall be properly disposed of in accordance with required regulations. The remaining surface and adjacent area shall be swept clean and dust free by the use of self-propelled power sweepers, vacuums, hand sweepers, or other methods approved by the QDPW representative.
Following sweeping, and just prior to paving, Contractor shall carefully apply tack coat to cold planed surface and adjacent vertical surface. Tack coat shall be applied by pressure sprayer or other means to achieve a uniform coating. Direct pouring from container shall be unacceptable. Tack coat shall be asphalt emulsion RS-1, and conform to M3.03.0. Tack coat application shall be 0.03 to 0.05 gallons per square yard. Tack coat shall be allowed to "break" prior to paving.

Contractor shall use the Hot Mix Asphalt type specified by the QDPW representative. Minimum bituminous temperature prior to placement shall be no lower than 225 degrees F, no payment will be made for any HMA not used. Bituminous shall be installed only when ambient temperature is 50 degrees F or higher, and no bituminous shall be installed on frozen sub base or sub base that has standing water. No HMA shall be installed during rain. Contractor shall have adequate personnel and equipment on site to place, spread, and compact the top course. All hand work shall be performed by workers skilled in this particular work. Top course shall be smooth, meet edges of adjacent roadway so as to be uniform after compaction, not overworked to segregate stone from fines, and be installed in one consistent lift. A self-propelled paver shall be used on all repairs over 4 feet wide or 15 feet in length. Compaction shall immediately follow with use of self-propelled roller. Roller shall be vibratory equipped with minimum weight of 2000 lbs. The use of plate compactor for top course shall not be allowed.

Following compaction, Contractor shall tack edges of patch with asphalt emulsion at a minimum width of 3", overlapping patch and adjacent roadway. Stone dust shall be adequately applied to tacked edge and broomed along seam to cover all exposed emulsion. Excess stone dust, asphalt, and debris shall be swept and removed by Contractor to the satisfaction of the QDPW representative prior to his moving on to the next location.

Contractor may leave cold planed surface unpaved overnight ONLY with approval of the QDPW representative. If approved, adequate warning devices must be approved and placed.

Contractor shall install temporary ramps to adjacent driveways or ADA ramps if necessary or directed, or if it is anticipated that the finish paving will not be completed on the same day as the cold planing. Project millings may be used to install the temporary ramp, but must be thoroughly compacted to the satisfaction of the QDPW representative. Contractor will be responsible for removal of any temporary ramps prior to paving. Contractor shall not leave any equipment, vehicles, or material overnight on any roadway.

Contractor shall contact the CITY OF QUINCY Water Division for the supply of water if needed. NO residential water shall be used.

D. “CONTRACTOR" DEFINITION
The Contractor is the person or entity identified as such in the Owner-Contractor Agreement and is referred to throughout the Contract Documents. The term Contractor means the Contractor or his authorized representative.

8. METHOD OF AWARD

City of Quincy will award a contract to the LOWEST RESPONSIVE AND RESPONSIBLE BIDDER based on the GRAND TOTAL BID. Bidder must meet the terms of the specifications. Bid Prices Per Unit Will Include All Labor, Equipment, Material, Administration and Overhead.

NOTE: IN THE EVENT OF MATHEMATICAL ERRORS ON EXTENSIONS OF UNIT PRICES TO TOTAL COSTS, UNIT PRICES WILL PREVAIL.

It is understood that all contingent quantities shown on the Proposal may be increased without limitations to the extent ordered by the City DPW Commissioner or his Representative, and payment for these items, in any quantity, will be made at unit prices bid. If the City considers other sections to be unbalanced all bids may be rejected. The successful Bidder will be compensated for additional work (services not specified under line item pricing) at the time and material rates. Such work must be at Departmental request, and must be incidental to an
ongoing project item. The City reserves the right to waive informalities and to accept or reject any and all bid proposals or portions thereof, to the satisfaction of the City.

All Unit Prices (items), for which a bid price has been requested, must be provided for each or your bid may be rejected. The City of Quincy reserves the right to terminate this contract at any time, or for any reason deemed in the best interest of the City. The contract calendar year shall be one year from the defined date stamp on the top of the fully executed contract with all necessary signatures. The contract will be awarded on a Grand Total bases payments on completed work shall be paid by the unit price.

9. **TERM OF THE CONTRACT & TERM EXTENSIONS**

The City of Quincy is soliciting pricing for a period of up to three (3) years. The Contract awarded in response to these specifications shall be effective for a period of one year. Upon the satisfactory performances of the vendor; the City of Quincy may extend the contract for two (2) additional terms of one (1) year each. Contract shall automatically renew upon anniversary date of contract execution, unless notification of termination is given 30 day prior, in writing, by either party.

10. **BILLING ADDRESS**

City of City of Quincy
QDPW – Highway Department
55 Sea Street / Quincy, MA 02169
Telephone (617) 376-1900 / EMAIL: lprendeville@quincyma.gov

11. **EXCLUSIVITY**

This contract will be non-exclusive. The City reserves the right to do work of the type covered by this contract with City forces or with other contracts.

12. **ADDITIONAL ITEMS**

City of Quincy reserves the right to add related items to this contract during the contract term upon agreement by both parties as to the price. Approval must be given in writing by the City DPW Commissioner or his Representative.

13. **ADDENDA AND INTERPRETATIONS**

No interpretation of the meaning of the plans, specifications or other pre-bid documents will be made to any bidder orally. All information given to bidders other than by means of the plans, specifications, or by addenda, as described below, is given informally and shall not be used as the basis of a claim against the Owner. Every request for such interpretation should be in writing addressed to the City DPW Commissioner and to be given consideration must be received at least seven days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the Contract. All addenda so issued shall become part of the Contract Documents.

14. **LAWS AND REGULATIONS**

The bidder’s attention is directed to the fact that all applicable State laws, municipal ordinances, and the rules and regulation of all authorities having jurisdiction over construction of the project shall apply to the Contract throughout, and they will be deemed to be included in the Contract the same as though herein written out in full.
15. FUEL/MATERIAL ESCALATION & DE-ESCALATION & ASPHALT PRICE ADJUSTMENTS

The contractor will assume responsibility for fueling operator-equipped equipment. Delivery of fuel by the contractor to the work site may be required and must be at no additional charge to City of Quincy. The price of the fuel will be determined by the current MassDOT market index and will be added to the invoice as a separate item billed or credited in cost per gallons. The Contractor is required to submit fuel price updates to City of Quincy. Fuel prices can be adjusted on a monthly basis only. Index will be set at the time of contract execution.

Contractor’s bid prices below shall be based upon the current State DOT liquid asphalt index posted on the due date for receipt of bids. If the State DOT liquid asphalt index differs by more than 5% when the work is performed, then Contractor’s invoices shall include price adjustments for the asphaltic materials utilizing the standard MassDOT formula.

**FUEL ESCALATION**

The City will allow escalation of prices during the contract term for fuel adjustment.

**MATERIAL ESCALATION**

The City will allow escalation of prices during the contract term for Liquid Asphalt Material adjustment.


16. PAY ITEM FORMAT/INVOICING

All labor, tools, machinery, and materials required to complete the items of work will be included in the Submitted Price Bid on each item of work. The quantities listed are the estimated annual quantities for City of Quincy and should not be construed to represent guaranteed maximum or minimum quantities to be purchased. All unit prices bid will be extended for the actual number of units purchased during the contract term. The City of Quincy reserves the right to order more or less than the quantities listed at the prices stipulated. Payment to the Contractor will be based on the aggregate of those items computed from rates indicated herein. The Contractor will prepare his invoices based on the aggregate of those items computed from the unit price as indicated herein. All other invoices, including material, will be submitted with suitable backup receipts and slips. Invoices will be submitted directly to the QDPW indicating the project (roadway) and should be submitted not more than once a month. Contractor will be responsible to follow the user Department's invoicing procedures and MGL Requirements. The contractor will be required to separate and/or provide the necessary detail required by the City DPW Commissioner or his representative,

17. INDEMNIFICATION

The Contractor agrees to defend, indemnify and save harmless the City of Quincy, its officers, agents, servants and employees from and against any and all liability, damages, costs or expenses, causes of action, suits, judgments, losses and claims of every name not described, including attorneys’ fees and disbursements, brought against the City of Quincy which may arise, be sustained, or occasioned directly or indirectly by any person, firm or corporation arising out of or resulting from the performance of the services by the Contractor, arising from any act, omission or negligence of the Contractor, its agents and employees, or arising from any breach or default by the Contractor under this Agreement. Any damages found by the City of Quincy to be the direct result of the Contractor’s performance under this contract will be the responsibility of the Contractor.
18. NOTICE OF AWARD

Regardless of any notification of award to any prospective Contractor, all bids remain open and acceptable by the City for thirty (30) days from the bid opening date. Nothing in this paragraph is to be considered a waiver of the City’s rights against a prospective Contractor who fails to execute a contract once it is awarded.

19. SCHEDULING OF WORK

The owner shall provide the contractor with as much notice as possible. However, the contractor shall be available to perform the work within 15 working days of the notification, meaning available for work and onsite on the 11th day. The notification may come formally (written request-mailed) or informally (phone call or email) at which time the owner will record his request date. The owner may give special dispensation to the schedule when affected by weather related conditions; this dispensation will be defined solely by the owner. The owner may at any time request, that the schedule be pushed back at which time the contractor will be allotted additional time equal to the difference between the original scheduled dates and the new scheduled date plus 2 working days. Example: If the schedule is pushed up 5 working days, then the start date will be equal to 22 working days from the original scheduled date (15+5+2).

20. SCHEDULING PENALTIES

Failure to meet the scheduling criteria under “Scheduling of Work” will result in a $250 (Two Hundred and Fifty Dollars) per day penalty for each day (starting on the 11th day) that the contractor is not present to perform the scheduled work. Excluded are weekends, and State recognized holidays.

21. LOCATION OF WORK

Service and commodities may be required or deliverable anywhere in the City of Quincy and for any City department. Prospective Contractors are to understand that work may be required anywhere in the City of Quincy, and shall bid accordingly.

22. PROOF OF EXPERIENCE

The contractor shall illustrate experience and capabilities to perform Paving related work. The bidder shall provide with his/her bid a list of five (5) or more similar projects completed within the last 3 years. Such list shall include the project names and locations, owner or agency contact names and telephone numbers, and the total area of work completed for each project. The total area of work for all projects on this list shall not be less than 50 thousand square yards.

No award will be made to any bidder who cannot satisfy the Owner that he has sufficient ability and experience in this class of work and sufficient capital and resources to enable him to complete the work successfully within the time named. The Owner’s decision or judgment on these matters will be final, conclusive, and binding.

The Owner may make such investigations as he deems necessary, and the bidder must furnish to the Owner, under oath if so required, all such information and data for this purpose as the Owner may request.

23. QUALITY OF WORK

The contractor shall complete the work as directed by the City DPW Commissioner and/or his Representative in a workman like manner in accordance with specifications contained herein and as a default, the requirements of the Standard Specifications for Road and Bridge Construction as published by the Massachusetts Highway Department including any revisions that have been installed/accepted by MassDOT prior to the date of contract issuance (posting in the central register).
If work is not completed in a workmanlike manner that is satisfactory to the City DPW Commissioner and/or his Representative, then the City can terminate the remaining period of the contract without obligation or recourse.

24. PERSONNEL AND EQUIPMENT

Principals, project managers, superintendent, estimators, expeditors, clerical and all other office personnel will be considered overhead. Time spent in preparation of an estimate for each project will be considered overhead. Time spent preparing and securing permits, drawings required thereof, shop drawings, submittals, schedules, reports and invoices will also be considered overhead costs.

