



TOWN OF  
**NORTH KINGSTOWN, RHODE ISLAND**

DEPARTMENT OF PUBLIC WORKS  
2050 DAVISVILLE ROAD  
NORTH KINGSTOWN, R.I. 02852  
PHONE: (401) 294-3331  
FAX: (401) 267-9036

**REQUEST FOR BIDS**  
**MISCELLANEOUS ROAD AND CONSTRUCTION MATERIALS**  
**ANNUAL SUPPLY**

Sealed proposals for the above will be accepted in the Administrative Office of the Public Works Department, 2050 Davisville Road, North Kingstown, RI 02852, until **10:00 A.M. on MARCH 20, 2017**, and will then be publicly opened and read aloud.

**NO BIDS WILL BE ACCEPTED AFTER THE 10:00 A.M. DEADLINE.**

The bid will be evaluated as to R.I.G.L. 45-55-5. (2) "Competitive Sealed Bidding" and the award shall be made on the basis of the lowest evaluated or responsive bid price.

The Town of North Kingstown reserves the right to reject any or all proposals or parts thereof; to waive any formality in same, or accept any proposal deemed to be in the best interest of the Town.

The Town of North Kingstown will provide interpreters for the hearing impaired at any pre-bid or bid opening, provided a request is received three (3) days prior to said meeting by calling 294-3331, ext. 601.

Kim Jones  
PW Programs Coordinator

## SELECTION CRITERIA

The bid will be evaluated as to R.I.G.L. 45-55-5. (2) "Competitive Sealed Bidding" and the award shall be made on the basis of the lowest evaluated or responsive bid price.

The following factors will be considered in determining the lowest evaluated or responsive bid price:

Unit bid Price;

Distance of the plant when picking up materials;

Overall low of items #13, #14 and #18 as determined by the Public Works Director;

Past performance by vendors offering;

Delivery date;

Past performance by brand name bid;

Early Payment Discount.

TOWN OF NORTH KINGSTOWN, RHODE ISLAND

INFORMATION FOR BIDDERS

ARTICLE 1. RECEIPT AND OPENING OF BIDS

Sealed bids must be submitted in SEALED ENVELOPES, addressed to the Administrative Office of the Department of Public Works, 2050 Davisville Road, North Kingstown, Rhode Island 02852, and clearly marked with the name of the item bid, and the date and time of opening. Bids will be received by the Director of Public Works up to the specified time as noted on the Invitation To bid, and publicly opened and read aloud at the specified time.

Proposals submitted for a specified item must not be combined under the same cover with any other bid item.

It is the bidder's responsibility to see that his bid is delivered within the time and at the place prescribed. Proposals received prior to the time of opening will be securely kept unopened. No responsibility will attach to any officer or person for the premature opening of a proposal not properly addressed and identified.

Any bid received after the time and date specified shall not be considered, by messenger or by mail, even if it is determined by the Town that such non-arrival before the time set for opening was due solely to delay in the mails for which the bidder is not responsible.

Conditional or qualified bids will not be accepted.

ARTICLE 2. PREPARATION OF BID

Each bid must be submitted on the prescribed form. All blank spaces for bid prices must be filled in, in ink or typewritten, both in words and figures. Erasures or other changes must be explained or noted over the signature of the bidder.

Each bid must be submitted in sealed envelopes, clearly labeled, so as to guard against opening prior to the time set therefore.

The Town may consider any bid not prepared and submitted in accordance with the provisions hereof and reserves the right to reject any or all proposals in whole or in part, toward any item, group of items, or total bid; to waive any technical defect or formality in same, or to accept any proposal deemed to be in the best interest of the Town.

In the event more than one item is requested and/or listed on the Proposal Form, bidders may bid on any or all items. The Town reserves the right to make award on an item for item basis or aggregately, whichever may be in the best interest of the Town.

ARTICLE 3. TELEGRAPHIC MODIFICATION

Telephonic, telegraphic or oral bids, amendments or withdrawals will not be accepted.

ARTICLE 4. WITHDRAWAL OF BIDS

Bids may be withdrawn personally or by written request at any time prior to the time specified for the opening. Bids may be modified in the same manner. Negligence on the part of the bidder in preparing the bid confers no right of withdrawal or modification of his bid after such bid has been opened.

ARTICLE 5. QUALIFICATIONS OF THE BIDDER

The Town reserves the right to request each bidder to present evidence that he is normally engaged in purveying the type of product or equipment bid on. No bid shall be considered from bidders who are unable to show that they are normally engaged in purveying the type of product or equipment specified in the bid proposal.

To receive full consideration, the bidder must submit literature and necessary details, when applicable, on the material or service he proposes to furnish in order that the Town may have full information available when analyzing the proposals.

ARTICLE 6. OBLIGATIONS OF THE BIDDER

At the time of opening of bids, each bidder will be presumed to have inspected the Specifications and Contract Documents (including all Addenda) which has been sent to the address given by such bidder. The failure or omission of any bidder to receive or examine any form, instrument, or document shall in no way relieve any bidder from any obligation in respect to his bid.

Any exceptions or deviations from the provisions contained in this Specification must be explained in detail and attached to proposal. If such deviations do not depart from the intent of this notice and are in the best interest of the Town, the proposal will receive careful consideration.

