

May 15, 2015

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATION
DEPARTMENT OF ADMINISTRATION

DIVISION OF PURCHASES BID NO. 7549520

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

RHODE ISLAND CONTRACT NO.2015-CR-052

FEDERAL-AID PROJECT NO. FAP Nos: STP-RESF(294)

2015 Paver Placed Elastomeric Surface Treatment

Statewide

CITY/TOWN OF Barrington, Cranston, East Providence, Jamestown, Johnston

COUNTY OF BRISTOL, PROVIDENCE, NEWPORT

NOTICE TO PROSPECTIVE BIDDERS

ADDENDUM NO. 1 Prospective bidders and all concerned are hereby notified of the following changes in the Plans, Specifications, Proposal and Distribution of Quantities for this contract. These changes shall be incorporated in the Plans, Specifications, Proposal and Distribution of Quantities, and shall become an integral part of the Contract Documents.

A. Other Item Changes

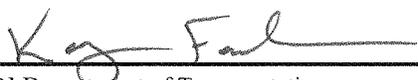
1. 413.9902 - RIDEABILITY
Quest Item Deleted.
2. 201.0409 - REMOVE AND DISPOSE FLEXIBLE PAVEMENT
Quantity Updated To "3000.00".
3. 401.2100 - MODIFIED CLASS 12.5 HMA
Quantity Updated To "5000.00".
4. 932.0100 - CUTTING AND MATCHING ASPHALT
Quantity Updated To "462.00".
5. T20.0104 - 4 INCH YELLOW FAST - DRYING WATERBORNE PAVEMENT MARKING PAINT
no change
6. T20.2006 - 6 INCH EPOXY RESIN PAVEMENT MARKINGS WHITE
Quantity Updated To "64938.00".
7. T20.0004 - 4 INCH WHITE FAST - DRYING WATERBORNE PAVEMENT MARKING PAINT
Quantity Updated To "127875.00".

B. Contract Documents

1. Special Provisions/Construction Specific
 - a) Delete page CS-i in its' entirety and replace with revised page CS-i (R-1) attached to this addendum. The appendix was modified.
 - b) Delete page CS-1 in its' entirety and replace with revised page CS-1 (R-1) attached to this addendum. Section 3, paragraph c was revised to reflect the correct page of the reporting form.
 - c) Delete pages CS-2, CS-3, and CS-4 in their entirety and replace with revised pages CS-2 (R-1), CS-3 (R-1), and CS-4 (R-1) attached to this addendum. Section 4, paragraph e, h1, h2 and k were revised.
 - d) Delete page CS-6, Table 1, in its' entirety and replace with revised page CS-6 (R-1) attached to this addendum.
 - e) Delete the two Orchard Avenue existing rideability tables from the appendix. There is no rideability requirement for this road.
 - f) Add the attached CRMC maintenance assent to the appendix.

C. Specification Change/Addition

1. Special Provisions/Job Specific
 - a) Delete pages JS-24 and JS-25 in their entirety and replace with revised pages JS-24 (R-1) and JS-25 (R-1) attached to this addendum.
 - b) Delete pages JS-27 through JS-29 in their entirety and replace with revised pages JS-27 (R-1) through JS-29 (R-1) attached to this addendum.



RI Department of Transportation
Chief Engineer

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 R.I. Contract No. - 2015-CR-052
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401.3005	CLASS 9.5 HMA FOR MISCELLANEOUS WORK	1
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411.0100	PAVER PLACED ELASTOMERIC SURFACE TREATMENT	1
412.0100	RUBBERIZED ASPHALT CHIP SEALING	1
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704.0200	RECONSTRUCT MANHOLE/CORBEL CONES	2
707.0900	ADJUST MANHOLES TO GRADE	2
707.1000	ADJUST SANITARY MANHOLE	2
707.1100	ADJUST CATCH BASINS	2
713.8269	ADJUST WATER GATE BOXES TO GRADE	2
713.8300	ADJUST GAS GATE BOXES TO GRADE	3
713.9901	REPLACE WATER GATE BOX COVER	3
713.9902	REPLACE GAS GATE COVER	3
914.5010	FLAGPERSONS	3
914.5020	FLAGPERSONS - OVERTIME	3
929.0110	FIELD OFFICE	3
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T20.0104	4 INCH YELLOW FAST - DRYING WATERBORNE PAVEMENT MARKING PAINT	4
T20.2006	6 INCH EPOXY RESIN PAVEMENT MARKINGS WHITE	4
T20.2012	12 INCH EPOXY RESIN PAVEMENT MARKINGS WHITE	4
T20.2014	4 INCH EPOXY RESIN PAVEMENT MARKINGS YELLOW	5
T20.2019	12 INCH EPOXY RESIN PAVEMENT MARKINGS YELLOW	5

