August 30, 2012

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATION
DEPARTMENT OF TRANSPORTATION

RHODE ISLAND CONTRACT NO.2012-CR-071

FEDERAL-AID PROJECT NO. FAP Nos: STP-RESF(250)

2012 Rubberized Asphalt Chip Sealing

Statewide

CITY/TOWN OF Statewide, Burrillville, Cranston, Foster, Hopkinton, Scituate

COUNTY OF STATEWIDE, PROVIDENCE, WASHINGTON

NOTICE TO PROSPECTIVE BIDDERS

ADDENDUM NO. 2 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. 201.0409 - REMOVE AND DISPOSE FLEXIBLE PAVEMENT
   Quest Item added.Quantity Updated To "1000.00".

2. 202.0300 - UNCLASSIFIED EXCAVATION
   Quest Item added.Quantity Updated To "400.00".

3. 204.0100 - TRIMMING AND FINE GRADING
   Quest Item added.Quantity Updated To "1000.00".

4. 304.0100 - SELECT LEVELING AND FILLER AGGREGATE
   Quest Item added.Quantity Updated To "450.00".

5. 403.0300 - ASPHALT EMULSION TACK COAT
   Quest Item added.Quantity Updated To "1000.00".

6. 932.0100 - CUTTING AND MATCHING ASPHALT
   Quest Item added.Quantity Updated To "60.00".Quest Item Deleted.

7. 932.0200 - FULL-DEPTH SAWCUT OF BITUMINOUS PAVEMENT

   Quest Item added.Quantity Updated To "60.00".

8. 401.9903 - CLASS 12.5 HMA

   Quest Item Added.Quantity Updated To "220.00".

9. 914.5010 - FLAGPERSONS

   Quantity Updated To "680.00".

10. 914.5020 - FLAGPERSONS - OVERTIME

    Quantity Updated To "187.00".

11. T20.0004 - 4 INCH WHITE FAST - DRYING WATERBORNE PAVEMENT MARKING PAINT

    Quantity Updated To "168154.00".

12. T20.0104 - 4 INCH YELLOW FAST - DRYING WATERBORNE PAVEMENT MARKING PAINT

    Quantity Updated To "168154.00".

13. T20.2006 - 6 INCH EPOXY RESIN PAVEMENT MARKINGS WHITE

    Quantity Updated To "168154.00".

14. T20.2016 - 6 INCH EPOXY RESIN PAVEMENT MARKINGS YELLOW

    Quantity Updated To "168154.00".

B. Contract Dates

1. Phase 2 Completion Date

   Phase 2 Completion Date "07/31/2013" added.

2. Phase 1 Completion Date

   Phase 1 Completion Date Updated To "12/15/2012".

C. Contract Documents

1. Special Provisions/Construction Specific

   Delete page JS-i and JS-2, replace with the revised pages JS-i and JS-2 attached to this add. # 2.

   Add pages JS-7 to JS-15 attached to this addendum # 2.

   Delete page CS-i, CS-1 through CS-4, CS-6, and the TMP and replace with revised pages CS-im CS-1 through CS-4c, CS-6, and the TMP attached to this addendum # 2.

RI Department of Transportation
Chief Engineer

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Distribution of Quantities

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FAP Nos: STP-RESF(250)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
001	401.9901	**CLASS 4.75 HMA SHIM COURSE**	**TON**			
		PROJECTWIDE				
		VARIOUS ROADS		300.00	0006	01
		Item 401.9901 Total:		**300.00**		
002	401.9902	**CLASS 9.5 HMA SHIM COURSE**	**TON**			
		PROJECTWIDE				
		VARIOUS ROADS		750.00	0006	01
		Item 401.9902 Total:		**750.00**		
003	412.0100	**RUBBERIZED ASPHALT CHIP SEALING**	**SY**			
		PROJECTWIDE				
		ALL ROADS		267,497.00	0006	01
		Item 412.0100 Total:		**267,497.00**		
004	707.0900	**ADJUST MANHOLES TO GRADE**	**EACH**			
		PROJECTWIDE				
		VARIOUS ROADS		9.00	0006	01
		Item 707.0900 Total:		**9.00**		
005	713.8269	**ADJUST WATER GATE BOXES TO GRADE**	**EACH**			
		PROJECTWIDE				
		VARIOUS ROADS		18.00	0006	01
		Item 713.8269 Total:		**18.00**		
006	713.8300	**ADJUST GAS GATE BOXES TO GRADE**	**EACH**			
		PROJECTWIDE				
		VARIOUS ROADS		4.00	0006	01
		Item 713.8300 Total:		**4.00**		
007	713.9901	**ADJUST SEWER GATE BOXES TO GRADE**	**EACH**			
		PROJECTWIDE				
		VARIOUS ROADS		4.00	0006	01

Distribution of Quantities

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Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
007	713.9901 Cont.	**Item 713.9901 Total:**		**4.00**		
008	914.5010	**FLAGPERSONS**	**MHRS**			
		PROJECTWIDE				
		ALL ROADS		680.00	0006	01
		Item 914.5010 Total:		**680.00**		
009	914.5020	**FLAGPERSONS - OVERTIME**	**MHRS**			
		PROJECTWIDE				
		ALL ROADS		187.00	0006	01
		Item 914.5020 Total:		**187.00**		
010	929.0110	**FIELD OFFICE**	**PMO**			
		PROJECTWIDE				
		ALL ROADS		21.00	0006	01
		Item 929.0110 Total:		**21.00**		
011	931.0110	**CLEANING AND SWEEPING PAVEMENT**	**HSY**			
		PROJECTWIDE				
		ALL ROADS		5,350.00	0006	01
		Item 931.0110 Total:		**5,350.00**		
012	931.9901	**POST WINTER-CLEANING AND SWEEPING PAVEMENT**	**HSY**			
		PROJECTWIDE				
		ALL ROADS		2,675.00	0006	01
		Item 931.9901 Total:		**2,675.00**		
013	936.0100	**MOBILIZATION AND DEMOBILIZATION**	**LS**			
		PROJECTWIDE				
		ALL ROADS		1.00	0006	01
		Item 936.0100 Total:		**1.00**		