ARTICLE 7. "OR EQUAL" BIDDING

The Town intends to permit liberal scope in bidding and specifically does not intend to limit bidding to any one make or model. Whenever a material, article or piece of equipment is identified by reference to manufacturers' or vendors' names, trade names, catalogue numbers, etc., it is intended merely to establish a standard; and any proposed material, article, or equipment of other manufacturers and vendors which will perform adequately the duties imposed by the general design will be considered equally acceptable provided it is in the opinion of the Town to be of equal substance and function.

ARTICLE 8. PRICES

Bidders shall state the proposed price in the manner as designated in the Bid Proposal Form. In the event that there is a discrepancy between unit prices and the extended totals, the unit prices shall govern. In the event that there is a discrepancy between the price written in words and written in figures, the prices written in words shall govern.

In the event a column headed "Vendor's Offering" is provided in the bid proposal, enter your offering, compliance or non-compliance in each space. DO NOT enter dollar amounts.

The prices in this bid shall be irrevocable for ninety (90) days, or until the bid is awarded by the Town Council. After award by the Town Council, said prices shall then remain firm for the duration of the Contract.

ARTICLE 9. TAX EXEMPTIONS

The Town is exempt from payment of the Rhode Island Sales Tax under the 1956 General Laws of the State of Rhode Island, 44-18-30 Para. I, as amended. The Town is exempt from payment of Federal Excise Taxes. The prices bid must be exclusive of taxes and will be so construed. Exemption certificates will be completed as required by the successful bidder.

ARTICLE 10. DELIVERY

Delivery shall be F.O.B. North Kingstown, Rhode Island or as specified in the Special Provisions section.

ARTICLE 11. LAWS, ORDINANCES AND CODES

All applicable Federal and State Laws, Ordinances and Codes of the Town of North Kingstown and regulations of all authorities having jurisdiction over this Project shall apply to this contract the same as though written herein in full.

The Town of North Kingstown will not award the Contract to any Contractor who is, at the time, ineligible under the provisions of any applicable regulations issued by the Secretary of Labor, United States Department of Labor, or is not qualified under applicable Ordinances of the Town of North Kingstown, or the laws of the State of Rhode Island.

## **SPECIAL PROVISIONS**

**Unless otherwise specified herein, all material specifications shall adhere to the Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction, 2004 Edition, as amended.**

The Vendor shall be aware that unit quantities offered for quotation are only approximated and are offered solely to establish unweighed and reliable unit prices for use throughout the fiscal year. **The Town reserves the right to purchase any material from RI MPAs at any time during the contract period should there be a significant cost savings benefit to do so.**

A sample consisting of approximately fifty (50) pounds may be made available to a representative of the Public Works Department for testing to determine if the materials meet specifications.

### **PICK-UP**

Loading of materials shall be performed with a mechanical loader of at least one and one half (1 ½) cubic yard capacity. Materials will be loaded on Town trucks between the hours of 7:15 a.m. and 3:15 p.m., except Saturdays, Sundays and legal holidays.

### **DELIVERY**

Materials will be delivered by the Vendor to the Town of North Kingstown Public Works Facility 2050 Davisville Road, North Kingstown (Davisville), North Kingstown, Rhode Island, or to 480 Oak Hill Road North Kingstown, Rhode Island between the hours of 7:30 a.m. and 3:15 p.m., except Saturdays, Sundays, and legal holidays, or to a specific job site within the Town. **Winter Sand delivery within 24 hours upon request and immediate delivery (MAX 4 HOURS) during or following storm operations.**

### **CONTRACT PERIOD**

**Pricing is to remain firm from date of award by the Town Council, through April 30, 2018.**

If financially advantageous to the Town of North Kingstown, these contracts may be renewed or extended, from time to time, when agreed to, in writing, by both parties.

**VENDORS ARE ENCOURAGED TO BID EACH ITEM SEPARATELY AS THE BID WILL BE AWARDED TO THE LOWEST EVALUATED OR RESPONSIVE BIDDER OF EACH MATERIAL.**

**SPECIFICATIONS AND PROVISIONS  
FOR  
*MISCELLANEOUS ROAD AND CONSTRUCTION MATERIALS***

1. **Processed Gravel**
2. **Crushed Stone**
3. **Brick Sand**
4. **Winter Sand**
5. **Portland & Masonry Cement**
6. **Concrete Materials**
7. **Precast Concrete Block**
8. **Loam**
9. **Infield Mix**
10. **Bituminous Concrete Materials**
11. **UPM/ High Performance Cold Patching Material**
12. **Stone Riprap**
13. **Pipe, Spiral, Aluminum**
14. **Pipe, HDPE, Corrugated smooth core**
15. **Square Frame and Grate**
16. **Filter Fabric**
17. **Precast Sump for Round Catch Basins**
18. **Ductile Iron Pipe**

## ITEM 1 - PROCESSED GRAVEL SPECIFICATIONS

### Processed Gravel

(Section M.01.02 GRAVEL BORROW, in Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction, 2004 Edition, as amended). Gravel borrow shall consist of bank run sand and gravel or plant processed, crushed or uncrushed gravel with fine aggregate added as filler. Alternatively, Gravel Borrow may consist of selected materials which have been reclaimed from within project limits, are proportioned and processed to produce granular material for reuse as Gravel Borrow within the source project limits. Gravel Borrow, whether consisting of bank run or plant processed sand and gravel, or reclaimed and processed granular material, shall consist of sound, durable particles free from loam, clay, organic soil, vegetative matter, soft and elongate particles. The material shall be hard and durable enough to resist weathering, traffic abrasion and crushing. This material shall meet the following gradation requirements:

<u>Sieve Size</u>	<u>Gradation and Passing</u>
3"	100%
1½"	70 to 100%
¾"	50 to 85%
#4	30 to 55%
#50	8 to 25%
#200	2 to 10%

## ITEM 2 – CRUSHED STONE SPECIFICATIONS

### Crushed Stone or Crushed Gravel

(Section M.01.09 GRADATION of AGGREGATES, in Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction, 2004 Edition, as amended). Materials shall consist of clean, sound, tough, durable rock, free from loam, clay, vegetable matter, and shall not contain more than one percent (1%) crusher dust by weight. This material shall meet the following gradation requirements:

<u>Sieve Size</u>	<u>Gradation and Passing</u>
2 ¼"	100%
2"	90 to 100%
1 ½"	30 to 55%
1 ¼"	0 to 25%
1"	0 to 5%

### ITEM 3 - BRICK SAND SPECIFICATIONS

Brick Sand (or aggregate for use in masonry mortar)

Brick sand shall consist of natural sand or manufactured sand. The sand shall consist of sound, tough, durable particles of aggregate, free of loam, clay, vegetable matter or other deleterious substances and conform to AASHTO Designation: M 45. The material shall meet the following gradation requirements:

<u>Percent Passing</u>		
<u>Sieve Size</u>	<u>Natural Sand</u>	<u>Manufactured Sand</u>
#4	100%	100%
#8	95 to 100%	95 to 100%
#16	70 to 100%	70 to 100%
#30	40 to 75%	40 to 75%
#50	10 to 35%	20 to 40%
# 100	2 to 15%	10 to 25%
#200	0 to 5%	0 to 10%

### ITEM 4 – WINTER SAND SPECIFICATIONS

Winter Sand

Winter Sand shall be natural or plant processed and shall consist of sound, durable particles free from loam, clay, organic soil, hazardous chemicals, vegetative matter, foreign particles or other deleterious materials and shall meet the following gradation requirements:

<u>Percent Passing</u>		
<u>Sieve Size</u>	<u>MINIMUM</u>	<u>MAXIMUM</u>
¼"		100%
#30	25%	55%
#50	7%	30%
# 100	0%	8%

Gradation of material provided by vendor will be tested. Any deliveries not meeting specifications will be rejected and the supplier will be required to remove all unsuitable material delivered at their own expense.

### ITEM 5 - PORTLAND CEMENT AND MASONRY CEMENT SPECIFICATIONS

- A. Portland Cement is hydraulic cement produced by pulverizing clinker consisting essentially of hydraulic calcium silicates usually containing one or more of the forms of calcium sulfate as an interground addition. Portland cement for this bid item shall conform to AASHTO Designation: M 85 Type 1. When cement is obtained in packages, the words "Portland Cement", "Type 1"



cement, the brand and name of the manufacturer, and mass of the cement contained therein shall be plainly marked on each package.

- B. Masonry Cement. (also Mortar) is hydraulic cement for use in mortars for masonry construction, containing one or more of the following materials: portland cement, portland-pozzolan cement, natural cement, slag cement or hydraulic lime; and in addition usually containing one or more materials such as hydrated lime, limestone, chalk, calcareous shell, talc, slag, or clay, as prepared for his purpose. The masonry cement for this bid item shall conform to AASHTO Designation: M 240. When masonry cement is obtained in packages, the brand, the name of manufacturer, and net weight of package in pounds shall be plainly indicated thereon.

## **ITEM 6 - PORTLAND CEMENT CONCRETE SPECIFICATIONS**

- A. More or less ten (10) cubic yards of Portland Cement Concrete for various purposes to be furnished in vendor's mixer, as required in accordance with the following:
- One (1) yard minimum order.
  - Concrete shall meet requirements of Part 600, Section 603 Controlled Low Strength Material and Section M.02 for materials as specified in Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction, 2004 Edition, as amended.
- B. More or less ten (10) cubic yards of Controlled Low Strength Material (CLSM) or "Flowable Concrete Fill" for various purposes to be furnished in Vendor's mixer, as required in accordance with the following.
- One (1) yard minimum order.
  - Concrete shall meet requirements of Part 600, Section 603 Controlled Low Strength Material and Section M.02 for materials as specified in Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction, 2004 Edition, as amended.

## **ITEM 7 - PRECAST CONCRETE BLOCK**

### Precast Concrete Block

Blocks shall consist of Portland Cement Concrete homogeneous in nature. The concrete shall meet requirements of Part 600, Section 603 Controlled Low Strength Material and Section M.02 for materials as specified in Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction, 2004 Edition, as amended. The block shall measure Sixty (60") inches long, Thirty-Six (36") inches wide and Thirty-Two (32") inches high. The faces of the block shall be flat and smooth. The blocks shall be at least 28 days old.