Distribution of Quantities

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Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
001	201.0409	REMOVE AND DISPOSE FLEXIBLE PAVEMENT	SY			
		PROJECTWIDE				
		PAWTUCKET AVE & HENDERSON		3,000.00	0006	01
		BRIDGE ON-RAMP				
				Item 201.0409 Total:	3,000.00	
002	401.2100	MODIFIED CLASS 12.5 HMA	TON			
		PROJECTWIDE				
		VARIOUS ROADS		5,000.00	0006	01
		PAWTUCKET AVE				
		BRIDGE ON-RAMP				
				Item 401.2100 Total:	5,000.00	
003	401.3005	CLASS 9.5 HMA FOR MISCELLANEOUS WORK	TON			
		PROJECTWIDE				
		MOST ROADS		500.00	0006	01
				Item 401.3005 Total:	500.00	
004	403.0300	ASPHALT EMULSION TACK COAT	SY			
		PROJECTWIDE				
		ALL ROADS		100,000.00	0006	01
				Item 403.0300 Total:	100,000.00	
005	411.0100	PAVER PLACED ELASTOMERIC SURFACE TREATMENT	SY			
		PROJECTWIDE				
		MOST ROADS		66,636.00	0006	01
				Item 411.0100 Total:	66,636.00	
006	412.0100	RUBBERIZED ASPHALT CHIP SEALING	SY			
		BARRINGTON				

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Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
006	412.0100	Cont. WASHINGTON ROAD AND MIDDLE		33,205.00	0006	01

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Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
006	412.0100 Cont.	HIGHWAY				
				Item 412.0100 Total:	33,205.00	
008	704.0200	RECONSTRUCT MANHOLE/CORBEL CONES PROJECTWIDE VARIOUS ROADS	EACH	2.00	0006	01
				Item 704.0200 Total:	2.00	
009	707.0900	ADJUST MANHOLES TO GRADE PROJECTWIDE VARIOUS ROADS	EACH	19.00	0006	01
				Item 707.0900 Total:	19.00	
010	707.1000	ADJUST SANITARY MANHOLE PROJECTWIDE VARIOUS ROADS	EACH	37.00	0006	01
				Item 707.1000 Total:	37.00	
011	707.1100	ADJUST CATCH BASINS PROJECTWIDE VARIOUS ROADS	EACH	53.00	0006	01
				Item 707.1100 Total:	53.00	
012	713.8269	ADJUST WATER GATE BOXES TO GRADE PROJECTWIDE VARIOUS ROADS	EACH	45.00	0006	01
				Item 713.8269 Total:	45.00	

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Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
013	713.8300	ADJUST GAS GATE BOXES TO GRADE	EACH			
		PROJECTWIDE				
		VARIOUS ROADS		18.00	0006	01
				Item 713.8300 Total:		18.00
014	713.9901	REPLACE WATER GATE BOX COVER	EACH			
		PROJECTWIDE				
		VARIOUS ROADS		3.00	0006	01
				Item 713.9901 Total:		3.00
015	713.9902	REPLACE GAS GATE COVER	EACH			
		PROJECTWIDE				
		VARIOUS ROADS		5.00	0006	01
				Item 713.9902 Total:		5.00
016	914.5010	FLAGPERSONS	MHRS			
		PROJECTWIDE				
		ALL ROADS		800.00	0006	01
				Item 914.5010 Total:		800.00
017	914.5020	FLAGPERSONS - OVERTIME	MHRS			
		PROJECTWIDE				
		ALL ROADS		320.00	0006	01
				Item 914.5020 Total:		320.00
018	929.0110	FIELD OFFICE	PMO			
		PROJECTWIDE				
		PROJECTWIDE		8.00	0006	01
				Item 929.0110 Total:		8.00
019	932.0100	CUTTING AND MATCHING ASPHALT	LF			
		PROJECTWIDE				
		ALL ROADS		462.00	0006	01

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Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
019	932.0100	Cont.				
				Item 932.0100 Total:	462.00	
020	935.0400	REMOVING BITUMINOUS PAVEMENT BY MICRO MILLING PROJECTWIDE MOST ROADS	SY			
				Item 935.0400 Total:	99,600.00	0006 01
021	T13.1000	TRAFFIC DETECTORS-LOOP, STANDARD 19.6.0 EAST PROVIDENCE PAWTUCKET AV	LF			
				Item T13.1000 Total:	250.00	0006 01
022	T20.0004	4 INCH WHITE FAST - DRYING WATERBORNE PAVEMENT MARKING PAINT PROJECTWIDE ALL ROADS	LF			
				Item T20.0004 Total:	127,875.00	0006 01
023	T20.0104	4 INCH YELLOW FAST - DRYING WATERBORNE PAVEMENT MARKING PAINT PROJECTWIDE ALL ROADS	LF			
				Item T20.0104 Total:	125,875.00	0006 01
024	T20.2006	6 INCH EPOXY RESIN PAVEMENT MARKINGS WHITE PROJECTWIDE ALL ROADS	LF			
				Item T20.2006 Total:	64,938.00	0006 01
025	T20.2012	12 INCH EPOXY RESIN PAVEMENT	LF			