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Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
014	943.0200	**TRAINEE MAN-HOURS**	**MHRS**			
		PROJECT WIDE				
		PROJECT		500.00	0006	01
		Item 943.0200 Total:		**500.00**		
015	T20.0004	**4 INCH WHITE FAST - DRYING**	**LF**			
		WATERBORNE PAVEMENT MARKING PAINT				
		PROJECTWIDE				
		ALL ROADS		168,154.00	0006	01
		Item T20.0004 Total:		**168,154.00**		
016	T20.0012	**12 INCH WHITE FAST - DRYING**	**LF**			
		WATERBORNE PAVEMENT MARKING PAINT				
		PROJECTWIDE				
		VARIOUS ROADS		150.00	0006	01
		Item T20.0012 Total:		**150.00**		
017	T20.0104	**4 INCH YELLOW FAST - DRYING**	**LF**			
		WATERBORNE PAVEMENT MARKING PAINT				
		PROJECTWIDE				
		ALL ROADS		168,154.00	0006	01
		Item T20.0104 Total:		**168,154.00**		
018	T20.1000	**REMOVE EXISTING PAVEMENT MARKINGS**	**LF**			
		PROJECTWIDE				
		ALL ROADS		333,908.00	0006	01
		Item T20.1000 Total:		**333,908.00**		
019	T20.2006	**6 INCH EPOXY RESIN PAVEMENT**	**LF**			
		MARKINGS WHITE				
		PROJECTWIDE				
		ALL ROADS		168,154.00	0006	01
		Item T20.2006 Total:		**168,154.00**		

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020	T20.2012	**12 INCH EPOXY RESIN PAVEMENT MARKINGS WHITE**	LF			
		PROJECTWIDE				
		VARIOUS ROADS		150.00	0006	01
		Item T20.2012 Total:		**150.00**		
021	T20.2016	**6 INCH EPOXY RESIN PAVEMENT MARKINGS YELLOW**	LF			
		PROJECTWIDE				
		ALL ROADS		168,154.00	0006	01
		Item T20.2016 Total:		**168,154.00**		
022	T20.9901	**REMOVE EXISTING 12" PAVEMENT MARKINGS**	LF			
		PROJECTWIDE				
		VARIOUS ROADS		150.00	0006	01
		Item T20.9901 Total:		**150.00**		
023	T20.9902	**6 INCH BLACK FAST-DRYING WATERBORNE PAVEMENT MARKING PAINT**	LF			
		PROJECTWIDE				
		ALL ROADS		295,896.00	0006	01
		Item T20.9902 Total:		**295,896.00**		
024	201.0409	**REMOVE AND DISPOSE FLEXIBLE PAVEMENT**	SY			
		SWITCH ROAD				
		RICHMOND		1,000.00	0006	01
		Item 201.0409 Total:		**1,000.00**		
025	202.0300	**UNCLASSIFIED EXCAVATION**	CY			
		SWITCH ROAD				
		RICHMOND		400.00	0006	01

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Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
025	202.0300 Cont.	Item 202.0300 Total:		400.00		
026	204.0100	**TRIMMING AND FINE GRADING**	SY			
		SWITCH ROAD				
		RICHMOND		1,000.00	0006	01
		Item 204.0100 Total:		**1,000.00**		
027	304.0100	**SELECT LEVELING AND FILLER AGGREGATE**	CY			
		SWITCH ROAD				
		RICHMOND		450.00	0006	01
		Item 304.0100 Total:		**450.00**		
028	401.9903	**CLASS 12.5 HMA**	TON			
		SWITCH ROAD				
		RICHMOND		220.00	0006	01
		Item 401.9903 Total:		**220.00**		
029	403.0300	**ASPHALT EMULSION TACK COAT**	SY			
		SWITCH ROAD				
		RICHMOND		1,000.00	0006	01
		Item 403.0300 Total:		**1,000.00**		
030	932.0200	**FULL-DEPTH SAWCUT OF BITUMINOUS PAVEMENT**	LF			
		SWITCH ROAD				
		RICHMOND		60.00	0006	01
		Item 932.0200 Total:		**60.00**		

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Addendum No. 2

JS-i

CODE 12.108.1000

PROSECUTION AND PROGRESS

In accordance with **Section 12.108.08, Failure to Complete on Time, Para. a., Phased and Interim Completion** the following defines the Phase and Interim Completion Dates and Associated Liquidated Damages.

Phase 1 Completion: December 15, 2012.

All work shall be completed for the Phase 1 Completion. Completion will be the point at which all work within the phase is complete such that it can be safely and effectively used by the public and when the following criteria are realized: **all rubberized asphalt chip sealing work is completed on the Reservoir Ave. Bridge 327 and the 300-foot reconstruction section of pavement from 75 feet North of pole 45 to 50 feet South of pole 46 on Switch Road in Richmond work is completed.**

Liquidated damages: $450.00 per calendar day.