Hauling or delivery of personnel, to/from/within the job site(s) will not be considered as billable. Mobilization will not be considered billable. A Mobilization will be defined as the move in and the move out. The contractor will not be paid a mobilization for exchanges of machinery do to breakdowns or as a matter of scheduling conflicts when work still remains. Travel time for personnel to/from/within the job site(s) will also not to be considered as billable hours.

The City of Quincy reserves the right to inspect the equipment to perform work under this contract of all bidders to determine the bidders' abilities to perform the services required. If, in the opinion of the User Department that may recommend award, the lowest responsible bidder does not have adequate facilities and/or proper equipment to service this contract, bidder may be subject to rejection. At which point the next lowest bidder may be used or the work may be re-bid.

Equipment must be in first class operating condition; operators must be experienced, qualified and possess the proper license to operate said piece of equipment. Any maintenance costs associated with the machinery will be the equipment owner's responsibility. Operators of respective equipment will be paid the prescribed rates of wages, as determined by the Commissioner of Labor and Industries, in accordance with the provisions of Massachusetts General Laws 149, Section 27F. All equipment must be properly registered and adequately insured.

In the event of notice to the contractor by the City of Quincy that the equipment is not in good, safe and serviceable condition and fit for use upon its arrival, the contractor shall have the obligation to put the equipment in good, safe and serviceable condition within a reasonable length of time. If this cannot be done by the time use of the equipment is required by the City of Quincy, then the contractor will provide a different but similar piece of equipment to the City of Quincy for its use.

25. SUPERVISION AND INSPECTION

The Contractor further agrees that the work shall be at all times under the immediate supervision of the City DPW Commissioner or his Representative, who shall at all times have free access to all parts of the work and all places where materials for the same are prepared, and shall have every facility made available for the proper inspection of (a) all materials used in, and (b) workmanship executed for the work under this contract. It is expressly understood and agreed that the inspection of the work and materials by the City DPW Commissioner or his Representative will in no way diminish the responsibility of the Contractor, or release him/her from the Contractor's obligation to perform and deliver to the City sound and satisfactory work. It is further agreed that the Contractor shall obey orders of the City DPW Commissioner or his Representative and by all persons employed on the work.

26. RESPONSIBILITY:

The contractor must accept full responsibility for providing licensed, qualified, experienced operators (where indicated on the unit price sheet) who can perform the work required. The City of Quincy will not accept responsibility for any equipment or other damage or failure caused by the contractor's failure to provide equipment or operators capable of performing the tasks specified. Although the City of Quincy will provide
general supervision, the City of Quincy will not be responsible or liable for contractor negligence. The contractor will guarantee all workmanship and material provided for a period of one year.

A. PERMITS, FEES AND NOTICES

Unless otherwise expressly, the Contractor will secure and pay for all permits and fees, licenses and inspections necessary for the proper execution and completion of the Work which are customarily secured after execution of the Contract and which are legally required at the time the bids are received, and the same will at all times be the property of the Owner and will be delivered to the Owner upon completion of the Project.

27. POLICE DETAILS

Off-duty police officers: if required by the City for traffic control will be paid for by the City directly. If City of Quincy police officers (hereinafter police officers) are to direct and control traffic during construction, as instructed and directed by the City DPW Commissioner or his Representative of the user department. This item will be used only at the discretion of the City DPW Commissioner or his Representative. This does not diminish the responsibility of the contractor to perform his work in a safe and traffic friendly manner.

28. NOTIFICATION TO UTILITY COMPANIES

It is the contractor's responsibility to contact DIG SAFE or any other utility company not notified per Dig Safe.

29. STORAGE OF MATERIALS AND EQUIPMENT

The Contractor will be required to store his/her material and equipment in a location, which will not interfere with the normal operations of other contractors or employees of the City, and in a manner which will afford them maximum protection. The City will not guaranty the security nor be responsible for loss, damage or theft of stored materials or equipment in a City facility or on a City street. Security of materials and equipment is the Contractor's responsibility. The Contractor will replace such items, as required, at his/her own expense.

At the end of each project, a list of all City owned materials in the possession of the Contractor will be sent to the City DPW Commissioner or his Representative of the User Department. Said material will be returned to a City maintenance yard or as ordered by the City DPW Commissioner or his Representative.

30. PROTECTION OF PROPERTY

The Contractor will properly protect public and private property from damage of any kind to all trees, plantings, lawns, hedges, fences, existing sidewalks, drives, curbs, street pavements, pavement markings, traffic control devices, utility facilities, vehicles and other facilities within, and contiguous to, the project area. Any negligent damage to said facilities caused by the Contractor's employees, sub-contractors, storage of material, and/or equipment, will be restored to its original condition. The Contractor will pay the cost at his sole expense of any such work or materials required in the repairing or replacement of said items or facilities. This restoration work must be entirely completed, to the satisfaction of the City DPW Commissioner or his Representative of the User Department, before final payment to the Contractor is approved by said City DPW Commissioner or his Representative. It will be the Contractor's responsibility to protect and secure his own property and equipment at all times.

31. SAFETY AND CODE REQUIREMENTS

Due to the nature of the work, Contractor will be familiar with recent modifications to the OSHA regulations regarding trench excavation and the temporary support of the working trench. Conduct operations as required by OSHA regulations at all times.

The Contractor will immediately advise the City of Quincy of inspections conducted by OSHA at the work site.
Immediately provide copies of citations and violations to the City of Quincy.

All areas of this project are hard-hat areas. All persons within the project limits are required to wear protective headgear.

32. MAINTENANCE AND PROTECTION OF TRAFFIC

DESCRIPTION

1. Insure access by emergency vehicles at all times.
2. Materials and equipment store on site will be located so as not to interfere with the normal movement of traffic, and will be secured and protected.
3. During non-working hours, do not stop; leave standing, or park construction equipment on any traffic lane or sidewalk within the project limits. Park such equipment only in protected staging area approved by the City DPW Commissioner or his Representative. Stockpile material only in protected staging area unless otherwise approved by the City DPW Commissioner or his Representative.
4. Maintain pedestrian access to building entrances at all times unless otherwise approved by the City DPW Commissioner.
5. Maintain access to drives until work sequence require blocking access. The City DPW Commissioner or his Representative must approve any blocking of access.

33. CITY SUPPLIED EQUIPMENT AND MATERIALS

City of Quincy reserves the right to advertise, procure or otherwise arrange for the supply of certain items; items to be specified at the discretion of the City DPW Commissioner or his representative.

34. ENGINEERING SERVICES

If required by the complexity of the circumstances, the City will provide line, grade and engineering, to the extent the City feels necessary to complete the project. It will be the contractor’s responsibility to relocate or offset any structures or line and grade information provided should it conflict with the Contractor’s work area.

35. USE OF CITY WATER

In those areas of the City where water is accessible, water will be made available via a connection point at no cost to the contractor for short-term use associated with the work covered in this contract. The contractor shall supply all materials and labor necessary to connect to the water supply point identified by the City.

36. CLEANUP OF PREMISES AND EQUIPMENT

The Contractor will not allow waste material or rubbish caused by work under this contract to accumulate in or about the premises, but will promptly and thoroughly remove rubbish and excess tools from the site including immediate work area. Upon Final Completion, he will leave the site thoroughly cleaned and ready for use. Clean all spilled equipment fluids to the satisfaction of the City. In case of a dispute, the City of Quincy may remove the rubbish and do such cleanup as required and back charge (charge the contractor) the cost thereof to the Contractor responsible.

37. CONTRACTOR RESPONSIBLE UNTIL WORK IS COMPLETED

The Contractor further agrees to assume charge of and be responsible for the entire work until completed and accepted by final payment; and that she/he will personally supervise the faithful performance of the work, and that s/he will keep it under Contractor’s exclusive control. In case of absence, the Contractor will designate a
A. SUPERVISION AND CONSTRUCTION PROCEDURES

The Contractor must supervise and direct the Work, using his best skill and attention which will not be less than such state of skill and attention generally rendered by the contracting profession for projects similar to the Project in scope, difficulty and location. The Contractor must maintain adequate supervisory personnel at the Site during the performance of the Work. He will be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract.

The Contractor will be responsible to the Owner for the acts and omissions of his employees, Subcontractors and their agents and employees, and other persons performing any of the Work under a contract with the Contractor. This obligation will also extend to the presence on the Site of suppliers of materials or equipment, their employees, contractors, and agents engaged in the work.

The Contractor will not be relieved from his obligations to perform the Work in accordance with the Contract Documents either by the activities or duties of the Owner in its administration of the Contract.

38. NIGHT WORK, CITY HOLIDAYS, AND WEEKEND WORK

It is anticipated that the work will include "night work." However, all hours of work will be authorization by the City of Quincy DPW Commissioner. It is anticipated that work hours will be Monday – Friday 7:00 am to 6:00 pm for day work and 7pm to 5am for night work. Holidays will be the same as those recognized by the MassDOT.

39. OTHER AGENCIES

The Contractor must honor the prices, terms and conditions of this contract with any and all municipalities, departments or public authority within City of Quincy. The Contractor must also offer the prices, terms and conditions of this contract to political subdivisions, fire companies or districts located entirely or partly within City of Quincy.

Orders placed against this contract between any subdivision or agency or corporation will be contracts solely between the Contractor and those entities. City of Quincy will not be responsible for, nor will it have any liability or other obligation for, such contract between the Contractor and any third party.

40. MOBILIZATION

The contractor will not be paid a mobilization fee.

41. BRAND REFERENCE

A reference to a manufacturer’s product by brand name or number is done solely to establish the minimum quality and performance characteristics required. Bidders may submit bids on alternates, but must attach catalog sheets listing the specifications for any alternate bid. Further, the bidder must demonstrate that the alternate proposed has a sufficient operating track record to show the product will perform per the specified brand. The acceptance of a bidder’s alternate rests solely with City of Quincy.

42. CONSTRUCTION DOCUMENTS: DRAWINGS AND TECHNICAL SPECIFICATIONS

The Contractor will be required to comply with all drawings and technical specifications, which may be associated with each particular project.
Where Standards, Specifications, and Codes are referred to herein, it will be understood, that such reference is to the issue in effect as of the date of the bid, including all revisions and addenda, if any.

Should any of the General Conditions, Special Conditions and Technical Specifications, or special notes on the drawings conflict with the any of the provisions of the Standard Specifications for Materials and Construction, Standards for Materials, or the Standards of Construction of the City of Quincy, the General Conditions, Special Conditions and Technical Specifications of this Contract will govern; followed by the City of Quincy Specifications and Standards.

43. PERFORMANCE WARRANTY

The contractor must furnish the following warranty after completion of the work and prior to final payment:

The Contractor hereby warranties that all workmanship and all materials furnished under the contract to comply fully with requirements of these Specifications. All Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective and, promptly after written notification of non-conformance, shall be repaired or replaced by the Contractor with Work conforming to such requirements at the contractors expense. If at any time within two (2) years after the date of the final payment, any substandard or defective work should appear which in the opinion of the City is due to inferior materials or workmanship, the Contractor warranties doing whatever is necessary to remedy the defects immediately without cost to the City. The City will notify the Contractor in writing of the defects and the repairs to be made, and the Contractor will begin repairs within a reasonable agreed time frame, however not more than 120 days or as approved by the Owner.

44. INFORMATION NOT GUARANTEED

All information given in the Contract Documents relating to subsurface and other conditions, natural phenomena, existing pipes, and other structures is from the best sources at present available to the Owner. All such information is furnished only for the information and convenience of bidders and is not guaranteed. It is agreed and understood that the Owner does not warrant or guarantee that the subsurface or other conditions, natural phenomena, existing pipes, or other structures encountered during construction will be the same as those indicated in the Contract Documents.

If is further agreed and understood that no bidder or Contractor shall use or be entitled to use any of the information made available to him or obtained in any examination made by him in any manner as a basis of or ground for any claim or demand against the Owner or the QDPW representative, arising from or by reason of any variance which may exist between the information made available and the actual subsurface or other structures actually encountered during the construction work, except as may otherwise be expressly provided for in the Contract Documents.