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Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
025	T20.2012 Cont.	MARKINGS WHITE				
		PROJECTWIDE				
		ALL ROADS		780.00	0006	01
				Item T20.2012 Total:		780.00
026	T20.2014	4 INCH EPOXY RESIN PAVEMENT	LF			
		MARKINGS YELLOW				
		PROJECTWIDE				
		ALL ROADS		62,938.00	0006	01
				Item T20.2014 Total:		62,938.00
027	T20.2019	12 INCH EPOXY RESIN PAVEMENT	LF			
		MARKINGS YELLOW				
		PROJECTWIDE				
		VARIOUS ROADS		34.00	0006	01
				Item T20.2019 Total:		34.00

**GENERAL PROVISIONS
CONTRACT SPECIFIC
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Addendum No. 1		(R-1)

1. BRIEF SCOPE OF WORK

The work encompassed in this contract shall include, but not be limited to, performing all operations and furnishing all materials, labor and equipment necessary for sweeping, cleaning, micromilling, surface preparation, rubber chip sealing, application of paver placed elastomeric surface treatment (PPEST) and any other specified bituminous hot mix across existing bituminous pavements within the specified longitudinal and transverse limits. Also included in the work shall be maintenance and protection of traffic and public access, adjustment of all manholes, utility gates, grates and other structures, temporary and permanent marking delineation of each roadway or roadway segment, and all other incidentals, complete, in place and accepted, as necessary to complete the work of this contract to the satisfaction of the Engineer.

This work shall be performed statewide, along roadways or segments of roadways as directed by the Engineer. The Engineer reserves the right to amend, adjust, and make deletions from the listing of roadways, or portions of the paver placed elastomeric surface treatment quantities listed for each roadway segment.

2. LIMITS OF PROJECT

The roadways and roadway segments to be paver placed elastomeric surface treated or overlaid with modified Class 12.5 HMA are shown in Table 1. Each roadway segment is identified by a project ID number. The PPEST or HMA paving of each listed roadway or segment thereof shall include all lanes, medians, and turning areas in both directions, along the listed roadway length between the longitudinal and transverse limits noted on Table 1.

3. SPECIAL NOTICE TO THE CONTRACTOR

- a. **“Significant Change”**: The terms of Section 12.104.07 “Significant Changes in the Character of the Work”, Subsection a, paragraph 2, of the RIDOA regulations shall not apply to this contract. An increase or decrease in the quantity of any major item of work, regardless of the magnitude of that increase or decrease, shall not be considered a “significant change”.
- b. **Approximate PPEST or Modified Class 12.5 HMA Quantities**. Total area listed for each roadway or roadway segment are shown in Table 1 and are estimates of PPEST or Modified Class 12.5 HMA required for the entire length of each roadway or roadway segment, within the longitudinal and transverse limits as stated.
- c. **Daily Measurement of PPEST or Modified Class 12.5 HMA**. Areas which have received surface preparation, PPEST, Modified Class 12.5 HMA and delineated to the satisfaction of the Engineer, shall be measured in the presence of the Engineer and reported to the Engineer on a daily basis, as the PPEST or Modified Class 12.5 HMA are performed. All measurements shall be made while the area being measured is protected by traffic control. There also shall be a continuous record of PPEST or Modified Class 12.5 HMA being applied to ensure that the application rate remains within the specified thickness range. The Contractor shall record paver placed elastomeric surface treated area measurements and the weight of PPEST being applied using the form shown on page CS-7, and shall submit one copy of the daily measurement records to the Engineer on a daily basis. The Engineer shall concur with the daily measurements prior to their acceptance as interim quantities for payment.