Phase **2** Completion: **July 31, 2013**.

All work shall be completed for the Phase **2** Completion. Completion will be the point at which all work within the phase is complete such that it can be safely and effectively used by the public and when the following criteria are realized: all rubberized asphalt chip sealing work is completed.

Liquidated damages: $1,200.00 per calendar day.

Substantial Completion: **May 14, 2014**.

All Contract work shall be completed, as defined by **Section 12.101.71**.

Liquidated damages: $200.00 per calendar day.

Special Provision 401.9902
Class 12.5 HMA

401.01 Description.

Class 12.5 shall conform to the requirements of the RI Standard Specifications for Road and Bridge Construction with the following exceptions and modifications.

401.02 Materials.

1. Aggregate

The aggregate shall conform to the 3 to <10 million ESAL requirements of Table 5 in AASHTO M 323. No more than 10% of the aggregate shall be natural sand. All aggregate properties of Section M.03 shall apply.

2. Performance Graded Binder

The binder shall meet the requirements of PG 64-28, Grade S as specified in AASHTO M 320 and MP 19.

3. Mix Design

HMA mixes shall conform to AASHTO M 323, "Standard Specification for Superpave Volumetric Mix Design". The design procedure shall follow AASHTO R 35 "Standard Practice for Superpave Volumetric Design for Hot-Mix Asphalt (HMA)". The design specifications found in AASHTO M 323 shall supersede those found in the Standard Specifications for Road and Bridge Construction. A mix design using PG 64-28 Grade S shall be used to determine the design binder content. The VMA and $VMA_{effective}$ shall be calculated for each asphalt content during the mix design process. The following specific requirements and exceptions to AASHTO M 323 shall apply.

a. $N_{initial}$ shall be 6, N_{design} shall be 50 and N_{max} shall be 75 gyrations.

b. A moisture susceptibility test will not be required.

c. The mix shall be designed at 4% voids.

d. The VMA shall be greater than or equal to 15.5%.

e. The VFA shall be 70 to 80 percent.

f. The mix shall be coarse graded as defined in Section 6.1.3 of AASHTO M 323.

g. The dust to binder ratio ($P_{0.075}/P_{be}$) shall be 0.5 – 1.0. The design effective binder content shall be used to calculate this ratio.

h. No RAP will be allowed in the mix.

i. In addition to the sieves listed in Table 3 of AASHTO M 323, the 0.600 mm, 0.300 mm and 0.150 mm sieves will be required. The 50.0 mm and 37.5 mm sieves will not be required.

The following procedures shall be adhered to for the mix design:

- Three trial blends shall be submitted and accepted before beginning the mix design procedure.

- All trial mixture data and calculations determined for Section 9 of AASHTO R 35 shall be submitted to the Engineer. The Engineer will determine which trial mixture shall be used for the mix design procedure.

- After the mix design is completed it shall be submitted to the Engineer for acceptance.

The gyratory cores and Rice (AASHTO T 209) samples at the design binder content shall be submitted to the Engineer.

A successful plant trial batch shall be performed before production of the HMA begins.

401.03 Construction Methods.

1. Plant Laboratory

In addition to the requirements of Section 930, the contractor provided lab shall be equipped with the following:

Gyratory compactor conforming to AASHTO T 312 and two molds.

All equipment required to determine the theoretical maximum specific gravity in accordance with AASHTO T 209 Test Method A and Section 13.1. A metal pycnometer and electronic digital vacuum gauge shall also be provided.

All sieves required for the mix design process.
Facilities and equipment to perform a wet-wash in accordance with AASHTO T 30 and a faucet spray hose shall be provided.

2. Mix Production

Samples will be taken at the plant every 600 tons. The following mix production tolerances shall apply:

a. The air voids (V_a) shall be 3.0 – 5.0 percent.

b. The voids in mineral aggregate (VMA) shall be 15.5% minimum.

c. The percent passing the #200 sieve shall be 2.0% minimum.

The following tolerances for gradation shall apply:

19.0mm	100%
12.5mm	90% - 100%
9.5mm	90% max
2.36mm	Established by the mix design ±5%
0.075mm	Greater than or equal to 2.0%

In-place density shall be 92% of the theoretical maximum density obtained at the plant.

401.04 Method of Measurement.

Subsection 401.04 of the RI Standard Specifications for Road and Bridge Construction will be used as the method of measurement.

401.05 Basis of Payment.

Subsection 401.05 of the RI Standard Specifications for Road and Bridge Construction will be used as the basis of payment

Special Provision 401.9901
Class 4.75 HMA Shim Course

401.01 Description.

Class 4.75 shall conform to the requirements of the RI Standard Specifications for Road and Bridge Construction with the following exceptions and modifications.

401.02 Materials.

1. Aggregate

The aggregate shall conform to the 3 to <10 million ESAL requirements of Table 5 in AASHTO M 323. No more than 20% of the aggregate shall be natural sand. All aggregate properties of Section M.03 shall apply.

2. Performance Graded Binder

The binder shall meet the requirements of PG 64-28, Grade S as specified in AASHTO M 320 and MP 19.