45. CONDITION OF WORK

Each bidder must familiarize himself fully with the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of his obligation to furnish all material and labor necessary to carry out the provisions of this Contract. Insofar as possible the Contractor, in carrying out his work, must employ such methods or means as will not cause any interruption of or interference with the work of any other Contractor.

By executing the Contract, the Contractor represents that he has visited the site, familiarized himself with the local conditions under which the Work is to be performed, and correlated his observations with the requirements of the Contract Documents.
A. REVIEW OF CONTRACT DOCUMENTS

The Contractor must carefully study and compare the Contract Documents and must at once report to the Owner any error, inconsistency or omission he may discover. The Contractor will not be liable to the Owner for any damage resulting from errors, inconsistencies or omissions in the Contract Documents which he discovers but will be liable for damage to the extent he reasonably should have but failed to discover such errors, inconsistencies or omissions. The Contractor will perform no portion of the Work at any time without Contract Documents or, where required, approved Shop Drawings, Product Data or Samples for such portion of the Work.

B. CUTTING AND PATCHING OF WORK

The Contractor will be responsible for all cutting, fitting or patching that may be required to complete the Work or to make its several parts fit together properly.

The Contractor must not damage or endanger any portion of the Work or the work of the Owner or any separate contractors by cutting, patching or otherwise altering any work or by excavation. The Contractor must not cut or otherwise alter the work of the Owner or any separate contractor except with the written consent of the Owner and of such separate contractor. The Contractor must not unreasonably withhold from the Owner or any separate contractor his consent to cutting or otherwise altering the Work.

46. OR EQUAL

The use of the words "Or Equal" following the name of any manufacturer, vendor or proprietary product will be understood to mean that articles or materials may be substituted which, in the opinion of the Owner, are equal in quality, durability, appearance, strength, design and performance to the articles or materials named or described and will perform adequately in providing a first-class facility.

When submitting shop drawing information on articles or materials which are being proposed as substitutes for specified items, the Contractor must clearly identify them as such. If the articles or materials are accepted as equal to those on which dimensions on the drawings are based, any dimensional variance from those shown and/or specified must be shown on the shop drawings prepared by the Contractor, illustrating the manner in which conformity to dimensions and design is to be obtained. All such drawings will be subject to the approval of the Owner and the installation of the article will not proceed without first obtaining said approval.

47. OWNER’S RIGHT TO STOP THE WORK

If the Contractor fails to correct defective Work as required by the Owner or fails to carry out the Work in accordance with the Contract Documents or if the Owner will for any other reason so require, the Owner, by a written order signed personally or by an agent specifically so empowered by the Owner in writing, may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated or until further written notice from the Owner; however, this right of the Owner to stop the Work will not give rise to any duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity. The Contractor must resume the Work after such stoppage promptly upon written notice to do so from the Owner. If such stoppage is required through no fault of the Contractor, the Contract Time (and the dates for achieving Substantial Completion and Final Completion) will be extended by a period equal to the period of the stoppage, and the Contractor will be compensated for its reasonable and justifiable cost incurred as a result of such stoppage.

48. OWNER’S RIGHT TO CARRY OUT THE WORK

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within seven days after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to any other remedy he may
have, perform such work or cause such work to be performed and/or make good such deficiencies. In such case an appropriate Change Order will be issued deducting from the payments then or thereafter due the Contractor the cost of correcting such deficiencies, including compensation for additional services made necessary by such default, neglect or failure. If the payments then or thereafter due the Contractor are not sufficient to cover the amount, the Contractor must pay the difference to the Owner.

49. OWNER’S RIGHT TO TERMINATE CONTRACT

The CITY reserves the right to terminate this Contract at their discretion with thirty (30) days written notice to the contractor. In the event of Contract termination, all finished or unfinished work, or un-used material, already paid for under Contract prices, will become the property of the City of Quincy.

50. COMMUNICATIONS

The Contractor must forward all communications to the Owner’s designated representative. The Contractor will at all times have a designated representative in the field that is authorized to act on behalf and make decisions for the Contractor under this contract agreement.

51. BID ITEMS

1. Section 120 Excavation by Cold Planer

This work shall consist of excavation, and disposal of material by means of Controlled Cold Planing (Milling).

The work to be done consists of excavating Bituminous Pavement by cold planer/milling in designated areas. The cold planer shall be capable of planing both the bituminous pavements and cement concrete patches if the latter should be encountered in bituminous pavements. The cold planer shall be equipped with all necessary safety devices such as flashing lights and backup signal so as to operate in traffic with complete safety. Contractor shall furnish auxiliary milling equipment for clean-up work along curbs and around casting. Work area will be left clean and free from debris at the end of each day. Cold Planer shall have a Rotor Mandrel at least three feet (3') but no more than four-feet (4') wide. Teeth shall be replaced as need to produce a planed surface without heavy scores, or as directed by the owner.

Prices quoted shall include milling, loading, trucking, sweeping, edging and final clean-up. The use of planing equipment mounted on pneumatic tires will be permitted only for clean-up work. **Milled material will become the property of the contractor and will be disposed of off-site.** Depth of Planing (milling) cut will average 2"-3" inches plus or minus ½" as directed by the Owner’s Representative. **Contractor will be responsible for damage to existing castings resulting from his operation** unless such castings (water gates e.g.) have previously been paved over and are therefore not visible on surface. The Cold Planer must be equipped with automation (non-contact grade sensors). Cold planing (milling) will be performed within plus or minus ½" of the specified thickness. Areas over milled that exceed the depths specified will be leveled to the predetermined thickness at the contractor’s expense and at no cost to the owner. Areas that are under planed that do not meet the depths specified will be re-milled to the predetermined thickness at the contractor’s expense and at no cost to the owner. The words Milling, Cold Planing and Grinding shall be interchangeable.

ITEM 120: 2" to 3" HOT MIX ASPHALT EXCAVATION BY COLD PLANER SQ.YD

Shall include milling, loading, trucking, sweeping, edging and final clean-up. The use of planing equipment mounted on pneumatic tires will be permitted only for clean-up work. This item does not cover or compensate for any loss in production due to weather, breakdowns, traffic or any other incidental result in production whether the result of the Owner of the Contractor.
Planing (milling) cut will average 2-3 inches plus or minus ½. This item shall cover all work complete to grade. Any other cost will be considered incidental and covered under this item.

SMALL QUANTITIES

ITEM 120A:  MILLING & INLAY LESS THAN 5000 SQ/YDS PER DAY (ADD)  SQ.YD

The price bid shall be all inclusive and include the production, trucking, installation, and compaction of the Milling and installation Hot Mix Asphalt (includes material). This ADD shall include the additional cost per square yard for day's production where the day's production to be less than 5000 square yards do to the scope of work. This item does not cover or compensate for any loss in production due to weather, breakdowns, traffic or any other incidental result in production whether the result of the Owner of the Contractor.

Measurement  Pay Item-Square Yard
Measurement shall be by the square yard installed and in place. This item shall cover all work complete and shall include the Grind/Mill and Inlay, all inclusive. Any other cost will be considered incidental and covered under this item.

SMALL QUANTITIES

ITEM 120B:  MILLING & INLAY LESS THAN 2500 SQ/YDS PER DAY (ADD)  SQ.YD

The price bid shall be all inclusive and include the production, trucking, installation, and compaction of the Milling and installation Hot Mix Asphalt (includes material). This ADD shall include the additional cost per square yard for day's production where the day's production to be less than 2500 square yards per day do to the scope of work. This item does not cover any loss in production due to weather, breakdowns, traffic or any other incidental result in production whether the result of the Owner of the Contractor.

Measurement  Pay Item-Sq. /Yd.
Measurement shall be by the square yard installed and in place. This item shall cover all work complete and shall include the Grind/Mill and Inlay, all inclusive. Any other cost will be considered incidental and covered under this item.

SMALL QUANTITIES

ITEM 120C:  MILLING & INLAY LESS THAN 1250 SQ/YDS PER DAY (ADD)  SQ.YD

The price bid shall be all inclusive and include the production, trucking, installation, and compaction of the Milling and installation Hot Mix Asphalt (includes material). This ADD shall include the additional cost per square yard for day's production where the day's production to be less than 1250 square yards per day do to the scope of work. This item does not cover any loss in production due to weather, breakdowns, traffic or any other incidental result in production whether the result of the Owner of the Contractor.
Measurement
Measurement shall be by the square yard installed and in place. This item shall cover all work complete and shall include the Grind/Mill and Inlay, all inclusive. Any other cost will be considered incidental and covered under this item.

SMALL QUANTITIES

ITEM 120D: MILLING & INLAY LESS THAN 700 SQ/YDS PER DAY (ADD) SQ YD

The price bid shall be all inclusive and include the production, trucking, installation, and compaction of the Milling and installation Hot Mix Asphalt (includes material). This ADD shall include the additional cost per square yard for day’s production where the day’s production to be less than 700 square yards per day do to the scope of work. This item does not cover any loss in production due to weather, breakdowns, traffic or any other incidental result in production whether the result of the Owner of the Contractor.

ITEM 120E: MINIMUM COLD PLANER/MILLING OPERATION MOBILIZATION & DEMOBILIZATION LUMP SUM

The price bid shall be all inclusive and include the delivery and removal of all machinery and equipment, labor, trucking and anything related thereto. Mobilization and Demobilization consists of preparatory work and operations necessary for the movement of personnel, equipment, supplies, and incidentals to the project site; for the establishment of work; and for other operations performed or costs incurred before the beginning of work.

It will represent the minimum cost to arrive and shall be added to each day’s quantity based on the unit pricing, irrespective of the quantities utilized for a given day’s production. It shall include the cost to move from location to location within the CITY limits after primary mobilization. NO additional compensation will be made for mobilization within the CITY limits. Mobilization & Demobilization shall be defined as arriving and leaving the CITY limits.

ITEM 170: FINE GRADING, COMPACTING AND FINISHING (TRENCHS) SY

The shaping, trimming, compacting and finishing of the surface of the soil subgrade or new Dense Graded or Gravel base, the grading and finishing of all unpaved areas and the preparation for paving as shown on the plans or as directed in accordance with these specifications and in close conformance with the lines, grades and typical cross sections shown on the plans or established by the QDPW representative.

The grading and compacting of the soil material shall be measured by the horizontal square yard. Payment for the shaping and compacting of the subgrade or existing gravel material as specified herein shall be included in the item for fine grading and compacting. As determined by the CITY, the removal and disposal of unsuitable material below subgrade will be paid for at the negotiated contract unit price per cubic yard for the
appropriate excavation. All other excavation shall be included in ITEM 472.A of this contract. Grading and finishing other than subgrade areas or existing gravel areas to remain in place will be included in the price of the other respective items of work involved.

Measurement of the work shall be by the Square Yard complete and in place and shall cover both night work and day work. This item shall cover all work complete. Any other cost will be considered incidental and covered under this item.

II. Section 220: Adjustment and Rebuilding of Structures & Gates

The work shall consist of rebuilding, removing, replacing, and adjusting the masonry and castings of existing structures (telephone manholes, sewer manholes, drain manholes, catch basins, gate boxes, etc.) as required, conforming to newly proposed line and grade changes, all in accordance with these specifications and in close conformity with the lines and grades shown on the plans or established by the QDPW representative or based upon the proposed pavement thickness. Work shall be prepared in such a manner that all manholes catch basins, valve gates or other structures in the roadway are installed with bituminous paving around the perimeter of each such structure such that a smooth transition is maintained between the top of each structure and the road surface. The elevation of these structures shall be established by running an eight (8') foot straight edge over the top of structure both longitudinally and transversely to the roadway to a finished height along the straight edge equal to that of the compacted pavement thickness.