4. SEQUENCE OF CONSTRUCTION

- a. There is no required sequence for PPEST or Modified Class 12.5 HMA. Once the Contractor has begun the PPEST or Modified Class 12.5 HMA of any roadway or roadway segment in accordance with the approved schedule, he shall complete paving of that roadway or roadway segment (all lanes, as required in each direction), prior to beginning paving any other roadway or roadway segment.
- b. **Utilities and Drainage Structures.** Adjustments of all manholes, gates, and catch basins shall be completed prior to application of the surface seal in accordance with Section 707 and 713. All adjustments shall comply with the rules and regulations of the city or town. The cost for traffic control for the adjustments of all utilities or drainage structures shall be included in the applicable item unit bid price for the structure being adjusted.
- c. **Saw Cut.** The contractor shall transversely saw cut the pavement at the longitudinal limits of all road sections as directed by the Engineer.
- d. **Micromilling.** Prior to placing the PPEST or Modified Class 12.5 on all roads listed in Table 1 the Contractor shall micromill the entire road to the depth specified in Table 1. The cost for the various milling depths shall be included in the square yard quantities listed under bid item 935.0400. The Contractor shall legally dispose of the milled material offsite. Traffic control for the micro milling operation shall be included in the bid price for item 935.0400. The Contractor shall place temporary striping immediately following the micro milling operation.
- e. **Leveling/Shimming:** Following the micromilling operation, should there be any depressed areas of pavement found to be below the remaining road's profile such as base failures, fatigued areas, potholes etc. shall be brought to profile by locally shimming the area with Class 9.5 HMA as directed by the Engineer. Emulsion tack coat shall be applied between pavement layers during leveling/shimming.
- f. **Traffic Detector Loops:** The Contractor shall replace any existing traffic detector loops that have been damaged as a result of any of the micromilling operations. Upon completion of the paving operations, the Contractor shall replace any damaged traffic detector loops in accordance with RI Standard 19.6.0. The cost of the traffic control for the replacement of the traffic loops shall be included in the bid price for item T13.1000.
- g. **PPEST**

Performance and Workmanship. Prior to obtaining approval to commence the work, the Contractor shall demonstrate to the satisfaction of the Engineer:

- 1) The performance of his equipment meets the requirements of the specifications herein
- 2) The traffic maintenance and protection equipment and setup meet the specifications herein
- 3) The surface preparation meets the specifications herein
- 4) The PPEST work to the standard of workmanship required by the contract.

In order to demonstrate the foregoing, the Contractor shall perform PPEST of a test section, 500-feet in length and full-width of the road, to be sited within the limits of one of the roadways listed in Table 1. The particular roadway as well as the site of the test section shall be a location selected by

the Contractor and approved by the Engineer. Upon approval by the Engineer of the Contractor's equipment, materials and mix design, traffic maintenance and protection, method of PPEST operations, quality of work and upon the Engineer's acceptance of measured quantities completed along the test section, the Contractor shall proceed with the contract PPEST per the specifications herein. Such approved test-section of PPEST quantities shall be included in the quantities approved for payment at the unit prices established by this contract.

h. Modified Class 12.5 HMA Overlay

- 1) A 20% rubberized asphalt chip seal (RACS) shall be applied to the milled surfaces of Washington Rd. [SS4550(15)TO] and Middle Hwy [SS4060(15)TO], prior to the application of the Modified Class 12.5 HMA. All base/fatigued areas and potholes shall be shimmed to road profile prior to the application of the RACS. Post sweepings at 2 weeks, October and April after the initial chip seal sweeping are not required. The RACS shall be overlaid with **2"** of Modified Class 12.5 HMA within 48 hours. The Contractor shall place temporary waterborne striping immediately following the rubberized chip sealing application.
- 2) The Contractor shall R&D flexible pavement to **expose the** concrete base and pave Pawtucket Ave [SS4665(15)TO] **and the Henderson Bridge on-ramp [SS4711(15)TO]** with Modified Class 12.5 HMA to match **previously** existing road grades and profiles. The contractor shall provide pavement transitions to the work zone if public traffic is allowed access due to delays in the paving operation.

i. There shall be a smooth transition of the profile between the final paved surfaces and all existing adjoining side streets pavement, driveways, utilities and drainage structures.

j. Pavement Markings.

1. It is the Contractor's responsibility to reflect the exact location of all existing pavement markings with new markings, including crosswalks, stop bars, beginning and end of passing and no passing zone markings, edge markers, arrow and "ONLY" markings. The contractor shall make all necessary arrangements to record the existing marking locations before commencing with the micromilling operations.
2. All pavement markings are to be located in accordance with the requirements of the "Manual on Uniform Traffic Control Devices". All existing striping must be replaced to match the traffic markings that existed prior to the micromilling unless otherwise detailed in these specifications or directed by the Engineer.
3. Temporary pavement markings are required as part of this contract. Before the end of each workday, any pavement marking that has been, removed, covered or partially covered as a result of any construction operation shall be replaced with an approved temporary pavement marking. These temporary markings shall be installed using fast-drying, waterborne pavement marking paint. During the workday, until the temporary marking is applied, the contractor shall be responsible for providing any necessary traffic control which shall be included in the contract bid item for temporary pavement marking.