3. Mix Design

HMA mixes shall conform to AASHTO M 323, "Standard Specification for Superpave Volumetric Mix Design". The design procedure shall follow AASHTO R 35 "Standard Practice for Superpave Volumetric Design for Hot-Mix Asphalt (HMA)". The design specifications found in AASHTO M 323 shall supersede those found in the Standard Specifications for Road and Bridge Construction. A mix design using PG64-28 Grade S shall be used to determine the design binder content. The VMA and $VMA_{effective}$ shall be calculated for each asphalt content during the mix design process. The following specific requirements and exceptions to AASHTO M 323 shall apply.

a. $N_{initial}$ shall be 6, N_{design} shall be 50 and N_{max} shall be 75 gyrations.

b. A moisture susceptibility test will not be required.

c. The mix shall be designed at 4% voids.

d. The VMA shall be greater than or equal to 17.5%.

e. The VFA shall be 70 to 80 percent.

f. The mix shall be coarse graded as defined in Section 6.1.3 of AASHTO M 323.

g. The dust to binder ratio ($P_{0.075}/P_{be}$) shall be 0.5 – 1.0. The design effective binder content shall be used to calculate this ratio.

h. No RAP will be allowed in the mix.

i. In addition to the sieves listed in Table 3 of AASHTO M 323, the 0.600 mm, 0.300 mm and 0.150 mm sieves will be required. The 50.0 mm and 37.5 mm sieves will not be required.

The following procedures shall be adhered to for the mix design:

- Three trial blends shall be submitted and accepted before beginning the mix design procedure.

- All trial mixture data and calculations determined for Section 9 of AASHTO R 35 shall be submitted to the Engineer. The Engineer will determine which trial mixture shall be used for the mix design procedure.

- After the mix design is completed it shall be submitted to the Engineer for acceptance.

The gyratory cores and Rice (AASHTO T 209) samples at the design binder content shall be submitted to the Engineer.

A successful plant trial batch shall be performed before production of the HMA begins.

401.03 Construction Methods.

1. Plant Laboratory

In addition to the requirements of Section 930, the contractor provided lab shall be equipped with the following:

Gyratory compactor conforming to AASHTO T 312 and two molds.

All equipment required to determine the theoretical maximum specific gravity in accordance with AASHTO T 209 Test Method A and Section 13.1. A metal pycnometer and electronic digital vacuum gauge shall also be provided.

All sieves required for the mix design process.

Facilities and equipment to perform a wet-wash in accordance with AASHTO T-30 and a faucet spray hose shall be provided.

2. Mix Production

Samples will be taken at the plant every 600 tons. The following mix production tolerances shall apply:

a. The air voids (V_a) shall be 3.0 – 5.0 percent.

b. The voids in mineral aggregate (VMA) shall be 17.5% minimum.

The following tolerances for gradation shall apply:

12.5mm	100%
9.5mm	95% - 100%
4.75mm	85% - 100%
1.18mm	Established by the mix design ±5%
0.075mm	Greater than or equal to 2.0%

3. Compaction

At least one pneumatic roller with a minimum operational weight of eight tons shall be included in the roller train for compacting leveling course.

401.04 Method of Measurement.

Subsection 401.04 of the RI Standard Specifications for Road and Bridge Construction will be used as the method of measurement.

401.05 Basis of Payment.

Subsection 401.05 of the RI Standard Specifications for Road and Bridge Construction will be used as the basis of payment.

Special Provision 401.9902
Class 9.5

401.01 Description.

Class 9.5 shall conform to the requirements of the RI Standard Specifications for Road and Bridge Construction with the following exceptions and modifications.

401.02 Materials.

1. Aggregate

The aggregate shall conform to the 3 to <10 million ESAL requirements of Table 5 in AASHTO M 323. No more than 10% of the aggregate shall be natural sand. All aggregate properties of Section M.03 shall apply.

2. Performance Graded Binder

The binder shall meet the requirements of PG 64-28, Grade S as specified in AASHTO M 320 and MP 19.

3. Mix Design

HMA mixes shall conform to AASHTO M 323, "Standard Specification for Superpave Volumetric Mix Design". The design procedure shall follow AASHTO R 35 "Standard Practice for Superpave Volumetric Design for Hot-Mix Asphalt (HMA)". The design specifications found in AASHTO M 323 shall supersede those found in the Standard Specifications for Road and Bridge Construction. A mix design using PG64-28 Grade S shall be used to determine the design binder content. The following specific requirements and exceptions to AASHTO M 323 shall apply.

a. $N_{initial}$ shall be 6, N_{design} shall be 50 and N_{max} shall be 75 gyrations.

b. A moisture susceptibility test will not be required.

c. The mix shall be designed at 4% voids.

d. The VMA shall be greater than or equal to 16.5%.

e. The VFA shall be 70 to 80 percent.

f. The mix shall be coarse graded as defined in Section 6.1.3 of AASHTO M 323.

g. The dust to binder ratio ($P_{0.075}/P_{be}$) shall be 0.5 – 1.0. The design effective binder content shall be used to calculate this ratio.

h. No RAP will be allowed in the mix.

i. In addition to the sieves listed in Table 3 of AASHTO M 323, the 0.600 mm, 0.300 mm and 0.150 mm sieves will be required. The 50.0 mm and 37.5 mm sieves will not be required.

The following procedures shall be adhered to for the mix design:

- Three trial blends shall be submitted and accepted before beginning the mix design procedure.
- All trial mixture data and calculations determined for Section 9 of AASHTO R 35 shall be submitted to the Engineer. The Engineer will determine which trial mixture shall be used for the mix design procedure.
- After the mix design is completed it shall be submitted to the Engineer for acceptance.

The gyratory cores and Rice (AASHTO T 209) samples at the design binder content shall be submitted to the Engineer.

A successful plant trial batch shall be performed before production of the HMA begins.