## **ITEM 8 - LOAM SPECIFICATIONS**

### A. Screened loam

(Section M.18.01 LOAM, as specified in Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction 2004 Edition, as amended). The material to be furnished shall consist of screened loose, friable, fine sandy loam or sandy loam, as defined by the USDA's Soil Conservation Service in the Soil Survey Manual issued in 1993, free of subsoil, refuse, stumps, roots, rocks, cobbles, stones, brush, noxious weeds, litter and other materials which are larger than ½-inch in any dimension and which will prevent the formation of a suitable seed bed. Organic matter shall constitute not less than Five (5%) Percent nor more than Twenty (20%) percent of the loam as determined by loss-on-ignition of oven dried samples that have been drawn by the Engineer, unless otherwise specified or directed. The loam shall have an acidity range of 5.5 pH to 7.6 pH. The Contractor shall notify the Department of Public Works the intended source of loam to be employed at least two (2) weeks prior to the intended time of use to allow time for sampling. If, after the testing of the samples, the loam is found unsatisfactory for the intended use, the Director of Public Works may require, as a prerequisite for acceptance, that the contractor, without additional compensation, add to the loam proposed by him for use such as lime, particular fertilizer, or particular humus as is necessary to render the loam suitable.

B. Unscreened loam

Unscreened loam has same specifications as described above but unscreened. The Town reserves the right to inspect the unscreened loam prior to delivery and reject any loads which do not conform to the loam specifications above.

## ITEM 9 - INFIELD MIX SPECIFICATIONS

A composite soil of fine sand, silt, and clay; devoid of particles larger than 0.1 mm; light brown to tan in color. It shall possess a gluey consistency when moist and conform to the following physical and chemical properties.

<u>Material</u>	<u>Ratio</u>
Sand	30 to 35%
Silt	25 to 35%
Clay	20 to 30%
Organic Matter	1 to 3%
PH	5 to 7

## ITEM 10 - BITUMINOUS CONCRETE SPECIFICATIONS

A. More or less five hundred (500) tons of Bituminous Concrete to be furnished and loaded on Town trucks in accordance with specifications as follows:

Bituminous Concrete shall be classified as Type I-1 and manufactured in accordance with requirements of Part 400, Section 401 Dense Graded Bituminous Concrete Pavements and Section M.03 as specified in the Rhode Island Department of Transportation Standard Specification for Road and Bridge Construction, 2004 Edition, as amended.

Weight slips listing exact material weights of materials used in the preparation of each batch of Bituminous Concrete will be required. This will be a computer printout slip. The successful bidder shall utilize a batch plant operation. Material must be available to the Town on an "as needed" basis. Prior notice for ordering material shall not be required.

B. More or less three hundred (300) tons of Bituminous Concrete Berm Mix to be furnished and loaded on Town trucks in accordance with specifications as follows:

Bituminous Concrete shall be classified as Type I-2 and manufactured in accordance with requirements of Part 400, Section 401 Dense Graded Bituminous Concrete Pavements and Section M.03 as specified in the Rhode Island Department of Transportation Standard Specification for Road and Bridge Construction, 2004 Edition, as amended.

Weight slips listing exact material weights of materials used in the preparation of each batch of Bituminous Concrete will be required. This will be a computer printout slip. The successful bidder shall utilize a batch plant operation. Material must be available to the Town on an "as needed" basis. Prior notice for ordering material shall not be required.

C. More or less four hundred (400) tons of Bituminous Concrete Cold Patch to be furnished and loaded on Town trucks or delivered to the Town's highway garage with following specifications:

Bituminous Concrete for Patching (Cold Patch) shall consist of a mixture of course aggregate, fine aggregate, mineral filler, if necessary, and designated bitumen combined to meet the composition limits by weight and other characteristics as shown in TABLE 1.

Materials shall conform to the requirements of Section M.03 Materials, Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction 2004 Edition, as amended.

**The contractor shall submit for approval, a job mix formula. A standard approved anti-stripping compound must be used to give the asphalt more affinity to the aggregate. The Asphalt Cold Patch must be capable of being stockpiled and must be workable at all times.** Weight slips will be required. This will be a computer printout slip. Delivery time for the Asphalt Cold Patch should be no more than two (2) days.

**TABLE 1**

Sieve Size	% Passing by Weight
1/2"	100%
3/8"	95 to 100%
#4	55 to 75%
#8	35 to 75%
#30	18 to 32%
#50	12 to 24%
#200	03 to 08%
Bitumen Content	06-08%
Type & Grade	MC 250
Retained Coating AASHTO T-182	95% Min

**MIXTURE TOLERANCES**

Passing #4 and larger sieve	+/- 7%
Passing # 100 to #8 sieve	+/- 4%
Passing #200 sieve	+/- 2%
Bitumen	+/- 0.4%

**ITEM 11 – UPM/ HIGH PERFORMANCE COLD PATCHING MATERIAL**

**Permanent Stockpile Patching Material**

**Detailed Specifications for  
Bituminous Cold Patch Material  
UPM® Permanent Pavement Repair Material**

**GENERAL:**

These UPM® bituminous patching mixes are designed in various seasonal grades for use when the outside ambient temperature is in the range of -15°F (-26°C) to 100°F (38°C). Each grade shall be manufactured specifically to accommodate anticipated climatic conditions. These grades shall consist of Winter Mix, Spring/Fall Mix and Summer Mix.

The bituminous patching mix shall consist of asphalt and aggregate within prescribed quantities to make a mixture, which will provide satisfactory coating, workability and adhesion characteristics. The patching mixture will be available in grades to function as a patch during cold and damp or during hot weather in bituminous and concrete pavement. The asphalt blend and aggregate shall conform to the following requirements.