The contractor shall provide coning as necessary to protect the work against damage from traffic. All specifications under Item 220 will include all labor and material such as concrete cement, masonry and mortar. The work under this contract shall comply in all respects to Section 220, "Adjustment, Rebuilding, & Remodeling of Drainage Structures" of the Massachusetts Department of Transportation (MassDOT) Standard Specifications for Highways and Bridges" 1995 Edition.

* Frame and Covers or Frame and Grates are not included and will be supplied by the Owner as needed.

ITEM 220: DRAINAGE STRUCTURE ADJUST 12" TO 120"

The price bid shall be all inclusive and include the cost to adjust the structure castings once either up or down. All labor and material shall be included. Frame and Covers or Frame and Grates are not included and will be supplied by the Owner as needed. Any other cost will be considered incidental and covered under this item. Bricks shall be set flat along the width of the brick. Brick shall be installed so that the length of the brick runs perpendicular with the opening of the structure. All the brick shall be hand spread (skimmed) sealed on the interior of the structure with Type M mortar. The masonry shall be removed to such depth as directed by the QDPW representative and new masonry shall be constructed to conform to the proposed design. As directed by the owner.

Measurement of the work shall be from the bottom of the bottom row of the adjusted masonry to the bottom of the casting. Any other cost will be considered incidental and covered under this item.

ITEM 220.2: DRAINAGE STRUCTURE REBUILD OVER 120"

The price bid shall be all inclusive and include the cost to adjust the structure castings once either up or down. All labor and material shall be included. Frame and Covers or Frame and Grates are not included and will be supplied by the Owner as needed. The masonry shall be removed to such depth as directed by the QDPW
representative and new masonry shall be constructed to conform to the proposed design. All the brick and/or block shall be hand spread sealed (skimmed) on the interior of the structure with Type M mortar. As directed by the owner.

Measurement
Pay Item-Per Foot
Measurement shall be from the bottom of the bottom row of the rebuilt masonry to the bottom of the casting. The contractor shall not include an additional adjust as part of this item. This item shall cover all work complete set to grade. Any other cost will be considered incidental and covered under this item.

ITEM 358: GATE BOX ADJUSTED EACH

The price bid shall be all inclusive and include the cost to adjust the gate box for various utilities once either up or down. All labor and material shall be included. Gate Boxes will be supplied by the Owner or the respective utility company as needed. As directed by the owner.

Measurement
Pay Item-Each
This item shall cover all work complete set to grade including a concrete collar. Any other cost will be considered incidental and covered under this item.

ITEM 381.3: SERVICE BOX ADJUSTED EACH

The price bid shall be all inclusive and include the cost to adjust the service box for various utilities once either up or down. All labor and material shall be included. Service Boxes will be supplied by the Owner or the respective utility company as needed. As directed by the owner.

Measurement
Pay Item-Each
This item shall cover all work complete set to grade including a concrete collar. Any other cost will be considered incidental and covered under this item.

ITEM 402.1: ¾”DENSE GRADED BASE (Crushed Stone) FOR SUB-BASE TON

Work under these items shall consist of furnishing ¾” Dense Grade Crushed Stone to be used to fine grade trenches prior to paving. Material shall conform to the requirements listed in the MassDOT standard specifications Item 402.1. This item shall include the manufacturing, delivery, installation, fine grading and compaction of material constructed to the depth, typical section, or elevation required by the plans and shall be rolled, finished, and approved before the placement of the HMA.

Measurement
Pay Item-Ton
This item shall cover all work complete including installation, labor, materials, delivery and trucking. Measurement shall be by the Ton installed and in place and shall cover both night work and day work. This item shall cover all work complete. Any other cost will be considered incidental and covered under this item.

III. Section 450: HOT MIX ASPHALT PAVEMENT

a. DESCRIPTION

Work under this item shall consist of furnishing hot mix asphalt composed of mineral aggregate and asphalt binder, mixed in a central mixing plant and placed on a prepared course in accordance with these specifications
and conformance to the lines, grades, thickness and typical cross sections shown on the plans or as directed by
the QDPW representative.

Each course shall be constructed to the depth, typical section, or elevation required by the contract and/or plans
and shall be rolled, finished, and approved before the placement of the next course. Each course shall be placed
to a smooth, dense, and uniform appearance.

The Contractor will establish, provide, and maintain a Quality Control System (QCS) that will detail the
methods and procedures that will be taken to assure that all materials and completed construction conform to
project specifications, plans, technical specifications and other requirements, whether manufactured or
processed by the Contractor or procured from subcontractors or vendors. The Contractor will be required to
complete daily Quality Control testing for the RAP material for each day of production in accordance with these
specifications. Failure to complete the necessary Quality Control testing will result in the suspension of further
production of any additional RAP material for the City.

Attention is called to the fact that payment for the asphalt required to perform the repairs shall only be the actual
asphalt used. NO payment shall be made for any asphalt not used.

b. HMA ITEMS

<table>
<thead>
<tr>
<th>ITEM 455.22</th>
<th>SUPERPAVE SURFACE COURSE(S) ì (SSC ì 9.5), (SSC - 12.5)</th>
<th>TON</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITEM 455.325</td>
<td>SUPERPAVE INTERMEDIATE COURSE ì (SSC ì 19.0mm)</td>
<td>TON</td>
</tr>
</tbody>
</table>

The Contractor shall adhere to all of the requirements herein of Section 450, Hot Mix Asphalt Pavement. All
material produced and placed must conform to the Quality Limits specified in Subsection 450.77. Payment for
HMA pavement will be based upon the quantity in Tons as listed in the truck slips based on what was actually
installed at the unit rate named in the bid form. The price shall constitute full compensation for production and
installation of pavement. Including and not limited to all the labor material and overhead associated with
the work. In addition, the contractor may at the contractor’s expenses perform its own Quality Control Testing.
Payment will be based on Tonnage Slips for Material Placed—All tonnage slips shall be automated printed
tickets. Hand written tonnage slips will not be accepted. The owner shall not pay for Material delivered but not
used.

| ITEM 455.225 | SUPERPAVE SURFACE COURSE(S) ì (SSC ì 9.5), (SSC - 12.5) | TON |

The price bid shall be all inclusive and include the production, trucking, installation, and compaction of the Hot
Mix Asphalt.

Measurement Pay Item-Per Ton
Measurement shall be by the Ton installed and in place. This item shall cover all work complete. Any other cost
will be considered incidental and covered under this item.

| ITEM 455.325 | SUPERPAVE INTERMEDIATE COURSE ì (SIC ì 19.0mm) | TON |

The price bid shall be all inclusive and include the production, trucking, installation, and compaction of the Hot
Mix Asphalt.

Measurement Pay Item-Per Ton
Measurement shall be by the Ton installed and in place. This item shall cover all work complete. Any other cost
will be considered incidental and covered under this item.
ITEM 463.5 BITUMINOUS TACK COAT GALLON

Scope: This work shall consist of furnishing and applying emulsified asphalt to previously prepared bituminous or cement concrete pavement surfaces in accordance with these specifications, at the locations shown on the plans or as directed by the QDPW representative.

Bituminous Materials: The bituminous material to be used for the tack coat shall be liquid asphalt emulsion, SS 1, SS 1h, CSS 1, CSS 1h, RS 1, or CRS 1, conforming to ASTM D977 for anionic and ASTM D2397 for cationic emulsions.

Equipment/Cleaning: Self-propelled power sweepers, vacuums or hand sweepers shall be used, and any combination thereof or other method necessary, to leave the surface clean and dust free.

Dust Control: All equipment will be operated such that it will effectively control dust and meet current State of Massachusetts Air Quality Requirements.

Applicators: The equipment used by the Contractor may include a self-powered, pressure bituminous material distributor or pressure tank with hand held "wand type" applicator.

The distributor shall have pneumatic tires of such width and number that the load produced on the surface shall not exceed 650 pounds per inch of tire width, and it shall be designed, equipped, and operated so that at an even heat the bituminous material may be applied uniformly on variable widths of surface at readily controlled rates from 0.05 to 2.0 gallons per square yard. The material shall be applied within a pressure range of 25 to 75 pounds per square inch and with an allowable variation from any specified rate not to exceed five (5) percent. Distributor equipment shall include a tachometer, pressure gauges, volume measuring devices, and a thermometer for reading the temperature of tank contents. The distributor shall be self-powered and shall be equipped with a power unit for the pump and full circulation spray bars adjustable laterally and vertically.

The wand applicator shall be capable of delivering the specified coverage in a uniformly speckled appearance free from globs, runs or other conditions which in the opinion of the QDPW representative may offset the performance of the tack coat.

Weather Limitations: The tack coat shall be applied only when the existing surface is dry, when the atmospheric temperature is above 50 degrees F., and when the weather is not foggy or rainy. The temperature requirements may be waived, but only when so directed by the QDPW representative.

Preparation of Surface: Immediately before applying a tack coat, the full width of surface to be treated shall be swept with a power broom and/or vacuumed to remove all loose dirt and other objectionable material.

Application of Bituminous Material: The temperature of the emulsion shall be between 75 and 130 degrees F. when applied. The bituminous material shall be uniformly applied at such a rate that the residual asphalt on the surface after curing shall be 0.03 to 0.05 gallons per square yard depending on the condition of the existing surface. The type of bituminous material and application rate shall be approved by the QDPW representative prior to application.

Following the application, the surface shall be allowed to cure without being disturbed for such period of time as may be necessary to permit drying out, setting, or breaking (turning from brown to black) of the tack coat. Suitable precautions shall be taken by the Contractor to protect the surface against damage during this interval including any coarse sand necessary to blot up excess bituminous material.

Slow setting emulsified asphalt may be diluted by the addition of water when directed by the QDPW representative and shall be applied a sufficient time in advance of the paver to ensure that all water has evaporated before any of the mixture is placed on the tacked surface.
The Contractor shall furnish vendor's certified test reports for each load, or equivalent, of bituminous material shipped to the project. The report shall be delivered to the. The furnishing of the vendor's certified test report for the bituminous material shall not be interpreted as a basis for final acceptance. All such test reports may be subject to verification by testing samples of material received at the project for use on the project.

**Measurement**

Pay Item-Per Gallon

Before the final estimate is allowed, the Contractor shall have filed receipted bills of the bituminous materials actually used in the construction. The quantity shall be measured by the gallon of emulsion (undiluted) used in the work. The Contractor shall not remove bituminous material from the tank truck or storage tank until the initial outage and temperature measurements have been obtained by the Department at the project site.

Payment for Bituminous Tack Coat shall be made at the contract unit price per gallon of undiluted emulsified asphalt. This payment shall be full compensation for all labor, tools, equipment, materials, sand, and all incidentals necessary to complete the item as specified.

**ITEM 464.5 HOT Poured RUBBERIZED ASPHALT Sealer**

The joint shall be coated with a hot poured rubberized asphalt sealant meeting the MassDOT requirements of M3.05.0. When using pavers in tandem, the use of the hot poured rubberized asphalt sealer may be omitted at the discretion of the QDPW representative, if the temperature of the mixture at the longitudinal joint does not fall below 200°F (95°C) prior to the placement of the adjacent mat. No re-heating of the joint shall be permitted. The hot poured rubberized asphalt shall be applied to the joints from a double jacketed heating kettle with a positive drive gear pump that is connected to a suitable applicator. The nozzle of the applicator shall be set to deliver sufficient sealant to effectively bond and seal the transverse and longitudinal paving joint between two adjacent lanes of hot mix asphalt.

**Measurement**

Pay Item-Per FT

Measurement shall be by the Linear Foot installed and in place. This item shall cover all work complete. Any other cost will be considered incidental and covered under this item.

**IV. ITEM 472. HOT MIX ASPHALT USED FOR PATCHING & HANDWORK**

Hot Mix Asphalt hand-laid in place and compacted on streets, sidewalks, drives, trenches or areas in the City including tack coat and/or pre-rolling that are not accessible with a paving machine. Mix type to be selected by owner. As directed by the owner.