401.03 Construction Methods.

1. Plant Laboratory

In addition to the requirements of Section 930, the contractor provided lab shall be equipped with the following:

Gyratory compactor conforming to AASHTO T 312 and two molds.

All equipment required to determine the theoretical maximum specific gravity in accordance with AASHTO T 209 Test Method A and Section 13.1. A metal pycnometer and electronic digital vacuum gauge shall also be provided.

All sieves required for the mix design process.

Facilities and equipment to perform a wet-wash in accordance with AASHTO T-30 and a faucet spray hose shall be provided.

2. Mix Production

Samples will be taken at the plant every 600 tons. The following mix production tolerances shall apply:

a. The air voids (V_a) shall be 3.0 – 5.0 percent.

b. The voids in mineral aggregate (VMA) shall be 16.5% minimum.

The following tolerances for gradation shall apply:

12.5mm	100%
9.5mm	90% - 100%
4.75mm	90% max
2.36mm	Established by the mix design ±5%
0.075mm	Greater than or equal to 2.0%

In-place density shall be 92% of the theoretical maximum density obtained at the plant.

401.04 Method of Measurement.

Subsection 401.04 of the RI Standard Specifications for Road and Bridge Construction will be used as the method of measurement.

401.05 Basis of Payment.

Subsection 401.05 of the RI Standard Specifications for Road and Bridge Construction will be used as the basis of payment.

(R-1)

GENERAL PROVISIONS
CONTRACT SPECIFIC
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Addendum No. 2

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, and application of rubberized asphalt chip seal across existing bituminous pavements within the specified longitudinal and transverse limits **and the reconstruction of a 300 foot section of pavement 75 feet North of pole 45 to 50 feet South of pole 46 on Switch Road in Richmond**. Also included in the work shall be maintenance and protection and piloting of traffic and public access, all sweeping, adjustment of all manholes, gates, and other structures, temporary 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.

The pavement reconstruction shall include, but not be limited, to the following:

Remove and dispose of flexible pavement, remove and dispose of existing gravel subbase and replace with compacted select leveling and filler aggregate subbase, trim and fine grading, placement of tack coat and HMA.

The completed roadway shall also include the placement of temporary and permanent pavement markings, maintenance and protection of traffic, and all incidentals, complete in place and accepted, as necessary to complete the work of this contract to the satisfaction of the Engineer. Reconstruction of 300' section must be completed in 2012.

This work shall be performed statewide, along roadways or segments of roadways as directed by the Engineer and shown on the Location Plan. The Engineer reserves the right to amend, adjust, and make deletions from the listing of roadways, or portions of the rubberized asphalt chip seal quantities listed for each roadway segment.

2. LIMITS OF PROJECT

The list of roadways and roadway segments to be rubberized asphalt chip sealed is shown in Table 1. Each roadway segment is identified by number which corresponds to the numbered roadway or roadway segment shown on the Plan. Rubberized asphalt chip sealing of each listed roadway or segment thereof shall include all lanes, 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 104.07 "Significant Changes in the Character of the Work", Subsection a, paragraph 2, 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 Rubberized Asphalt Chip Sealing Quantities. Total quantities listed for each roadway or roadway segment are shown in Table 1 and are estimates of rubberized asphalt chip sealing required for the entire length of each roadway or roadway segment, within the longitudinal and transverse limits as stated.

c. Measurement of Rubberized Asphalt Chip Sealing Quantities. Areas which have been completely swept, cleaned, rubberized asphalt chip sealed, 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. All measurements shall be made while the area being measured is protected by traffic control. There also shall be a continuous record of the metered weight of rubberized asphalt chip sealing applied to ensure that the application rate remains within the specified range. The Contractor shall record rubberized asphalt chip sealed area measurements using the form shown on page CS-8, and shall submit one copy of the daily measurement records to the Engineer at the end of each work day. The Engineer shall concur with and approve the daily measurements

prior to their acceptance as interim quantities for payment.

d. Adjustments of all manholes and gates in accordance with Section 707 and 713 shall be completed prior to application of the surface seal. All adjustments shall comply with the rules and regulations of the city or town.

e. Prior to the operation, the Contractor shall verify the distributor rate of spray in the presence of the Engineer.

f. Performance and Workmanship. Prior to obtaining approval to commence the work, the Contractor shall demonstrate to the satisfaction of the Engineer: 1) that the performance of his equipment meets the requirements of the specifications herein; 2) that his traffic maintenance and protection equipment and setup meet the specifications herein, 3) that the surface preparation meet the specifications herein, and 4) that he can perform the rubberized asphalt chip sealing work to the standard of workmanship required by the contract.

In order to demonstrate the foregoing, the Contractor shall perform rubberized asphalt chip sealing of a test section, 500-feet in length, 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, traffic maintenance and protection, method of rubberized asphalt chip sealing 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 rubberized asphalt chip sealing per the specifications herein. Such approved test-section rubberized asphalt chip sealing quantities shall be included in the quantities approved for payment at the unit prices established by this contract.

g. Temporary pavement marking is required as part of this contract. Before the end of each workday, any pavement marking that has been covered or partially covered with rubberized asphalt chip sealing or otherwise nonexistent or obliterated 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.