4. A minimum of two weeks after paving the Contractor shall replace all temporary pavement markings with permanent pavement markings on the roads that have been paved under this contract. The Contractor shall be responsible for providing any necessary traffic control to apply the permanent pavement markings which shall be included in the contract bid item for permanent pavement marking.

All pavement markings are to be located in accordance with the requirements of the latest edition of the “Manual on Uniform Traffic Control Devices”. All pavement traffic markings must be replaced to match the existing striping unless otherwise detailed in these specifications or directed by the Engineer.

- k. Rideability is required on all roads except Pawtucket Ave., **Orchard Ave., and Henderson Bridge on-ramp.**
- l. Subcontracting. For work performed by a subcontractor, the subcontractor shall be subject to the reporting requirements as set forth for the prime contractor under the provisions of Section 12 of the RI DOA Procurement Regulations.

5. SPECIAL REQUIREMENTS FOR TRAFFIC MAINTENANCE AND PROTECTION

In addition to the requirements of the Standard Specifications for Road and Bridge Construction and the special requirements of other sections of this contract document, the following requirements shall be undertaken by the Contractor:

The Contractor shall be required to provide, install and maintain proper warning and construction signing, truck mounted arrow boards, and protective devices at each work location to conform to the Manual on Uniform Traffic Control Devices. All traffic protection must be approved by the Engineer before any operations may commence. The costs of all maintenance and protection of traffic shall be included in the item for the construction operation being conducted. There shall be no separate item or payment for provision neither of truck mounted arrow boards, construction signing, protective devices, nor for the maintenance and protection of traffic.

It shall be the responsibility of the Contractor to arrange with the appropriate municipal authorities any parking restrictions necessary to ensure unfettered and unhindered access to the full width of pavements to be sealed, and to notify business owners and residents of these restrictions.

6. MAINTENANCE OF PUBLIC ACCESS

The Contractor shall keep one 11’ wide lane of traffic open at all times.

7. STORAGE OF CONSTRUCTION MATERIAL AND/OR EQUIPMENT

Storage of construction material and/or equipment within the road “clear zone” as described below, will require written approval of the Engineer. No overnight storage within the “clear zone” will be allowed.

<u>Posted Speed</u>	<u>Distance From Edge of Travel Lane</u>
39 MPH or Less	12 feet
40-45 MPH	16 feet
50 MPH	20 feet
55 MPH	30 feet

Any area of the “clear zone” that is used for storage of construction material must be clearly delineated

**TABLE 1
PAVER PLACED ELASTOMERIC SURFACE TREATMENT
STATEWIDE**

TOWN NAME	PROJECT ID	ROAD	ROUTE	LIMITS	LENGTH (MI)	WIDTH (FT)	QUANTITY (SY)	MICRO-MILLING DEPTH (IN)
BARRINGTON	SS4550(15)TO	WASHINGTON RD		NAYATT RD TO LINCOLN AVE	1.4	25	2500*	2.0
BARRINGTON	SS4060(15)TO	MIDDLE HWY		NAYATT RD TO SEVEN OAKS DR	0.9	24	1600*	2.0
CRANSTON	SS2058(15)TO	DEAN PW		OAKLAWN AVE TO MISHANTICUT VALLEY PKWY	0.9	31	16368	1.0
E PROVIDENCE	SS4665(15)TO	PAWTUCKET AVE	RT 114	NEWMAN AVE TO POLE 72 (NORTH BOUND ONLY)	0.06	24	845*	3.5 - 4.0
JAMESTOWN	SS42029(15)TO	E SHORE RD		ELDRED AVE TO 1.0 MILE SOUTH	1.0	32	18773	1.0
JOHNSTON	SS1252(15)TO	ORCHARD AVE		WINDSOR AVE TO RI 116	0.9	22	11616	1.0
E PROVIDENCE	SS4013(15)TO	VETS MEMORIAL PKWY		PAWTUCKET AVE TO SOUTH BROADWAY	0.8	40	18773	1.0
PROVIDENCE	SS4711(15)TO	HENDERSON BRIDGE ON RAMP		300' FROM WATERMAN AVE TO 560' TOWARDS HENDERSON BRIDGE	0.11	30	330*	3 - 3.5

NOTE 1: Place paver placed elastomeric surface treatment or Modified Class 12.5 as listed in Table 1 curb to curb where curbing is present or edge of road to edge of road when no curbing is present.