Work under these items shall consist of furnishing Hot Mix Asphalt composed of a mineral aggregate, asphalt cement, mixed in a central mixing plant and placed on a prepared course in accordance with these specifications and conformance to the plans. Mix type to be selected by owner. As directed by the QDPW representative. Hot Mix Asphalt Used for Patching and any other area assigned by the QDPW representative will be conform to the specifications for Item paid for under Item 450, Hot Mix Asphalt. Hot Mix Asphalt used for the construction of temporary pedestrian ramps will be paid for under Item 472, Hot Mix Asphalt for Patching. Each course shall be constructed to the depth, typical section, or elevation required by the plans and shall be rolled, finished, and approved before the placement of the next course.

**Materials**

All materials shall conform to the specifications of Item 450 Hot Mix Asphalt for each respective mixture. All bituminous asphalt must be obtained from a plant approved by the QDPW.
Measurement

This item shall cover all work complete set to grade including hand placed tack coat as required by the owner. Any other cost will be considered incidental and covered under this item. The price bid shall include full compensation for, HMA, and for furnishing all materials, labor, tools, equipment, and incidentals needed to complete this work. Cutting of pavement or milling is not included.

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**ITEM 472.A: PERMANENT PATCH**

SQUARE YARD/PER INCH

Work under these items shall consist of excavating the existing "Temporary Patch" to specified depth, width and length of proposed "Permanent Patch", "Tack Coating" of surfaces, furnishing "HMA" in accordance with relative specifications to be used for final trench repairs. It shall include spreading of HMA and Compaction. Material shall conform to the requirements listed in the MassDOT standard specifications. This item shall include the excavation, delivery of material, machinery, tools and labor, installation, and compaction of HMA material constructed to the depth, typical section, or elevation required by the plans and shall be rolled, finished, and Sand Sealed at Joints. All excess excavated material shall become the property of the contractor and removed from the site by the contractor. It is estimated that the existing Temporary HMA patches do not exceed 4 ½" in thickness.

A. The existing pavement shall be saw-cut to a minimum of twelve (12) inches beyond the initial excavation limits to expose a twelve (12) inch width of undisturbed soil.

B. The temporary pavement, backfill and undisturbed soil shall be removed to the depth of the proposed pavement thickness and disposed offsite. Excavated temporary trench materials shall become property of the contractor and included in the price.

C. Any material required for fine grading shall be paid under a separate item. Material used for fine grading if need shall be ¾" MassDOT Dense Graded Base Item 402.1.

D. After excavation the contractor will fine grade the surface if necessary to establish a uniform surface within ½" of proposed paving depth in preparation for paving.

E. A tack coat shall be applied along all joints and in between all HMA surfaces.

F. The permanent pavement shall be (Road Classification and HMA material type to be used shall be defined by the CITY):

   a. Local Streets:
      i. 1.5 inches of 9.5mm or 12.5mm HMA material placed on 2.5 inches of 19.0mm HMA material course.

   b. Collector Streets:
      i. 2 inches of 9.5mm or 12.5mm HMA material placed on 4 inches of 19.0mm HMA material course (19.0mm material placed in two equal courses).

   c. Arterial Streets:
      i. 2.5 inches of 9.5mm or 12.5mm HMA material placed in two courses on 4.5-inches of 19.0mm HMA material placed in two equal courses.

G. Trench backfill material used shall be compacted to within 95% of the proctor value.
H. Permanent pavement restorations shall not be allowed to commence until at least one hundred twenty (120) days have passed since the installation of approved temporary hot-mixed asphalt pavement (unless otherwise directed by the CITY).

I. The limits of the repair shall be defined by the CITY.

J. Each course of hot-mixed asphalt (HMA) shall be compacted separately, meeting the requirement of 92 percent minimum compaction of standard laboratory maximum theoretical density for the specific material.

K. Mechanical compactors will be permitted for repairs less than 10 square yards. Repairs exceeding 10 square yards shall be rolled with an appropriately sized, power-driven, steel-wheeled roller to obtain specification density.

L. Hot-mixed asphalt materials shall be laid upon an approved clean, dry, compacted surface, spread and struck off to the established grade and elevation, giving regard to the loss in depth between loose and compacted mixtures. Immediately after the hot mix asphalt mixture has been spread, struck off, and surface irregularities adjusted, it shall be thoroughly and uniformly compacted.

M. All saw-cut vertical faces of existing pavement shall be neat, free of loose materials, and tack coated with an approved asphalt emulsion by applying the emulsion material in conformance with MassDOT Standard Specifications Section 460.62, to fully cover the surfaces prior to pavement installation.

N. A tack coat shall be applied to the sub-base paved surface, or previous HMA course surface.

O. Unless otherwise approved by the CITY, finish course paving shall be placed by machine method.

P. Joints shall be sand sealed by applying a combination of sand and tack along the final surface coat joints (longitudinal and vertical).

Measurement
Pay Item- Sq. Yd. / Inch.
This item shall cover all work complete labor, materials, delivery, and machinery. Measurement shall be by the square yard per inch of installed Permanent Trench thickness and shall cover both night work and day work. The final Permanent Trench thickness in inches shall be multiplied by the square yardage and multiplied by the bid unit price to establish payment. This item shall cover all work complete. Prices shall include all labor, materials and equipment necessary to perform the work. Work in existing pavement in areas of trenching for new conduit, in areas of new or reset curb, or trench limits for drainage/water work, sewer will be included in the unit price under the respective items and will not be paid for separately under this item. Any other cost will be considered incidental and covered under this item.

ITEM 482: SAWCUTTING LINEAR FOOT
This work shall consist of the saw-cutting of asphalt pavements, sidewalks and trenches where shown on the plans, and/or as required by the CITY. The saw shall be capable of wet cutting to neat lines established by the CITY. The equipment shall be approved by the CITY prior to commencing work. The pavement shall be saw-cut through its full depth at all joints between existing and proposed pavements, and at all utility trenches, to provide a uniform, smooth vertical surface. Existing pavements shall be saw-cut at the limits of work as shown on the plans and/or as required by the CITY. Saw-cut edges which become broken, ragged or undermined as a result of the Contractor's operations shall be re-cut prior to the placement of abutting proposed pavement at no additional cost to the CITY. Saw-cut surfaces in asphalt pavements shall be sprayed or painted with a uniform, thin coat of asphalt emulsion tack coat immediately before placement of hot mix asphalt against the cut surfaces.
Measurement
This item shall cover all work complete labor, materials, delivery, and machinery. Measurement shall be by the lineal foot and shall cover both night work and day work. This item shall cover all work complete. Sawing pavement will be paid for at the respective contract unit prices per foot, for which prices shall include all labor, materials and equipment necessary to perform the work. Saw-cuts made in existing pavement in areas of trenching for new conduit, in areas of new or reset curb, or trench limits for drainage/water work, sewer will be included in the unit price under the respective items and will not be paid for separately under this item. Asphalt emulsion tack coat will be paid for under separate Item. Any other cost will be considered incidental and covered under this item.

Pay Item- Ln. Ft.

V. Section 820: Night Work

ITEM 820: NIGHT WORK & LIGHTING (ADD)

HOUR

Do not start night work or carry on day work into night work without operating an adequate and approved lighting system. Night work is defined as work performed from 30 minutes before sunset to 30 minutes after sunrise. Operation of adequate lighting system consists of furnishing, installing, operating, maintaining, moving, and removing night time lighting to illuminate construction work areas for night work. Obtain the QDPW representative’s approval of the lighting at the beginning of the project and before starting the paving operation.

Provide an illuminated zone around all operating machinery. Provide an illuminated zone of at least 5 Foot-candles (55 lux) of lighting luminance in the immediate vicinity of pavers, rollers, grinding equipment, material transfer vehicles, etc., and at least 1 Foot-candle (10 lux) at 25 feet (7.6 m) from this equipment. Provide an illuminated zone of at least 5 Foot-candles (55 lux) of lighting luminance in the immediate vicinity of coring equipment and at least 1 Foot-candle (10 lux) at 10 feet (3m). Position the light sources so they don’t interfere with or impede traffic in any direction and do not cause glare for motorists or point onto adjacent properties.

Obtain the luminance level any time requested by the QDPW representative. Test the illumination levels on the site each time a change in lighting configuration is made. Replace non-functioning lamps immediately. Check the luminaries aiming daily. Clean the luminaries regularly. Correct any deficient lighting within one hour or terminate construction activities.

For night time paving operations the temporary illumination of the paving area shall be in accordance with the requirements of Section 850.35 Temporary Illumination. Temporary Illumination shall conform to the relevant provisions of Section 800, the Massachusetts Electrical Code and OSHA Safety Standards.

Measurement
This item shall cover all work complete including labor, materials, lighting, delivery and trucking. Measurement shall be by the Hours worked and shall cover night work for new Trench Paving, Mill/Grind and Inlay/Patch. Where the Item cost shall be added to the Per Ton cost of the mix utilized as an "Add". This item shall cover all work complete. Any other cost will be considered incidental and covered under this item.

Pay Item-Hour

52. QUALITY ASSURANCE

The Contractor assumes the responsibility of the quality for all materials and construction incorporated into the work and will control all the processes leading to the final result through this function.

The City of Quincy, or their authorized agent, will perform the Quality Acceptance function for this work. All material will be considered for acceptance through a sampling, testing and inspection program performed by the QDPW representative or their agent. Quality Acceptance activities include:
Proficiency Testing prior to production with Contractor
Inspection of HMA Production Plant and Testing Laboratory
Production Trials of HMA Products Intended For Use in Quincy
Inspection/Testing for Acceptance of Hot Mix Asphalt Production
Inspection/Testing for Acceptance of Hot Mix Asphalt Placement
HMA Quality Acceptance Daily Report of Activities

53. SPECIFICATIONS

A. PRELIMINARY MATERIAL ACCEPTANCE:
Prior to delivery of HMA materials to the job site, the Contractor shall submit Design Mix Formulas to the QDPW representative for materials certified under the Contractor’s quality control system as approved Mix Designs by the MassDOT.

B. COMPOSITION OF HMA MIXTURES

1. Hot Mix Asphalt
HMA plant mix may be composed of a homogeneous mixture of aggregate, filler if required, bitumen, and/or additives, combined to meet the composition limits by weight and other characteristics as specified. The several aggregate fractions shall be sized, uniformly graded and combined in such proportions that the resulting mixture meets the grading requirements of that meet the approved MassDOT specifications.

2. Job Mix Formula/Design Mix Formula (DMF/JMF)
Work shall not begin on any Quincy project nor shall any mixture be accepted until the Contractor has submitted to the City an approved Job Mix Formula/Design Mix Formula. The City will require HMA producers to qualify their facilities, in accordance with the requirements of this specification, for use on City projects annually or as needed. HMA producers will be responsible for obtaining an approved DMF/JMF from the City. Producers wishing to supply mixture to any Quincy project must have a current MassDOT approved DMF/JMF.

3. DMF/JMF Submittal
The Job Mix Formula/Design Mix Formula shall establish the percentage of each additional aggregate required, a single percentage of aggregate passing each required sieve size, a single percentage and the grade of asphalt binder to be added, a single temperature at which the mixture is to be discharged from the plant, and the number of seconds for dry mixing time and the number of seconds for wet mixing time. The Job Mix Formula/Design Mix Formula shall also specify a single source or uniform blend of particular sources for fine aggregate, a single source for each nominal size of coarse aggregate, and a single source of supply for mineral filler and for asphalt.