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 application of the rubberized asphalt chip seal unless otherwise detailed in these specifications or directed by the Engineer. 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 surface sealing operations.

h. Warranty. The Contractor at no cost to the Department shall replace any material or repair any workmanship found to be defective by the Engineer for up to one year from the date of placement. Upon notification by the Engineer, as soon as weather conditions permit, the Contractor shall repair such defective areas. The repair work shall be in accordance with Section 412.0100. Any item necessary to complete this work, including traffic control, shall be provided by the Contractor at no cost to the Department. Five percent of the total amount due the Contractor will be withheld until the end of this one-year warranty period. **The warranty does not apply to Project ID No. SS2370(12)RCS, Reservoir Ave. Bridge 327.**

i. 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. The Contractor shall accept as full payment therefore, an amount equal to the actual cost to the Contractor of such work performed by the subcontractor as determined by the Engineer, plus 10 percent of said cost.

j. There shall be no rubberized asphalt chip sealing performed after Labor Day 2012. The rubberized asphalt chip sealing will restart in the spring of 2013 once daily temperatures have reached a low of 50 degrees F. Placement restrictions will not apply to Project ID No. SS2370(12)RCS, Reservoir Ave. Bridge 327. **Rubberized Asphalt Chip Seal shall be applied to Bridge 327 in 2012.**

4. REQUIRED SEQUENCE OF CONSTRUCTION

a) Rubberized Asphalt Chip Sealing

Table 1 lists the roadways or roadway segments. There is no required sequence for rubberized asphalt chip sealing. Once the Contractor has begun rubberized asphalt chip sealing of any roadway or roadway segment in accordance with the approved schedule, he

shall complete rubberized asphalt chip sealing of that roadway or roadway segment (all lanes, each direction), prior to beginning rubberized asphalt chip sealing of any other roadway or roadway segment.

b) Reconstruction Section

Two lane Roadway - The Contractor shall only work on one-half of the road at a time and shall maintain one full travel lane (10' min.) of traffic at all times during construction operations with flaggers and uniformed traffic personnel actively engaged in directing traffic. The Contractor, at his own expense, shall provide safe access and egress to all side streets and all residential and commercial driveways. The safe access and egress must be maintained at all times. Night time work is allowed. Should the Contractor elect to work at night, lighting shall conform to the latest requirements of the RIDOT specifications. The cost of the work zone lighting shall be incidental to the contract. Highway lighting shall not be relied upon for work zone lighting.

All work shall be completed in accordance with the Traffic-Related Work Restrictions indicated in the TMP.

The 300 foot section of pavement from 75 feet North of pole 45 to 50 feet South of pole 46 shall be reconstructed as follows:

a) **The asphalt pavement and 12 inches of the gravel shall be removed full width and replaced with 13 inches of compacted select leveling and filler aggregate subbase in accordance with Section 304 and four inches of HMA in two 2-inch lifts of Class 12.5 HMA.**

b) **Reconstruction Survey: The Contractor shall establish existing grades, survey baseline, cross slopes and cross sections at 50 foot intervals in accordance with section 934, starting 200' prior to the reconstruction section and ending 200' after the reconstruction section. The Contractor shall conduct a survey from top of the final gravel grades and submit the same to the Engineer for approval before paving operations. All survey data shall be available to the Engineer upon request. The Contractor shall match final grades and sections after paving. It will be the responsibility of the Contractor to develop a grade plan based from the sections taken. The cost of all survey work is incidental to the contract and will not be measured for payment.**

c) **The following shall apply when there is traffic in areas where pavement has been removed and the subbase/subgrade is exposed at the end of the work day:**

The Contractor shall "square-off" the pavement approximately perpendicular to the direction of travel. Existing gravel or temporary patch

may be used to construct a ramp so as not to leave a vertical drop-off. This material is to be removed before paving operations recommence. Should the Contractor's operation result in a vertical drop off greater than 2" between adjacent travel lanes, the contractor shall place temporary concrete barrier along the entire length of the longitudinal drop off and station a 24 hour police detail for the length of time that the temporary barrier is in place at his own cost. The Contractor shall place W8-1 (36"x36") "BUMP AHEAD" and "BUMP" signs at each drop-off for each direction of traffic. The cost for all this work shall be considered incidental to the contract.

Any residue or waste generated as a result of any operation shall be removed by the contractor at his own expense.

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, pilot vehicles, truck mounted arrow boards, and protective devices at each work location to conform with the Manual on Uniform Traffic Control Devices, its latest revisions, and as shown on pages CS-8 – CS-11. 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 rubberized asphalt chip sealing. There shall be no separate item or payment for provision of pilot vehicles, truck mounted arrow boards, construction signing, protective devices, nor for the maintenance and protection of traffic as shown on pages CS-8 – CS-11.

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.

The Contractor shall install and maintain a Rhode Island Standard 26.2.0 Polyethylene Drum with Markings at each location where adjustments to grade have been made until the resurfacing work has been performed. Other types of protective devices may be used, if approved by the Engineer.

6. MAINTENANCE OF PUBLIC ACCESS

The Contractor shall keep one 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.

Posted Speed	Distance From Edge of Travel Lane
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 with appropriate traffic control devices. On roads with curbing and sidewalks, no portion of the shoulders and sidewalks may be used for storage of construction equipment and/or material.

8. PRE-CONSTRUCTION CONFERENCE

There shall be a pre-construction conference scheduled in coordination with the RIDOT Construction Section prior to the commencement of work. This will be a Schedule Level C Project.

9. TRANSPORTATION MANAGEMENT PLAN

Included as an appendix to these Contract Specific General Provisions is the Transportation Management Plan (TMP) for this project. The TMP lays out the set of coordinated transportation management strategies that will be used to manage the work zone safety and mobility impacts of this project. In the event of a discrepancy between information in the TMP and information elsewhere in the Contract Documents, the former shall govern.