* Tons of Modified Class 12.5

Maintenance Assent



State of Rhode Island and Providence Plantations
Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road, Suite 3
Wakefield, RI 02879-1900

(401) 783-3370
Fax (401) 783-3767

Certificate of Maintenance

March 30, 2015

RI Department of Transportation
Two Capitol Hill
Attn: Peter A. Healey, P.E. Chief Civil Engineer
Providence, RI 02903

RE: CRMC Assent No. M2015-03-086: perform Statewide Elastomeric surface treatment as per plan submitted to CRMC on 03/27/2015.
Project Location: statewide, ; Plat , Lot

Dear Applicant:

The Coastal Resources Management Council has reviewed your project proposal and has determined that it conforms to RICRMP Section 300.14 and applicable standards. Construction authorized by this approval shall be limited to replacement, reconstruction, or rebuilding to approved, pre-existing conditions and dimensions of the above noted structure. In accordance with revisions to RIGL 46-23-6.3 Expiration Tolling Periods (as amended effective June 26, 2013), all work being permitted must be completed on or before July 1, 2018. If this project involves excess construction materials or debris, these materials shall be removed from the site and disposed of at a suitable legal upland location. No equipment access or storage of equipment, construction material or debris shall occur on coastal features. If the project involves earthwork, appropriate erosion controls shall be utilized. All applicable conditions of original CRMC Assents that pertain to this property shall be upheld unless otherwise modified by the CRMC. All applicable policies, prohibitions, and standards of the RICRMP shall be upheld.

A copy of this maintenance authorization to perform maintenance work shall be kept on site and available for inspection. The maintenance (blue) card must be posted on site during the project duration.

Sincerely,

William Mosunic, Administrative Officer
Coastal Resources Management Council

/ajt

CAUTION:

Permits issued by the CRMC confer no property rights, and are valid only with the conditions and stipulations under which they are granted. Permits imply no guarantee of renewal, and may be subject to denial, revocation, or modification.

Applicant agrees that as a condition to the granting of this assent, members of the Coastal Resources Management Council or its staff shall have access to applicant's property to make on-site inspections to insure compliance with the assent.

The limits of authorized work shall be only for that which was approved by the CRMC. Any activities or alterations in which deviate from the approved plans will require a separate application and review. If the information provided to the CRMC for this review is inaccurate or did not reveal all necessary information or data, then this permit may be found to be null and void. Plans for any future alteration of the shoreline or construction or alteration within the 200' zone of CRMC jurisdiction or in coastal waters must be submitted for review to the CRMC prior to commencing such activity.

Permits, licenses or easements issued by the Council are valid only with the conditions and stipulation under which they are granted and imply no guarantee of renewal. The initial application or an application for renewal may be subject to denial or modification. If an application is granted, said permit, license and easement may be subject to revocation and/or modification for failure to comply with the conditions and stipulations under which the same was issued or for other good cause.

ATTENTION: ALL STRUCTURES AND FILLED AREAS IN THE TIDAL, COASTAL, OR NAVIGABLE WATERS OF THE STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS ARE SUBJECT TO:

1. The Superior Property Rights of the State of Rhode Island and Providence Plantations in the Submerged and Submersible Lands of the Coastal, Tidal, and Navigable Waters;
2. The Superior Navigation Servitude of the United States;
3. The Police Powers of the State of Rhode Island and the United States to regulate Structures in the Tidal, Coastal, or Navigable Waters.

THE SUBMERGED AND SUBMERSIBLE LANDS OF THE TIDAL, COASTAL, AND NAVIGABLE WATERS OF THE STATE ARE OWNED BY THE STATE AND HELD IN TRUST FOR THE PUBLIC. CONVEYANCE OF THESE LANDS IS ILLEGAL; TITLES PURPORTING TO TRANSFER SUCH LANDS ARE VOID. ASSENTS THAT INVOLVE THE FILLING OR USE OF THE STATES SUBMERGED LANDS ARE GRANTED WITH THE PROVISO THAT IT IS SUBJECT TO THE IMPOSITION OF A USAGE FEE TO BE ESTABLISHED BY THE COASTAL RESOURCES MANAGEMENT COUNCIL.

State of Rhode Island and Providence Plantations

COASTAL RESOURCES MANAGEMENT COUNCIL

MAINTENANCE ASSENT

CRMC Assent No. M2015-03-086

Date: March 30, 2015

This certifies that RI Department of Transportation

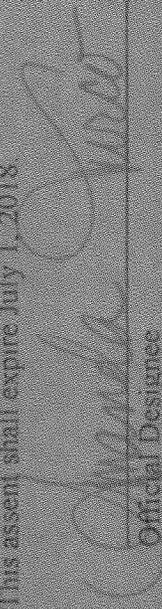
has permission to perform Statewide Elastomeric surface treatment as per plan submitted to CRMC on 03/27/2015

situated at Statewide
Plat No. _____

Lot No. _____

Said maintenance operations to be done in accordance with an application on file in the Offices of the Coastal Resources Management Council and subject further to all the provisions of the building ordinances of the
STATEWIDE

and to all the applicable State, Local and Federal provisions. This assent shall expire July 1, 2018.