**LIQUID ASPHALT:**

The bituminous material shall be UPM® liquid asphalt blend, from UNIQUE Paving Materials Corporation, Cleveland, Ohio (UNIQUE) or from one of its approved blending facilities. The blend shall meet the following requirements:

Kinematic Viscosity @ 140°F (60°C) (mm <sup>2</sup> /s)	ASTM D 2170	350 to 4000 cSt
Flash Point, Tag Open Cup minimum	ASTM D 1310	200°F (93°C)
Percentage of Water	ASTM D 95	Less Than 0.2%
Distillation to 680°F (360°C) Below	ASTM D 402	See Values

Sample Temperature	Volume % Total Distillate		Volume % Original	
	Minimum	Maximum	Minimum	Maximum
to 437°F (225°C)	0	0	0	0
to 500°F (260°C)	0	0.5	0	0
to 600°F (316°C)	10	65	0	18
Residue from distillation to 680°F (360°C) % Volume by Difference			73	95

## TESTS ON RESIDUE FROM DISTILLATION\*

Absolute viscosity @ 140°F (60°C) (10-1Pa x s)	ASTM D 2171	75 to 425 Poise
Penetration, Modified with Cone	ASTM D 5*	180 minimum
Ductility, 39°F (4°C), 1 cm/minute	ASTM D 113	100 minimum
Solubility in Trichloroethylene	ASTM D 2042	99.0% minimum

\* Make this test in accordance with ASTM Method D 5, except utilize a penetration cone in place of the standard penetration needle. The cone shall conform to the requirements given in ASTM Method D 217, except that the interior construction may be modified as one desires. The total moving weight of the cone and attachments must be 150 ± 0.1 grams. Also the level of water in the transfer dish shall be lowered to less than the height of the sample and decant water from the top of the sample before transferring from the bath to the penetrometer.

### AGGREGATE:

The aggregate shall be crushed stone and shall meet the following requirements:

### SIEVE ANALYSIS

### ASTM C 136

Sieve	#9 ASTM D 448 Percent Passing	COMBINATION #9 & #89 Percent Passing	#89 ASTM D 448 Percent Passing
1/2" (12.5 mm)	-	100	100
3/8" (09.5 mm)	100	90 - 100	90 - 100
# 4 (4.75 mm)	85 - 100	55 - 85	20 - 55
# 8 (2.36 mm)	10 - 40	5 - 40	5 - 30
# 16 (1.18 mm)	0 - 10	0 - 10	0 - 10
# 50 (0.30 mm)	0 - 5	0 - 5	0 - 5

Soundness Loss (Sodium, 5 cycles)	ASTM C 88	12.0 maximum
Los Angeles Abrasion Loss	ASTM C 131	45.0% maximum
Specific Gravity	ASTM C 127	2.45-2.85
Absorption	& 128	3.0% maximum
Minus 200 Sieve (0.075mm) Wash Loss	ASTM C 117	2.5% maximum

### PREPARATION OF MIXTURE:

The producer will provide a paved stockpile pad or an established material base of the same product as bid in the specifications. The pad or material base shall be solely committed to this product during the contract period.

The asphalt shall be heated to a temperature between 185° - 265°F (85o - 130o C).

The mixture shall consist of an aggregate and asphalt combined in a pug mill in the following proportions:

Asphalt	5.0 to 6.5%
Aggregate	93.5 to 95%

The mixture may be prepared with no heat to the aggregate when determined as acceptable by UNIQUE's laboratory testing.

Heat should be applied to the aggregate when determined as necessary by UNIQUE's laboratory testing prior to production of the mixture or by a technical representative of UNIQUE.

Under any of the above conditions the minimum amount of heat necessary to obtain coating or facilitate the operation of the plant may be utilized not to exceed under any circumstance 175°F (80°C).

When producing in a batch plant, wet mix time in the pug mill should be typically in the range of 30 to 45 seconds or until the aggregate is uniformly coated (greater than 95%) as outlined in ASTM D 2489.

### PRODUCTION SUPERVISION:

A technical representative from UNIQUE will be present at every production for quality assurance of the mix. This supervision shall be at the expense of UNIQUE.

**MIXTURE:**

The UPM mix shall meet the following requirements:

<b>Coating</b>	<b>ASTM D 2489</b>	<b>Greater than 95%</b>
Stripping in distilled water1	Visual	Less than 5%
Extraction of Bituminous Material max.	ASTM D 2172	3.5 min. 9.0%
Sieve Analysis of Extracted Aggregate Specification	ASTM C 136	See Aggregate
Minus 200 (0.075mm) of Extracted Aggregate	ASTM C 117 & ASTM C 136	4.0% Maximum <sup>2</sup>
Shelf Life of 100 Tons or more Minimum		One-Year

Note 1: Place approximately 100 grams in a 250 ml glass beaker and cover with distilled water for 24 hours before observation.

Note 2: This value shall not be confused with the 2.5% maximum allowed for the Minus 200 (0.075mm) Wash Loss on the raw aggregate before the production of UPM mix. That value is necessary to minimize the effect of the plant when producing the finished UPM cold mix.

**PERFORMANCE GUARANTEE:**

The supplier of the material shall guarantee the performance of the mix to meet the following requirements:

- A. The material shall remain workable to accommodate climatic conditions, in an uncovered stockpile of 100 tons or more, if applicable, for a period of not less than 12 months
- B. Smaller quantities must be reasonably covered.
- C. Repaired potholes shall not show any significant signs of shoving, rutting, tracking, kick-up or ravel-out within a period of 12 months from the time of repair.