The DMF/JMF shall be submitted in writing by the Contractor to the CITY at least 30 days prior to the start of paving operations and shall include as a minimum:

1) Percent of each individual aggregate and passing each sieve size.
2) Percent of asphalt binder.
3) Performance grading test results and Material Certificate certifying the PG grade.
4) Number of gyrations for the estimated design ESAL loading for Superpave.
5) Mixing temperature.
6) Compaction temperature.
7) Temperature of mix when discharged from the mixer.
8) Plot of the combined gradation on the Federal Highway Administration (FHWA) 0.45 power gradation curve.
9) Densification curve for each asphalt content plotting density, \( \% \text{Gmm} \), versus the logarithm of the number of gyrations for Superpave design.
10) Fine and Coarse aggregate angularity (Percent fractured faces).
11) Percent flat and elongated particles.
12) Tensile Strength Ratio (TSR), ALL Superpave Courses.
13) Antistrip agent \( \text{type and quantity} \).
14) Sand equivalent value.
15) Fine aggregate angularity value.
16) Percentage of wear.
17) Sulfate soundness loss.
18) Combined aggregate specific gravity.
19) Dust to effective asphalt ratio.
20) Graphical plot of air voids, voids in mineral aggregate (VMA), voids filled with asphalt (VFA). Graphical plot of density at \( N_{\text{initial}} \), density at \( N_{\text{design}} \), and density at \( N_{\text{maximum}} \) versus asphalt content for Superpave design (50 gyration and 75 gyration design).
21) Gradation, asphalt content, specific gravity, and moisture content of the RAP.

The Contractor shall submit samples to the QDPW representative, upon request, for DMF/JMF verification testing.

The DMF/JMF for each mixture shall be in effect until modified in writing by the QDPW representative. Should a change in sources of materials be made, a new DMF/JMF must be approved by the CITY before the new material is used.

C. REQUIREMENTS FOR ALL PLANTS

a) Mixing plant shall be of sufficient capacity to adequately handle the proposed HMA construction. The QDPW representative shall have access at all times to all areas of the yard, laboratory, and plant, for checking adequacy of equipment, inspecting operations of the plant, verifying weights, proportions, material properties and checking the temperatures maintained in the preparation of the mixtures.

b) Plant scales: Scales for measuring materials into the mixtures shall be digital type and shall be of standard make and design and shall be calibrated.

54. HMA CONSTRUCTION

A. PRE-MILLING & PRE-PAVING CONFERENCE

Prior to the Grind and Inlay of HMA, a pre-work conference shall be held to discuss and approve work plan, schedule, source of HMA, Job Mix Formula/Design Mix Formula approvals, type and amount of equipment to be used, sequence of paving pattern, rate of HMA supply, all sampling, testing and reporting procedures to be used, traffic control, safety, and general continuity of the operation. QDPW representative's representatives,
Contractor’s representatives shall attend this meeting. All equipment used number of trucks to be used for hauling and delivery rate shall be approved on the project site prior to start of work.

B. WEATHER LIMITATIONS

The hot mix asphalt shall not be placed when weather conditions of fog or rain prevail or when the pavement surface or base shows signs of free moisture (film of water). When the surface temperature of the underlying course is less than 50°F the Contractor shall determine the time available for compaction. The time available for compaction shall be calculated based on the time, date, air temperature, average wind speed, sky conditions, latitude, mix type, PG grade, lift thickness, mix delivery temperature, existing surface type, existing moisture content of surface, existing state of moisture in surface, and surface temperature. The estimated time available for compaction can be calculated with computer programs, e.g., Pave Cool Tool 2.2.

This program is available at the following web location:

http://www.dot.state.ia.us/construction/hot_mix_asphalt.htm

The QDPW representative and the Contractor shall determine if there is an adequate amount of time available to compact the mixture. Options can be explored to extend the time available for compaction. If there is an adequate amount of time available to compact the mixture, the temperature requirements may be waived by the QDPW representative; however all other requirements including compaction shall be met. The Contractor assumes responsibility for constructing the pavement to meet compaction and specification requirements.

The QDPW representative will not permit work to continue when overtaken by sudden storms until the pavement surface shows no signs of free moisture. The material in transit at the time of shutdown will not be placed until the pavement surface shows no signs of free moisture, provided the mixture is within temperature limits as specified.

The construction of hot mix asphalt concrete pavements shall terminate on November 15 and shall not be resumed prior to April 1, except as determined and directed in writing by the QDPW representative.

C. PREPARATION OF THE UNDERLYING SURFACE.

Immediately before placing the hot mix asphalt, the underlying course shall be thoroughly cleaned of all dust and debris by a self-propelled sweeper. Areas inaccessible by power sweepers shall be broom swept until the pavement surface is clean. Extra care shall be required during fall leaf fall.

Do not begin paving work until deficient base material areas and utility trenches have been corrected and are ready to receive paving. Paving shall not be applied until the QDPW representative inspects and approves the finished base.

When an existing surface or new base upon which the bottom course is to be placed contains unsatisfactory irregularities, in the QDPW representative’s judgment, such irregularities may be eliminated by an adequate placing and compaction of HMA mixture so as to furnish a surface with true contour and grade before placing any specified course of mixture.

Check all frames, covers, grates, water valve boxes and other miscellaneous castings that are located in the proposed pavement areas to ensure that all have been correctly positioned and set to the proper slope and elevation. All covers and grates shall be set flush with the required finished surface. No depressions or mounds will be permitted in the pavement to accommodate inaccuracies in the setting of castings.

The Contractor shall furnish, set, and maintain all line and grade stakes necessary to guide the automated grade control equipment. Where required these control stakes shall be maintained by the Contractor and used throughout the operations, from the grading of the subbase material up to and including the final layers of the pavement.
Adequate artificial lighting shall be provided during night placements. Hauling over freshly placed material shall not be permitted until the material has been compacted, as specified, and allowed to cool to an internal temperature of 140°F minimum.

Proper precautions shall be taken to prevent damage by construction operations to edges adjacent to the hot mix asphalt. These edges may be, but are not limited to, gutters, catch basins, curbs, concrete structures, and hot mix asphalt concrete. If damage occurs, repairs shall be made to the satisfaction of the QDPW representative with no additional payment.

D. HAULING EQUIPMENT

Trucks used for hauling hot mix asphalt mixtures shall have tight, clean smooth metal beds which have previously been cleaned of all foreign material. To prevent the mixture from adhering to them, the beds shall be lightly coated with a minimum amount of paraffin oil, lime solution, soluble oils, or other approved material. When coating is applied, truck bodies shall be raised immediately prior to loading to remove any excess coating material in the truck bed. Containment of the excess anti-adhesive material may be required for environmental concerns depending on the type of anti-adhesive agent used. Each truck shall have a securely fastened, both front and rear, waterproof cover to protect the mixture at all times. When necessary, so that the mixture will be delivered to the site at the specified temperature within 25°F of the approved DMF/JMF, truck beds shall be insulated.

E. TACK COAT:

Contact surfaces of manholes, structures, vertical pavement edges, etc. shall be painted with a thin, uniform tack coat just before the material is placed against them.

Tack coat is required on all surfaces to be paved; this includes leveling, base, or intermediate layers of HMA, unless the underlying HMA layer was placed during the same day. Particular attention should be made during the application that the longitudinal joint areas be treated with no bare spots. Missing areas on the longitudinal joint area will require either re-application or localized hand work application as directed by the QDPW representative.

Tack coat shall be applied at a residual binder amount on the pavement between 0.03 to 0.05 gallons per square yard. Use the lower application amount between new lifts and the higher application rate on milled or Portland cement surfaces. This amounts to a very thin application that needs to be carefully applied. Massachusetts uses RS-1 and CRS-1 type asphalt emulsions for tack coating. These can be applied, as an emulsion, between approximately 0.05 to 0.08 gallons per square yard. Tack coat shall be supplied as part of the HMA operation. Allow tack coat to dry from a brown color to a black color prior to paving.

F. PAVERS

Pavers shall be self-contained, heated, power propelled units with an activated screed or strike off assembly, and shall be capable of spreading and finishing courses of hot mix asphalt material which will meet the specified thickness, smoothness, and grade. Pavers used for shoulders and similar construction shall be capable of spreading and finishing courses of hot mix asphalt material in widths shown on the plans.

The paver shall have a receiving hopper of sufficient capacity to permit a uniform spreading operation. The hopper shall be equipped with a distribution system to place the mixture uniformly in front of the screed. The screed or strike off assembly shall effectively produce a finished surface of the required evenness and texture without tearing, shoving, segregating, or gouging the mixture.

The paver shall be capable of operating at forward speeds consistent with satisfactory laying of the mixture.
The paver shall be equipped with hoppers and distributing screws of the reversing type to place the mixer evenly in front of adjustable screeds. They shall be equipped with a quick and efficient steering device and shall have reverse as well as forward traveling speeds.

G. JOINTS
The formation of all joints shall be made in such a manner as to ensure a continuous bond between the courses and obtain the required density. All joints shall have the same texture as other sections of the course and meet the requirements for smoothness and grade. When abutting a previously placed lane, the longitudinal joint should be rolled first followed by the regular rolling procedure. The contractor will install a tack coat or hot rubber along the joint when directed by the QDPW representative.

1. Transverse Joints
The roller shall not pass over the unprotected end of the freshly laid mixture except when necessary to form a transverse joint. When necessary to form a transverse joint, it shall be made by means of placing a bulkhead or by tapering the course, in which case the edge shall be cut back to its full depth and width on a straight line to expose a vertical face. In both methods, all contact surfaces shall be given a coat of bituminous material before placing any fresh mixture against the joint.

2. Longitudinal Joints
All longitudinal joints shall be constructed with the first paver pass in a neat straight line. Deviation from trueness will negate the ability to form a properly compacted longitudinal joint.

3. Longitudinal and transverse joints Density
Joints shall have an in-place density between 90.0% and 98.0% of maximum theoretical, when measured by the average of three, six (6) inch cores

H. ROLLERS & COMPACTION
All pavements shall be machine placed and rolled with a tandem roller having an effective force of not less than five (5) tons. An additional finish roller of less weight will be utilized during the installation of the Top Course (wearing surface) to remove all roller marks produced by the intermediate roller and the break down roller.

Rollers of the vibratory, steel wheel, oscillatory, and pneumatic-tired type may be used. They shall be in good condition, capable of reversing direction without backlash, and operating at slow speeds to avoid displacement of the hot mix asphalt. The number, type, and weight of rollers shall be sufficient to compact the mixture to the required density while it is still in a workable condition.

The use of equipment which causes excessive crushing of the aggregate or that which does not produce a smooth, dense, and uniform HMA inlay/patch will not be permitted.

The Contractor shall exercise great caution when using vibratory rollers so as not to cause damage to buried infrastructure or adjacent infrastructure. Damage to buried or adjacent infrastructure will be the responsibility of the Contractor.

I. PAVEMENT COMPACTION & TESTING
The Owner may provide at their expense a Pavement Inspector that will be responsible for testing compaction, temperature, thickness and overall placement techniques.

Roadway will be compacted to 92-97% of the Maximum Theoretical Density. Prior to paving the Contractor will provide the Pavement Installation Inspector with the Maximum Theoretical Density by the production facility, the pavement surfaced will be tested using a density gauge (nuclear gauge). The Contractor will hold harmless the Owner or its representative with respect to reported test results.
J. TRANSPORTING, PLACING AND FINISHING

HMA deliveries shall be scheduled so that placing and compacting of mixture is uniform with minimum stopping and starting of the paver.

The elevation of the screed above the surface of the first inlay/patch should be equal to the amount of roll-down expected during compaction of the new inlay/patch. The overlapped material shall be bumped by the lutes, if necessary, to optimize the density along the longitudinal joint. Under no circumstances should the overlapped material be broadcast across the inlay/patch. Excess material should be removed by hand. Transverse joints in adjacent lanes shall be offset a minimum of 10 feet.

On areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impractical, the mixture may be spread and luted by hand tools. When hand spreading is permitted, the mixture shall be distributed into place by means of hot shovels and spread with lutes in a loose layer of uniform density and correct depth. The use of rakes to spread the hot mix asphalt shall not be permitted. Loads shall not be dumped any faster than they can be properly handled by the shoveler and the shoveler shall not distribute the dumped load any faster than it can properly be handled by the luters. The luting shall be carefully and skillfully done to avoid segregation and so that, after the first passage of the roller over the luted mixture, no back patching will be necessary. Compaction must immediately follow hand spreading such that specification density is achieved while the mixture temperature is above the manufacturers recommended compaction temperature for the performance graded binder.

The mixtures shall be placed and compacted only at such times as to permit the proper inspection and checking by the QDPW representative.

The mixtures shall only be placed in the work when they can be efficiently and satisfactorily placed, compacted, smoothed, and made uniform in accordance with these specifications. Unless otherwise permitted by the QDPW representative for special particular conditions, only machine methods of placing shall be used.

Immediately after any course is screeded and before roller compaction is started, the surface shall be checked, any irregularities adjusted, any accumulation from the screed removed by rake or lute, and all fat spots in any course removed and replaced with satisfactory materials. Irregularities in alignment and grade along outside edges shall be corrected by the addition or removal of mixture before the edges are rolled. Indiscriminate casting of mix on the new screeded surface, where irregularities are not evident, shall not be permitted.

All hot mix shall be placed and compacted in such a manner as to ensure a continuous bond between the tacked hot mix pavement surfaces and obtain the required density.

K. SURFACE SMOOTHNESS

The finished surfaces of the pavement shall be uniform in appearance, free from irregularities in contour and texture and shall present a smooth-riding surface. Smoothness evaluation applies to all hot mix asphalt roadways receiving 1.5” or more in plan (compacted) thickness of HMA pavement.

Tests for conformity with the specified crown and grade shall be made by the Contractor immediately after initial compaction. Any variation shall be corrected by the removal or addition of materials and by continuous rolling.

The finished surface of the pavement, when measured with a 10-foot straightedge, shall not vary more than 1/4 inch for the surface course and 3/8 inch for the intermediate course measured perpendicular and parallel to the centerline. If, in the opinion of the QDPW representative, the surface visually appears wavy, but meets the surface tolerance test with the 10-foot straightedge, the QDPW representative reserves the right to additionally test.
After the completion of final rolling, the smoothness of the course shall again be tested; humps or depressions exceeding the specified tolerances shall be immediately corrected by removing the defective work and replacing with new material, as directed by the QDPW representative. This shall be done at the Contractor's expense.

Skin patching will not be permitted.

When profile corrections are required, the Contractor shall use one or more of the following corrective methods:

1. Removing and replacing the entire pavement thickness
2. Diamond grinding or micro milling
3. Overlaying (not patching) with the specified surface course
4. Removing the surface by milling and applying a lift(s) of the specified course(s)
5. Use of other methods that will provide the desired results

The corrective method(s) chosen by the Contractor and approved by the QDPW representative, shall be performed at the Contractor's expense, including all necessary equipment and traffic control.

L. UNIFORMITY
The HMA inlay/patch shall be smooth, dense, and uniform. Uniformity is generally affected by Thermal and/or Aggregate segregation.

If segregation is evident and discernable by either the Contractor or the QDPW representative, the Contractor shall immediately cease production and take steps to correct and eliminate the cause(s) of the segregation to the satisfaction of the QDPW representative.

The Contractor shall review all potential causes of segregation as it relates to its operation, including but not limited to HMA Plant issues, loading and transportation issues, placement issues, thermal segregation, and hand work. The Contractor shall employ additional investigation methods and make the necessary changes in their operation such that segregation is eliminated and inlay/patch uniformity is acceptable.

M. THICKNESS
The thickness requirements contained herein shall apply only when each pavement layer is specified to be a uniform compacted thickness of 1 inch or greater. Thickness shall be evaluated for acceptance by the QDPW representative to the requirements shown on the plans. Measurements of thickness may be checked periodically by the Contractor in following their QC system for field operations. Measurements of thickness for acceptance shall be made by the QDPW representative using (6) six-inch ((4) four-inch cores may be used if only thickness testing is being undertaken) minimum diameter pavement cores removed also for subsequent density measurement.

The finished surfaces of each HMA pavement course shall not vary from that specified or cross sections shown on the contract drawings by more than one-quarter (1/4) of an inch. The Contractor shall correct pavement areas varying in excess of this amount by removing and replacing the defective work or as ordered by the QDPW representative. Skin patching will not be permitted.

N. OPENING TO TRAFFIC
No vehicular traffic or loads shall be permitted on the newly completed pavement until adequate stability has been attained and the material has cooled sufficiently to an internal temperature of 140°F or less. If the climatic or other conditions warrant, or if the PGAB manufacturer recommends, the period of time before opening to traffic may be extended at the discretion of the QDPW representative.

O. REJECTION OF INFERIOR HMA
The QDPW representative may at any time, notwithstanding previous plant acceptance, reject and require the Contractor to dispose of any batch of hot mix asphalt which is rendered unfit for use due to contamination,
segregation, incomplete coating of aggregate, or improper mix temperature. Such rejection may be based on only visual inspection or temperature measurements. Similarly, the QDPW representative may at any time, notwithstanding field acceptance for inlay/patch density, reject and require the Contractor to correct any HMA pavement that was placed with unacceptable inlay/patch uniformity or paving joints due to low density, segregation, improper elevation, or tearing. In the event of such rejection, the Contractor and QDPW representative may take random split samples of the area(s) in question in the presence of the QDPW representative, and if it can demonstrate in the laboratory, in the presence of the QDPW representative, that such material/pavement was erroneously rejected, payment will be made for the material at the contract unit price. Numbers used in all calculations shall be carried to the correct significant figures and rounded according to AASHTO R-11 Rounding Method.

55. **PAYMENT MEASUREMENT**

   **A. METHOD OF MEASUREMENT**

The quantity of hot mix asphalt to be paid for shall be the measured by the ton complete in place. The quantity of each truck load shall be obtained from printed tickets indicating the recorded batch weights or certified truck scale weights that have been properly countersigned by an authorized representative of the QDPW representative at the time of delivery. HMA quantities shall be verified by the QDPW representative using HMA yield calculations which will include the in-place bulk specific gravity and actual area and nominal depth for the mixture placed.

   **B. BASIS OF PAYMENT**

Payment shall be made at the contract unit prices per ton complete in place with any applicable adjustments. This payment shall be full compensation for furnishing and placing all quality hot mix asphalt materials, including tack coat where specified, cutting of keyways or milling/stripping of pavement to produce neat joints, mechanical sweeping of streets and for all labor, tools, equipment, materials, and all incidentals necessary to complete the work.

56. **BID SUMMARY**

Unit prices in this contract will be extended by multiplying each by the appropriate unit of measure listed. Said extensions will then be totaled. The contract will be awarded on a "Grant Total" sum bases. In the event of mathematical errors on extensions or prices, unit prices will prevail.

Bid proposal must be legible and submitted in the original form bearing an original signature. COPIES AND FACSIMILES ARE NOT ACCEPTABLE.

57. **QUESTIONS MAY BE DIRECTED TO**

   City of Quincy  
   Kathryn R. Logan  
   Purchasing Agent, City of Quincy, Purchasing Dept.  
   1305 Hancock Street  
   Quincy, MA 02169  
   EMAIL: purchasing@quincyma.gov

58. **STANDARD CONTRACT ARTICLES & CONTRACT SIGNATURE AND DATES**

The terms and specifications of this contract have been read and fully understood by the person whose signature appears below. The parties agree to comply with the terms and conditions set forth on the preceding pages along with any addenda that may be issued. The undersigned certifies that the person signing this bid on behalf of the bidder has been authorized by the company to submit bids on its behalf.
The Bidder understands that all bids are subject to the applicable laws of the Commonwealth of Massachusetts and Municipal Ordinances including General Laws. The Bidder acknowledges that no Bid may be withdrawn for 60 days, Saturday, Sundays, and legal holidays excluded, after opening of bids per MGL C. 149, 44A(3). By endorsing this contact the bidder agrees to adhere to the general conditions, plans and specifications of this contract. (Vendor should provide 1 original, 1 copy and a thumb drive with your submission)

a. STANDARD CONTRACT ARTICLES

Merger and Integration Clause
This Agreement and the exhibits attached hereto contain the entire agreement of the parties with respect to the subject matter of this Agreement, and supersedes all prior negotiations, agreements and understandings with respect thereto. This Agreement may only be amended by a written document duly executed by all parties.

Choice of Law and Forum Clause
This agreement shall be interpreted under the laws of the Massachusetts. Any litigation under this agreement shall be resolved in the trial courts of Massachusetts.

Time of Performance
Time is of the essence for the completion of the work described in this contract. It is anticipated by the parties that all work described herein will be completed within the time period specified and enumerated in subsequent sections of this contract based on the date of notification of scheduled work and that any delay in the completion of the work described herein shall constitute a material breach of this contract. The parties agree that time is of the essence in the completion of the work described in this contract and that all parties shall act to complete the work described within a reasonable time.

Savings (Severability) Clause
If any provision of this Contract is held unenforceable, then such provision will be modified to reflect the parties’ intention. All remaining provisions of this Contract shall remain in full force and effect.

Non-Waiver
The failure by one party to require performance of any provision shall not affect that party's right to require performance at any time thereafter, nor shall a waiver of any breach or default of this Contract constitute a waiver of any subsequent breach or default or a waiver of the provision itself.

Contractor’s Warranty of Title
The Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

Out of State Bidder
The undersigned certifies under the penalties of perjury they shall not enter into a contract with a foreign corporation which has not received a certificate from the state secretary stating that such a corporation has complied with sections three and five of Chapter 181 of Massachusetts General Law and the date with which compliance was obtained and shall report to the state secretary and the department of corporations and taxation any foreign corporation performing work under contract, and residing or having a principal place of business outside the Commonwealth.
Disbarment
The undersigned further certifies under penalty of perjury that the said undersigned is not presently debarred from doing public construction work in the Commonwealth of Massachusetts under the provisions of Section Twenty-Nine F of Chapter Twenty-Nine, or any other applicable Debarment provisions of any other Chapter of the General Laws or any rule or regulations promulgated there under.