Official Designee

Coastal Resources Management Council

**THIS CARD MUST BE DISPLAYED IN A CONSPICUOUS PLACE ON THE PREMISES.
FAILURE TO DISPLAY WILL RESULT IN LEGAL ACTION.**

411.9901

PAVER PLACED ELASTOMERIC SURFACE TREATMENT

Delete **Section 411.02.1 Modified Asphalt Binder** from the Paver Placed Elastomeric Surface Treatment Specification No. 411.0100 in its entirety and replace with the following:

411.02.1 Performance Graded Asphalt Binder (PGAB). This shall be either Chemically Modified Asphalt Binder with Rubber (411.02.1.1); or Polymer Modified Asphalt Binder (411.02.1.2).

PGAB shall conform to AASHTO M 320 and R 29 and shall meet the requirements of PG 64E-34. The nonrecoverable creep compliance versus percent recovery of the binder shall be plotted and must fall above the curve in Figure X1.1 in Appendix X1 of AASHTO M 332. The elastic recovery at 10°C (AASHTO T 301) shall be not less than 70%.

Should the PPEST be designated as “with WMA” the Contractor shall use a WMA (Warm Mix Additive). WMA shall conform to Section 414 of these specifications.

Re-refined engine oil bottoms (REOB) shall not be used in the PGAB.

411.02.1.1 Chemically Modified Asphalt Binder with Rubber. This shall consist of a blend of neat asphalt cement, SBS polymer, crumb rubber and a bonding agent, which are chemically bonded to produce a modified asphalt binder. The modified asphalt binder shall not contain any particles of rubber or elastomeric material when tested in accordance with AASHTO T 44. It shall incorporate an aromatic VOC inhibitor to mitigate odors at a dosage rate that conforms to the manufacturer’s recommendation.

- a. Anti-Stripping Agent. An anti-stripping agent that is heat stable and approved by the Engineer may be added to the neat asphalt cement prior to blending with the crumb rubber. The dosage (not exceeding 1.0% by weight of asphalt cement) shall be within the manufacturer’s specified range.
- b. Crumb Rubber. The asphalt binder shall have a crumb rubber content of not less than 9% by weight of asphalt cement. The maximum size of the crumb rubber shall be 60 mesh.
- c. Chemical Bonding Agent. The chemical bonding agent shall be heat stable and compatible with asphalt and rubber.

411.02.1.2 Polymer Modified Asphalt Binder. This shall be a SBS polymer modified asphalt binder.

- a. **Anti-Stripping Agent.** An anti-stripping agent that is heat stable and approved by the Engineer may be added to the neat asphalt cement prior to modification. The dosage (not exceeding 1.0% by weight of asphalt cement) shall be within the manufacturer's specified range.

In **Section 411.03.1 Surface Preparation**, delete the 4th sentence and replace with the following:

All localized depressions, ruts, trench cuts, utility settlements and joint settlements shall be brought to profile with a Class 9.5 HMA.

In **Section 411.03.2 Production Tolerances**, insert the following at the end of the section:

The following mix tolerances shall apply:

- a. The production air voids (V_a) shall be 3.0 – 5.0 percent.
- b. The production asphalt content (AC) shall be $\pm 0.3\%$ from the optimum AC established by the mix design.

In **Section 411.03.7 Placement**, insert the following after the first sentence:

The paver shall be equipped with thermostatically – controlled heaters for the screed and screed extenders. These heaters shall remain on throughout the paving process.

Delete **Section 411.05 Basis of Payment** from the Paver Placed Elastomeric Surface Treatment Specification No. 411.0100 in its entirety and replace with the following:

411.05 BASIS OF PAYMENT

The accepted quantities of "Paver Placed Elastomeric Surface Treatment" (PPEST) will be paid for at the contract unit price per square yards as listed in the Proposal. The price so-stated shall constitute full and complete compensation for all traffic control, surface preparation; furnishing, transporting, handling, placing and rolling the PPEST material as specified; site cleanup; furnishing of all labor, tools, equipment, and incidentals for the satisfactory completion of the work.

CODE 413.9901
RIDEABILITY – SURFACE COURSE

413.01 DESCRIPTION. This specification covers pavement rideability as determined by the Engineer and unit price adjustments in accordance with the rating scale based on post paving rideability determination.