**In the event the material furnished does not meet all of the above requirements, the supplier shall replace the unsatisfactory with acceptable material. The acceptable material shall be provided and delivered at no extra charge to the Department.**

**ITEM 12 - RIPRAP SPECIFICATIONS**

**Riprap**

(Section M.10.03 RIPRAP, as specified in Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction 2004 Edition, as amended). Riprap shall consist of broken stone produced from sound ledge or large boulders with at least three fractured faces on each particle and shall be free from overburden, spoil, shale or organic material. The stone shall have a minimum density of 160 pounds per cubic foot. It shall be angular in shape with its minimum dimension not less than one third of the maximum dimension. Stone for Placed Riprap shall have one flat face and shall be roughly square or rectangular to facilitate lying up.

Stone for Riprap shall meet the quality requirements of this subsection and shall conform to one of the following designations. In addition, such stone shall be well graded within the size specified.

**GRADED RIPRAP STONE <sup>(1)</sup>**

<b>Modified NSA No.</b>	<b><u>Size Inches (square openings)</u></b>		
	<b><u>100%Passing</u></b>	<b><u>0-50%Passing</u></b>	<b><u>0-15%Passing</u></b>
R-1	2	1	No.4
R-2	4	2	1
R-3	8	4	2
R-4	14	7	4
R-5	20	10	6
R-6	26	13	8
R-7	34	18	14
R-8	50	24	18

Notes: (1) REFERENCE: National Stone Association Manual: "Quarried Stone for Erosion and Sediment Control", dated 1978.

## **ITEM 13 – SPIRAL ALUMINUM PIPE SPECIFICATIONS**

### **Aluminum Pipe**

(Section M.04.02.6 Corrugated Aluminum Pipe, as specified in Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction 2004 Edition, as amended). Pipe shall conform to the requirements of AASHTO M196 and M197.

(Section M.04.02.7 Perforated Corrugated Aluminum Alloy Pipe for Under drains, as specified in Rhode Island Department of Transportation Standard Specifications for Road and Bridge **Construction 2004** Edition, as amended). Pipe shall conform to the requirements of AASHTO M196 and M197.

## **ITEM 14 – (HDPE) CORRUGATED, SMOOTH CORE PIPE SPECIFICATIONS**

### **CORRUGATED, SMOOTH CORE PIPE SPECIFICATIONS (HDPE)**

HDPE pipe is manufactured in accordance with specifications by ASTM and AASHTO. These specifications cover all aspects of HDPE pipe from materials to installation and testing.

AASHTO M252 Standard Specification for Corrugated Polyethylene Pipe (3" to 10")  
AASHTO M294 Standard Specification for Corrugated Polyethylene Pipe (12" to 60")  
ASTM D3350 Standard Specification for Polyethylene Plastic Pipe and Fittings Materials

## **ITEM 15 – SQUARE FRAME AND GRATE**

### **Metal Frames and Grates and/or Covers**

(Section 702 Manholes, Inlets and Catch Basins as specified in Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction 2004 Edition, as amended). *Rhode Island Standard 6.3.0 and 6.3.2.*

## **ITEM 16 – SPUNBOUND NONWOVEN FILTER FABRIC SPECIFICATIONS**

### **Filter Fabric**

Non woven geotextiles / filter fabrics are designed for multi-purpose engineered use and provide tensile reinforcement, filtration, and separation for many civil engineering and construction uses. They are resistant to tears, soil chemicals, puncture, ultra violet light exposure, and are virtually unaffected by hydrocarbons, mildew, rot and freeze-thaw.

AASHTO M-288 Geotextile Specification for Highway Applications

## **ITEM 17 – PRECAST SUMP FOR ROUND CATCH BASINS**

### **4' inner diameter Precast Drainage Structure**

Precast sumps are manufactured to meet or exceed, ASTM C-478 and AASHTO M 199 specifications. The concrete shall be a minimum of 4,000 PSI per ASTM C-478. Reinforcing steel will conform to latest ASTM A 185 specifications, .12 sq. in. / lineal ft. and .12 sq. in. (both ways) base bottom. The steel reinforcement will meet or exceed AASHTO HS-20 loading.

The top of the precast unit will be cast with an eight inch (8") lip flush with the inner wall. The lip is designed to accept barrel block for creating the top section of the basin.

Walls should be a minimum of five inches (5") thick with the bottom being a minimum six inches (6") thick. Overall height of sump should be no more than thirty six inches (36") tall.

## **ITEM 18 – DUCTILE IRON PIPE SPECIFICATIONS**

### **Ductile Iron Pipe**

(Section M.04.02.1 Ductile Iron Pipe, as specified in Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction 2004 Edition, as amended).

Pipe shall conform to the requirements of ASTM/ ANSI and AWWA.

These specifications cover all aspects of Ductile Iron pipe from materials to installation and testing.