The Contractor's attention is called to the Job Specific Specification for **SECTION 103-AWARD AND EXECUTION OF THE CONTRACT,** which describes the requirements for the Contractor's designation of a TMP Implementation Manager for the Contract.

The Contractor's attention is called to the Job Specific Specification for **SECTION 105-CONTROL OF WORK,** which describes the requirements for the training of all Contractor and Subcontractor personnel involved in work zone design, implementation, operation, inspection, management, and/or enforcement.

The Department's latest Training Guidelines for Personnel Responsible for Work Zone Safety & Mobility are available under the "Training" section at http://www.dot.ri.gov/humanresources/index.asp

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TABLE 1
RUBBERIZED ASPHALT CHIP SEALING

TOWN NAME	PROJECT ID	ROAD	ROUTE	LIMITS	LENGTH (MI)	WIDTH (FT)	QUANTITY (SY)
BURRILLVILLE	SS1005(12)RCS	ROUND TOP RD	RT 96	BROOK RD TO MASS S/L	1.0	29	17354
BURRILLVILLE	SS1012(12)RCS	SHERMAN FARM RD	RT 98	1 MILE NORTH OF SCHOOL ST TO MASS S/L	2.1	25	31240
CRANSTON	SS2050(12)RCS	PIPPIN ORCHARD RD		RT 12 TO HOPE RD	1.8	25	26836
FOSTER	SS2010(12)RCS	CUCUMBER HILL RD		MOOSEUP VALEY RD TO RT 6	4.5	32	84667
SCITUATE	SS1240(12)RCS	ELMDALE RD		POLEBRIDGE RD TO SAWMILL RD	0.6	26	8847
HOPKINTON	SS3175(12)RCS	MAIN ST	RI 3	POLE 38 TO WHEELER LN	0.9	44	23887
HOPKINTON	SS3565(12)RCS	MAIN ST	RI 3	LAWTON RD TO CANOCHET RD	1.5	30	26576
HOPKINTON	SS3176(12)RCS	SPRING ST	RI 138	SOAP HOUSE LN TO POND RD	2.6	31	46921
SCITUATE	SS2040(12)RCS	EAST RD	RI 116	DANIELSON PK TO RI 12	5.4	28	87883
PROVIDENCE	SS2370(12)RCS	RESERVOIR AVE	RI 2	BRIDGE 327 LIMITS	0.03	48	950
RICHMOND	**SS3695(12)REC***	**SWITCH RD**		**75' NORTH OF POLE 454 TO 50' SOUTH OF POLE 46**	**300 FT.**	**30**	**NA**

*** Reconstruction Section**
Application limits for rubberized asphalt chip sealing shall be as listed and as coordinated with the Engineer.

Rubberized asphalt chip seal shall be placed as follows:
- Edge of road to edge of road when roadway shoulders are less than 6 feet
- From white edge line to white edge line when roadway shoulders are 6 feet and greater

LEVEL 3 TRANSPORTATION MANAGEMENT PLAN

Project Name: 2012 RUBBERIZED ASPHALT CHIP SEALING
RI Design Contract No(s): N/A
RI Construction Contract No(s): 2012-CR-071

Submission: ADV Date: 7/26/2012

PROJECT INFORMATION

Brief Project Description: This project involves grinding the existing epoxy pavement markings, applying new water based pavement markings to spot leveling locations with asphalt to restore profile, and applying 1/2 inch thick 20% rubberized asphalt chip seal, sweeping and restriping with water bourne pavement markings. The chip seal treatment will be applied from edge to edge of road within the limits specified in the contract. In addition to the this work there will also be the recontruction of 300ft of Switch Road in Richmond.

Work Limits: The work is located Statewide in the Cities and Towns of Burrillville, Cranston, Foster, Hopkinton, Richmond, and Scituate.

GENERAL RESTRICTIONS

ROADWAY NAME	FROM	TO	LENGTH (Miles)
ROUND TOP RD (RT 96)	BROOK RD	MASS S/L	1
SHERMAN FARM RD (RT 98)	1 MILE NORTH OF SCHOOL ST	MASS S/L	2.1
PIPPIN ORCHARD RD	RT 12	HOPE RD	1.8
CUCUMBER HILL RD	MOOSEUP VALLEY RD	ROUTE 6	4.5
ELMDALE RD	POLEBRIDGE RD	SAWMILL RD	0.6
MAIN ST (RI 3)	POLE 38	WHEELER LN	0.9
MAIN ST (RI 3)	LAWTON RD	CANOCHET RD	1.5
SPRING ST (RI 138)	SOAP HOUSE LN	POND RD	2.6
EAST RD (RI 116)	DANIELSON PIKE	RI 12	5.4
SWITCH ROAD	POLE 45	POLE 46	300FT
RESERVOIR AVE BRIDGE (RI 2)	BRIDGE NO.327 LIMITS		<0.1

General Project Schedule*: The work is expected to begin late summer 2012 and is expected to be completed by the end of September 2012.

*The information in this section is not intended to and shall not supersede the official schedule for the project.

TRAFFIC RELATED WORK RESTRICTIONS

General Restrictions: See Attached General Restrictions Chart
The chip seal treatment on Reservoir Ave will be done with lane shifts keeping one lane of traffic in each direction open at all times.

Holiday Restrictions: No lane and/or shoulder closures allowed after 13:00 on the Friday preceding a holiday weekend.

EASTER SUNDAY*
- No lane and/or shoulder closures allowed on Saturday and/or Sunday.