Signature of Bidder                      Date

(Printed Name and Title of Signatory)

(Business Address - Street, City, State, Zip)
## City of Quincy

### 59. BID SHEET

**CONTRACT NO. 2018-TRENCH1 (April 2018-December 2018)**

Instructions: Multiply the Estimated Quantity by the Unit Bid Price for each bid item.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item Number</td>
<td>Item</td>
<td>Unit</td>
<td>Estimated Quantity</td>
<td>Item Unit Bid Price</td>
<td>Item Total (D x F)</td>
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<tr>
<td>ITEM 120</td>
<td>2” TO 3” HOT MIX ASPHALT EXCAVATION BY COLD PLANER</td>
<td>Square Yard</td>
<td>400</td>
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<tr>
<td>ITEM 120A</td>
<td>MILLING &amp; INLAY LESS THAN 5000 SQ/YDS PER DAY (ADD)</td>
<td>Square Yard</td>
<td>400</td>
<td></td>
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<tr>
<td>ITEM 120B</td>
<td>MILLING &amp; INLAY LESS THAN 2500 SQ/YDS PER DAY (ADD)</td>
<td>Square Yard</td>
<td>400</td>
<td></td>
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<tr>
<td>ITEM 120C</td>
<td>MILLING &amp; INLAY LESS THAN 1250 SQ/YDS PER DAY (ADD)</td>
<td>Square Yard</td>
<td>400</td>
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<td>ITEM 120D</td>
<td>MILLING &amp; INLAY LESS THAN 700 SQ/YDS PER DAY (ADD)</td>
<td>Square Yard</td>
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<td>ITEM 120E</td>
<td>MINIMUM COLD PLANER/MILLING OPERATION MOBILIZATION &amp; DEMOBILIZATION</td>
<td>Lump Sum</td>
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<td>ITEM 170</td>
<td>FINE GRADING, COMPACTING AND FINISHING (TRENCH)</td>
<td>Square Yard</td>
<td>2,500</td>
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<tr>
<td>ITEM 220</td>
<td>DRAINAGE STRUCTURE ADJUST 1” TO 12”</td>
<td>Each</td>
<td>10</td>
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<tr>
<td>ITEM 220.A</td>
<td>DRAINAGE STRUCTURE REBUILD OVER 12”</td>
<td>Per Foot</td>
<td>5</td>
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<td>ITEM 358</td>
<td>GATE BOX ADJUSTED</td>
<td>Each</td>
<td>10</td>
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<tr>
<td>ITEM 381.3</td>
<td>SERVICE BOX ADJUSTED</td>
<td>Each</td>
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<td></td>
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<tr>
<td>ITEM 402.1</td>
<td>¾” DENSE GRADED BASE (Crushed Stone) FOR SUB-BASE</td>
<td>Ton</td>
<td>750</td>
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<tr>
<td>ITEM 455.225</td>
<td>SUPERPAVE SURFACE COURSE(S) – (SSC – 9.5) - (SSC - 12.5)</td>
<td>Ton</td>
<td>200</td>
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<td>ITEM 455.325</td>
<td>SUPERPAVE INTERMEDIATE COURSE(S) (SIC-19.0MM)</td>
<td>Ton</td>
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<td>ITEM 463.5</td>
<td>BITUMINOUS TACK COAT</td>
<td>Gallon</td>
<td>1,000</td>
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<tr>
<td>ITEM 464.5</td>
<td>HOT POURRED RUBBERIZED ASPHALT SEALER</td>
<td>Linear</td>
<td>15,000</td>
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<tr>
<td>ITEM 472</td>
<td>HOT MIX ASPHALT USED FOR PATCHING &amp; HANDWORK</td>
<td>Ton</td>
<td>375</td>
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<td>ITEM 472.A</td>
<td>PERMANENT PATCH</td>
<td>Square Yard/Per Inch</td>
<td>5,000</td>
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<td>ITEM 482</td>
<td>SAWCUTTING</td>
<td>Linear</td>
<td>15,000</td>
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<tr>
<td>ITEM 820</td>
<td>NIGHT WORK &amp; LIGHTING (ADD)</td>
<td>Hour</td>
<td>20</td>
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</tbody>
</table>
GRAND TOTAL (Sum of all the item Totals column “F”)  

Dollars and ___________ cents  

Written Grand Total  

($__________________)  

Numerical Grand Total  

Signature of Bidder  

Date  

(Printed Name and Title of Signatory)  

(Business Name, Address - Street, City, State, Zip)  

1. OSHA 10 Certification & Labor Harmony Certification  

Pursuant to M.G.L. c.30, §39S, any person submitting a bid for, or signing a contract to work on, a public building or public works project estimated to cost more than $10,000, must certify under the pains and penalties of perjury that he or she is able to furnish labor in harmony with all other elements of labor employed in the work and that all employees employed on the worksite, or in work subject to the bid, have successfully completed at least ten hours of OSHA approved training.  

The undersigned hereby certifies that it 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 it will comply fully with all laws and regulations applicable to awards made subject to section forty-four A.  

Signature of Bidder  

Date  

(Printed Name and Title of Signatory)  

(Business Name & Address - Street, City, State, Zip)  

2. Non-Collusion  

The undersigned further certifies under the penalties of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this paragraph the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity. The undersigned further certifies under penalty of perjury that the said undersigned is not presently debarred from public contracting or subcontracting in the Commonwealth under the provisions of M.G.L. Chapter 29, Section 29F or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated hereunder.  

Signature of Bidder  

Date  

(Printed Name and Title of Signatory)  

(Business Name & Address - Street, City, State, Zip)
3. **Certificate of Tax Compliance**

Pursuant to Chapter 62C of the Massachusetts General Laws, Section 49A (b)

The undersigned further certifies under the pains and penalties of perjury that said contractor has complied with all laws of the Commonwealth of Massachusetts relating to taxes, reporting of employees and contractors, and withholding and remitting child support.

________________________________________________________________________________

Signature of Bidder

Date

________________________________________________________________________________

(Printed Name and Title of Signatory)

________________________________________________________________________________

(Business Name & Address - Street, City, State, Zip)

60. **EVIDENCE OF QUALIFICATIONS**

The undersigned offers the following information as evidence of his/her qualifications to perform the work as bid upon according to all requirements of the plans and specifications:

1. Have been in business under present name for _______________ years.

2. Ever failed to complete any work awarded? If so, explain using additional sheets as necessary.

______________________________________________________________________________

______________________________________________________________________________

3. List recent contracts, preferably with municipalities, with names of towns/cities/owners on which you served as Contractor or provided service or materials of the same nature as requesting: (add supplementary page if necessary).

<table>
<thead>
<tr>
<th>#</th>
<th>Completion Date</th>
<th>Project Name (City/Town/Owner)</th>
<th>Job Type</th>
<th>Contract Amount</th>
<th>Reference Name</th>
<th>Telephone No.</th>
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Upon written request from the Owner, the bidder may be required to produce other information to support its qualifications to do the work and to make sure it is financially qualified to carry out the contract.
61. CERTIFICATE OF AUTHORITY

At a duly authorized meeting of the Board of Directors of the _____________________________
(Name of Corporation)
held on _____________________________ at which all the Directors were present or waived notice, it was
(Date)
voted that _____________________________________________________________________________
(Officer/Title)
of this company be and he hereby is authorized to execute contracts and bonds in the name and behalf of said
company, and affix its Corporate Seal thereto, and such execution of any contract of obligation in this
company’s name on its behalf of such _____________________________________________________________________________under seal of the
company, shall be valid and binding upon this company. (Officer)

A TRUE COPY,
ATTEST: ______________________________________
(Signature/Title)
Place of Business: ______________________________________
____________________________________

I hereby certify that I am the ___________________________ of the________________________
(Title) (Name of Corporation)
that __________________________________ is duly elected ____________________________
(Officer, Name) (Title)
of said company, and the above vote has not been amended or rescinded and remains in full force and effect as
of the date of this contract.

____________________________________
Full Legal Name of Business
____________________________________
Telephone Number

____________________________________
State of Incorporation*
____________________________________
Principal Place of Business

____________________________________
Qualified in Massachusetts
____________________________________
Place of Business in Massachusetts

____________________________________
Signature

*If state of incorporation is Massachusetts, insert MASSACHUSETTS on State of Incorporation line and
disregard other parts of the form.

Subscribed and sworn to before me (Corporate Seal)

This ___day of ________________, 20___
____________________________________ (Notary Seal)

Notary Public
My Commission Expires________________________

Page 46 of 48
62. ADDENDA ACKNOWLEDGEMENT

Bidder acknowledges receipt of the following addenda (if issued-if you are not sure if addenda has been issued contact the Owner/Agency):

No. _______________ Dated: ____________________

No. _______________ Dated: ____________________

No. _______________ Dated: ____________________

No. _______________ Dated: ____________________

No. _______________ Dated: ____________________
63. **STANDARD TESTING REQUIREMENTS DESIGNATIONS**

- AASHTO T104  Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
- AASHTO T11  Materials Finer than 75-um (No. 200) Sieve in Mineral Aggregates by Washing
- AASHTO T96  Resistance to Degradation of Small Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
- AASHTO T27  Sieve Analysis of Fine and Coarse Aggregates
- AASHTO T127  Sampling and the Amount of Testing of Hydraulic Cement
- AASHTO T255  Total Moisture Content of Aggregate by Drying
- AASHTO T2  Sampling of Aggregates
- AASHTO M17  Mineral Filler for Bituminous Paving Mixtures
- AASHTO T170  Recovery of Asphalt from Solution by Abson Method
- AASHTO T275  Bulk Specific Gravity of Compacted Bituminous Mixtures Using Paraffin-Coated Specimens
- AASHTO T110  Moisture or Volatile Distillates in Hot Mix Asphalt
- AASHTO T209  Theoretical Maximum Specific Gravity and Density of Hot Mix Asphalt (HMA)
- AASHTO T164  Quantitative Extraction of Asphalt Binder from Hot Mix Asphalt
- AASHTO T176  Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test
- AASHTO T195  Determining Degree of Particle Coating of Asphalt Mixtures
- AASHTO T166  Bulk Specific Gravity of Compacted Hot Mix Asphalt Mixtures Using Saturated Surface-Dry Specimens
- AASHTO T269  Percent Air Voids in Compacted Dense and Open Asphalt Mixtures
- ASTM D 2950  Density of Bituminous Concrete in Place by Nuclear Method
- ASTM D 3665  Random Sampling of Paving Materials
- ASTM D 3666  Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials
- AASHTO T287  Asphalt Cement Content of Asphalt Concrete Mixtures by the Nuclear Method
- AASHTO T89  Determining the Liquid Limit of Soils
- AASHTO T90  Determining the Plastic Limit and Plasticity Index of Soils
- ASTM D 4791  Flat or Elongated Particles in Coarse Aggregate
- ASTM E 178  Practice for Dealing with Outlying Observations
- ASTM D5821  Determining the Percentage of Fractured Particles in Coarse Aggregate
- AASHTO T304  Uncompacted Void Content of Fine Aggregate
- AASHTO T 30  Mechanical Analysis of Extracted Aggregate
- AASHTO T202  Viscosity of Asphalts by Vacuum Capillary Viscometer
- AASHTO T240  Effect of Heat and Air on a Moving Film of Asphalt (Rolling Thin Film Oven Test)
- AASHTO T283  Resistance of Compacted Hot Mix Asphalt (HMA) to Moisture Induced Damage
- AASHTO T308  Determining the Asphalt Binder Content of Hot Mix Asphalt (HMA) by the Ignition Method
- The Asphalt Institute's Mix Design Methods for Asphalt Concrete Manual No. 2 (MS-2).
ADDITIONAL REQUIREMENTS

- AASHTO M320 Standard Specification for Performance Graded Asphalt Binder
- AASHTO M323 Standard Specification for Superpave Volumetric Mix Design
- AASHTO R30 Standard Practice for Mixture Conditioning of Hot Mix Asphalt (HMA)
- AASHTO R29 Grading or Verifying the Performance Grade of an Asphalt Binder
- AASHTO R26 Standard Practice for Certifying Suppliers of Performance Graded Asphalt Binders
- AASHTO R35 Standard Practice for Superpave Volumetric Design of Hot Mix Asphalt (HMA)
- AASHTO T312 Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of the SHRP Gyratory Compactor
- AASHTO T315 Determining the Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer (DSR)
- AASHTO T316 Viscosity Determinations of Unfilled Asphalts Using the Brookfield Thermosel Apparatus
- AASHTO M140 Emulsified Asphalt
- AASHTO M208 Cationic Emulsified Asphalt
- AASHTO TP79 Determining the Dynamic Modulus and Flow Number for Hot Mix Asphalt (HMA) Using the Asphalt Mixture Performance Tester (AMPT)

(Vendor should provide 1 original, 1 copy and if possible a thumb drive with your submission)
ATTACHMENT ONE

STANDARD GENERAL CONDITIONS
AND
SUPPLEMENTAL DOCUMENTS

**CAN BE FOUND IN A SEPARATE FILE
ON OUR WEBSITE FOR REFERENCE PURPOSES**
ATTACHMENT TWO

PREVAILING WAGE RATES

**CAN BE FOUND IN A SEPARATE FILE ON OUR WEBSITE FOR REFERENCE PURPOSES**