Town of North Kingstown

PROPOSAL FORM

TO: Town of North Kingstown  
2050 Davisville Road  
North Kingstown RI 02852

I, (We) the undersigned agree to furnish to the Town of North Kingstown, the following items at the firm price(s) quoted below, during the contract period, in accordance with the specifications as outlined:

Item 1. PROCESSED GRAVEL

a. Picked up by Town \$\_\_\_\_\_ ton

b. Delivered by Vendor \$\_\_\_\_\_ ton

Item 2. CRUSHED STONE

a. Picked up by Town \$\_\_\_\_\_ ton

b. Delivered by Vendor \$\_\_\_\_\_ ton

Item 3. BRICK SAND

a. Picked up by Town \$\_\_\_\_\_ ton

b. Delivered by Vendor \$\_\_\_\_\_ ton

Item 4. WINTER SAND

a. Picked up by Town \$\_\_\_\_\_ ton

b. Delivered by Vendor \$\_\_\_\_\_ ton

Item 5. PORTLAND & MASONRY CEMENT

A. (Portland) a. Picked up by Town \$\_\_\_\_\_/pallet

b. Delivered by Vendor \$\_\_\_\_\_/pallet

a. Picked up by Town \$\_\_\_\_\_/bag

b. Delivered by Vendor \$\_\_\_\_\_/bag

B. (Masonry) a. Picked up by Town \$\_\_\_\_\_/pallet

b. Delivered by Vendor \$\_\_\_\_\_/pallet

a. Picked up by Town \$\_\_\_\_\_/bag

b. Delivered by Vendor \$\_\_\_\_\_/bag

Item 6. CONCRETE MATERIALS

A. (Portland Cement Concrete) One cubic yard \$\_\_\_\_\_ c.y.

Two cubic yards \$\_\_\_\_\_ c.y.

Three cubic yards \$\_\_\_\_\_ c.y.

Four cubic yards \$\_\_\_\_\_ c.y.

Five cubic yards \$\_\_\_\_\_ c.y.

Six or more cubic yards \$\_\_\_\_\_ c.y.

VENDOR SIGNATURE: \_\_\_\_\_



<b>B.</b>	<b>(Flowable Concrete Fill)</b>	<b>One cubic yard</b>	<b>\$_____ c.y.</b>
		<b>Two cubic yards</b>	<b>\$_____ c.y.</b>
		<b>Three cubic yards</b>	<b>\$_____ c.y.</b>
		<b>Four cubic yards</b>	<b>\$_____ c.y.</b>
		<b>Five cubic yards</b>	<b>\$_____ c.y.</b>
		<b>Six or more cubic yards</b>	<b>\$_____ c.y.</b>

**Item 7. PRECAST CONCRETE BLOCKS**

<b>a. Picked up by Town</b>	<b>\$_____ each</b>
<b>b. Delivered by Vendor</b>	<b>\$_____ each</b>

**Item 8. LOAM**

<b>A.</b>	<b>(Screened)</b>	<b>a. Picked up by Town</b>	<b>\$_____ ton</b>
		<b>b. Delivered by Vendor</b>	<b>\$_____ ton</b>
<b>B.</b>	<b>(Unscreened)</b>	<b>a. Picked up by Town</b>	<b>\$_____ ton</b>
		<b>b. Delivered by Vendor</b>	<b>\$_____ ton</b>

**Item 9. INFIELD MIX**

<b>a. Picked up by Town</b>	<b>\$_____ ton</b>
<b>b. Delivered by Vendor</b>	<b>\$_____ ton</b>

**Item 10. BITUMINOUS CONCRETE**

<b>A.</b>	<b>(Class I-1)</b>	<b>Batch Plant Location: _____</b>	
		<b>a. Picked up by Town</b>	<b>\$_____ ton</b>
		<b>b. Delivered by Vendor</b>	<b>\$_____ ton</b>
<b>B.</b>	<b>(Class I-2)</b>	<b>Batch Plant Location: _____</b>	
		<b>a. Picked up by Town</b>	<b>\$_____ ton</b>
		<b>b. Delivered by Vendor</b>	<b>\$_____ ton</b>
<b>C.</b>	<b>(Cold Patch)</b>	<b>Batch Plant Location: _____</b>	
		<b>1. Picked up by Town</b>	<b>\$_____ ton</b>
		<b>2. Delivered by Vendor</b>	<b>\$_____ ton</b>

**Item 11. UPM/ HIGH PERFORMANCE COLD PATCHING MATERIAL**

<b>a. Picked up by Town</b>	<b>\$_____ ton</b>
<b>b. Delivered by Vendor</b>	<b>\$_____ ton</b>

**Item 12. STONE RIPRAP**

<b>a. Picked up by Town</b>	<b>\$_____ ton</b>
<b>b. Delivered by Vendor</b>	<b>\$_____ ton</b>

**VENDOR SIGNATURE: \_\_\_\_\_**

**Item 13. PIPE, SPIRAL ALUMINUM**

**A. (Solid)**

6" - 18ga.	a. Picked up by Town	\$_____ /ft.
	b. Delivered by Vendor	\$_____ /ft.
8" - 18ga.	a. Picked up by Town	\$_____ /ft.
	b. Delivered by Vendor	\$_____ /ft.
12" - 18ga.	a. Picked up by Town	\$_____ /ft.
	b. Delivered by Vendor	\$_____ /ft.
15" - 18ga.	a. Picked up by Town	\$_____ /ft.
	b. Delivered by Vendor	\$_____ /ft.
18" - 18ga.	a. Picked up by Town	\$_____ /ft.
	b. Delivered by Vendor	\$_____ /ft.
24" - 18ga.	a. Picked up by Town	\$_____ /ft.
	b. Delivered by Vendor	\$_____ /ft.