413.02 MATERIALS. Not Applicable.

413.03 CONSTRUCTION METHODS. Not Applicable.

413.04 METHOD OF MEASUREMENT. Pavement rideability will be determined by the Engineer using a profiler on all travel lanes. A travel lane is defined as a lane on which traffic is allowed to travel excluding paved shoulders. The profiler will meet all the equipment requirements of ASTM E 950 for a Class 1 profiler.

The surface course ride quality acceptance will be based on the average International Roughness Index (IRI) of three tests using a profiler, for each 0.1-mile section, conducted by the Engineer and reported for each travel lane.

An IRI number in inches per mile will be established using ProVAL software for each 0.1-mile long section for each wheel path in each travel lane. A 300 foot long wavelength filter will be applied during testing. A 250mm short wavelength filter will be applied during analysis using ProVAL.

Each wheelpath of each 0.1 mile section in each travel lane will be considered a subplot. A lot is defined as all of the sublots in each wheelpath in each travel lane.

Areas that are excluded from testing include: The area 25 feet before and after pavement segments with manholes or catch basins in the travel lane, the area 50 feet before and after bridge joints. Areas excluded from testing by the profiler may, at the Engineer's discretion, be tested using a 10-foot maximum straightedge. The variation of the surface between any two contacts along the straightedge shall not be more than 1/4 inch. Humps and depressions exceeding the specified tolerance shall be subject to correction as directed by the Engineer, at no additional cost to the State.

Sections before bridges, manholes, catch basins, and the section at the end of the paving limit will be added to the previous subplot if they are less than 0.05 miles or will be considered a full subplot if they are greater than or equal to 0.05 miles.

The roads for this project are classified below:

Class A Roads	Class B Roads
Dean Parkway	Washington Rd
East Shore Rd	Middle Hwy
Vets Memorial Pkwy	

Table 1 provides the pay adjustment and corrective action criteria for Class A roads based upon the IRI established for each subplot.

Table 1	
IRI	Pay Adjustment
(Inches Per Mile)	(Percent)
55 and Under	+3%
56 - 75	+1%
76 - 95	0%
96 - 120	-5%
121 - 140	-15%
141 - 160	-25%
161 - 180	-40%
Over 180	Corrective Action Required

Table 2 provides the pay adjustment and corrective action criteria for Class B roads based upon the IRI established for each subplot.

Table 2	
IRI	Pay Adjustment
(Inches Per Mile)	(Percent)
120 and Under	+3%
121 - 150	+1%
151 - 170	0%
171 - 200	-5%
201 - 230	-15%
231 - 250	-25%
251 - 270	-40%
Over 270	Corrective Action Required

When corrections to the pavement surface are required, the Engineer will approve the Contractor's method of correction. In order to produce a uniform cross section, the Engineer may require corrections to the adjoining lanes and shoulders. Corrections shall be at no cost to the State. The method of correction shall be limited to diamond grinding or another approved method.

Where corrections are made after the official Department test, the pavement will be retested by the Engineer to verify that corrections have produced an acceptable ride surface. No incentives will be provided for sections on which corrective actions are performed. In the event the corrective action(s) results in an IRI of greater than 180 in/mi in any wheel path for Class A roads, the Contractor will be assessed an adjustment based on Table 3.

Table 3	
IRI After Correction	Pay Adjustment
(Inches Per Mile)	(Percent)
181 - 220	-60%
221 - 270	-80%
Over 270	-100%

In the event the corrective action(s) results in an IRI of greater than 270 in/mi in any wheel path for Class B roads, the Contractor will be assessed an adjustment based on Table 4.

Table 4	
IRI After Correction	Pay Adjustment
(Inches Per Mile)	(Percent)
271 - 300	-60%
301 - 330	-80%
Over 330	-100%

This rideability specification does not relieve the Contractor from responsibility concerning workmanship in accordance with the requirements of the Specifications and other contract requirements.

The theoretical tonnage is obtained by taking the measured length, multiplied by the design width of the travel lane, multiplied by the design thickness of the surface course, multiplied by the unit weight derived from 93% of the averages of the theoretical maximum densities for dense graded mixes or 93% of the Marshall densities obtained at the plant for Friction course or PPEST.

413.05 Basis of Payment

The adjusted subplot tonnage will be obtained by multiplying the theoretical tonnage in the subplot by that subplot's pay adjustment. The adjusted sublots will be totaled to determine the adjusted lot tonnage. The adjusted lot tonnage will be divided by the theoretical lot tonnage to obtain a unit price adjustment for each lot. A weighted average of all lot unit price adjustments will be used to determine the rideability price adjustment for the contract. This rideability price adjustment will be multiplied by the unit price of the HMA and applied to the total theoretical tonnage for pay purposes.

Incentives or disincentives will be addressed using a Report of Change.