**B. (Perforated)**

6" - 18ga.	a. Picked up by Town	\$_____ /ft.
	b. Delivered by Vendor	\$_____ /ft.
8" - 18ga.	a. Picked up by Town	\$_____ /ft.
	b. Delivered by Vendor	\$_____ /ft.
12" - 18ga.	a. Picked up by Town	\$_____ /ft.
	b. Delivered by Vendor	\$_____ /ft.
15" - 18ga.	a. Picked up by Town	\$_____ /ft.
	b. Delivered by Vendor	\$_____ /ft.
18" - 18ga.	a. Picked up by Town	\$_____ /ft.
	b. Delivered by Vendor	\$_____ /ft.
24" - 18ga.	a. Picked up by Town	\$_____ /ft.
	b. Delivered by Vendor	\$_____ /ft.

**Item 14. PIPE, (HDPE), CORRUGATED, SMOOTH CORE**

**A. (Solid)**

12"	a. Picked up by Town	\$_____ /ft.
	b. Delivered by Vendor	\$_____ /ft.
15"	a. Picked up by Town	\$_____ /ft.
	b. Delivered by Vendor	\$_____ /ft.
18"	a. Picked up by Town	\$_____ /ft.
	b. Delivered by Vendor	\$_____ /ft.
24"	a. Picked up by Town	\$_____ /ft.

**VENDOR SIGNATURE:** \_\_\_\_\_

		b. Delivered by Vendor	\$_____ /ft.
	30"	a. Picked up by Town	\$_____ /ft.
		b. Delivered by Vendor	\$_____ /ft.
	36"	a. Picked up by Town	\$_____ /ft.
		b. Delivered by Vendor	\$_____ /ft.
<b>B.</b>	<b>(Perforated)</b>		
	12"	a. Picked up by Town	\$_____ /ft.
		b. Delivered by Vendor	\$_____ /ft.
	15"	a. Picked up by Town	\$_____ /ft.
		b. Delivered by Vendor	\$_____ /ft.
	18"	a. Picked up by Town	\$_____ /ft.
		b. Delivered by Vendor	\$_____ /ft.
	24"	a. Picked up by Town	\$_____ /ft.
		b. Delivered by Vendor	\$_____ /ft.
	30"	a. Picked up by Town	\$_____ /ft.
		b. Delivered by Vendor	\$_____ /ft.
	36"	a. Picked up by Town	\$_____ /ft.
		b. Delivered by Vendor	\$_____ /ft.

**Item 15. SQUARE FRAME AND GRATE**

**(Regular)**

- a. Picked up by Town \$\_\_\_\_\_ /ea.
- b. Delivered by Vendor \$\_\_\_\_\_ /ea.

**(Bicycle Safe)**

- a. Picked up by Town \$\_\_\_\_\_ /ea.
- b. Delivered by Vendor \$\_\_\_\_\_ /ea.

**Item 16. SPUNBOUND NONWOVEN FILTER FABRIC @ minimum 120 mils, 12.5' wide rolls, 400' long**

- a. Picked up by Town \$\_\_\_\_\_ /400' roll
- b. Delivered by Vendor \$\_\_\_\_\_ /400' roll

**Item 17. PRECAST SUMP FOR ROUND CATCH BASINS**

- a. Picked up by Town \$\_\_\_\_\_ /ea.
- b. Delivered by Vendor \$\_\_\_\_\_ /ea.

**VENDOR SIGNATURE: \_\_\_\_\_**

**Item 18. PIPE, DUCTILE IRON, PUSH JOINT**

**A. (Class 50)**

8"	a. Picked up by Town	\$ _____ /ft.
	b. Delivered by Vendor	\$ _____ /ft.
10"	a. Picked up by Town	\$ _____ /ft.
	b. Delivered by Vendor	\$ _____ /ft.
12"	a. Picked up by Town	\$ _____ /ft.
	b. Delivered by Vendor	\$ _____ /ft.
14"	a. Picked up by Town	\$ _____ /ft.
	b. Delivered by Vendor	\$ _____ /ft.
16"	a. Picked up by Town	\$ _____ /ft.
	b. Delivered by Vendor	\$ _____ /ft.
18"	a. Picked up by Town	\$ _____ /ft.
	b. Delivered by Vendor	\$ _____ /ft.

**B. (Class 52)**

8"	a. Picked up by Town	\$ _____ /ft.
	b. Delivered by Vendor	\$ _____ /ft.
10"	a. Picked up by Town	\$ _____ /ft.
	b. Delivered by Vendor	\$ _____ /ft.
12"	a. Picked up by Town	\$ _____ /ft.
	b. Delivered by Vendor	\$ _____ /ft.
14"	a. Picked up by Town	\$ _____ /ft.
	b. Delivered by Vendor	\$ _____ /ft.
16"	a. Picked up by Town	\$ _____ /ft.
	b. Delivered by Vendor	\$ _____ /ft.
18"	a. Picked up by Town	\$ _____ /ft.
	b. Delivered by Vendor	\$ _____ /ft.

Pricing is to remain firm from date of award by the Town Council, through April 30, 2017 with option to extend for one (1) additional year at the sole option of the Town of North Kingstown.

**TERMS:** \_\_\_\_\_

**DISCOUNT FOR EARLY PAYMENT:** \_\_\_\_\_

**COMPANY NAME:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

**DISTANCE FROM PICKUP LOCATION TO:**  
2050 DAVISVILLE ROAD  
NORTH KINGSTOWN, RI 02852 \_\_\_\_\_

**SIGNATURE:** \_\_\_\_\_

\_\_\_\_\_  
**(Please print name and title)**

**E-mail address:** \_\_\_\_\_

**TEL:** \_\_\_\_\_ **DATE:** \_\_\_\_\_