NEW YEAR'S DAY, INDEPENDENCE DAY, VETERANS DAY*, & CHRISTMAS DAY
- No lane and/or shoulder closures allowed after 13:00 on the day before the holiday.
- No lane and/or shoulder closures allowed on the holiday.

DR. MARTIN LUTHER KING JR. DAY*, MEMORIAL DAY, VICTORY DAY*, LABOR DAY, & COLUMBUS DAY*
- No lane and/or shoulder closures allowed on Saturday, Sunday, and/or Monday.

THANKSGIVING DAY
- No lane and/or shoulder closures allowed after 13:00 on the Wednesday preceding Thanksgiving Day
- No lane and/or shoulder closures allowed on Thanksgiving Day
- No lane and/or shoulder closures allowed on Friday, Saturday, and/or Sunday

*Note: Lane and/or shoulder closures may be implemented after 19:00 on the holiday

TEMPORARY TRAFFIC CONTROL PLANS

These RIDOT- and/or Designer-Developed TTC Plans will be used during the work on this project

RIDOT TYPICAL TTC PLANS	Included In: TMP	Plan Set
☐ Mobile Operation		
☐ Work Beyond the Shoulder		
☑ Shoulder Closure - Two Lane Road	X	
☐ Shoulder Closure - Limited Access		
☑ 1-Side Lane Shift - Two Lane Road	X	
☐ 2-Side Lane Shift - Two Lane Road		
☐ Lane Shift - Limited Access		
☑ Lane Closure - Two Lane Road	X	
☐ Lane Closure - Four Lane Road		
☐ Lane Closure - Limited Access		
☐ Double Lane Closure - Limited Access		

DESIGNER-DEVELOPED TTC PLANS	Included In: TMP	Plan Set

PUBLIC INFORMATION PLAN

These strategies will be used to provide information concerning the project to road users and the community

SELECTED STRATEGIES	RESPONSIBILITIES / REQUIREMENTS / SPECIAL CONSIDERATIONS
RIDOT travel advisories news releases	RIDOT TMP Imp. Mngr. to send CMG Restriction Form to Communications min. 48 hours in advance of restriction.
RIDOT travel advisories web site	RIDOT TMP Imp. Mngr. to send CMG Restriction Form to Communications min. 48 hours in advance of restriction.
RIDOT 511 traveler information system	RIDOT TMP Imp. Mngr. to send CMG Restriction Form to TMC min. 48 hours in advance of restriction.

TRANSPORTATION OPERATIONS PLAN

These strategies will be used to provide improved transportation operations/safety within project work zones

SELECTED STRATEGIES	RESPONSIBILITIES / REQUIREMENTS / SPECIAL CONSIDERATIONS

PERFORMANCE MONITORING, CHANGES TO TMP, & CONTINGENCIES

PERFORMANCE MONITORING, CHANGES TO TMP, & CONTINGENCIES

The Contractor's TMP Implementation Manager (if identified below) is responsible for keeping the portion of the project being used by public traffic in a condition that (1) safely and adequately accomodates such traffic and (2) is in accordance with the Traffic-Related Work Restrictions, the Temporary Traffic Control Plans, and where appropriate, the other transportation management strategies identified above. The RIDOT TMP Implementation Manager should inspect the project work zones at initial setup, at the start of each subsequent work day, and just prior to extended breaks in the work (e.g., weekends) for conformance with the Temporary Traffic Control Plans, the ATSSA Quality Guidelines for Work Zone Traffic Control Devices, and where applicable, the other transportation management strategies identified above. He/she should also document work zone-related feedback and/or legitimate complaints that are received from the public through phone calls, in person, in writing, or by electronic mail.

If at any time (1) a significant deviation from any of the strategies included in the TMP (e.g., the use of an alternate construction sequence) is desired by one or more members of the project implementation team, (2) field observations and/or data suggest that impacts to road users are or will be unacceptable, or (3) one or more performance requirements established in the TMP are not being met in the field, the RIDOT TMP Implementation Manager shall report the situation to his/her supervisor or Division/Section/Unit manager. The supervisor / manager will coordinate with the State Traffic Engineer, the Deputy Chief Engineer, the TMP Implementation Manager(s), the Chief Engineer, and/or other interested parties as appropriate and/or necessary to consider and determine whether revised and/or alternate strategies should be implemented in an effort to lessen the adverse safety and/or mobility impacts of the project. If the supervisor / manager deems that strategy changes should be implemented, the changes shall be documented in a revised version of the TMP and the Deputy Chief Engineer, the State Traffic Engineer, and the Chief Engineer must approve of the revised TMP prior to their implementation.

If a significant deviation from any of the strategies included in the TMP is requested by the Contractor, unless directed otherwise by the RIDOT the Contractor is responsible for preparing and submitting to the RIDOT TMP Implementation Manager appropriate documentation (e.g., design calculations, analysis reports, Temporary Traffic Control Plans, etc.) showing that the requested change(s) are (1) feasible and (2) expected to result in safety and mobility impacts that are no more adverse than the impacts resulting from the strategies already included in the latest approved TMP. The RIDOT will review and consider the submittal(s) as described in the preceding paragraph and will determine whether the changes should be implemented. If the requested changes are approved by the RIDOT, unless otherwise directed by the RIDOT the Contractor shall prepare and submit to the RIDOT TMP Implementation Manager a revised version of the latest approved TMP in both printed and electronic (Microsoft® Excel) format that documents all of the approved changes. Work to implement the changes shall not begin until the Deputy Chief Engineer, the State Traffic Engineer, and the Chief Engineer have

When unexpected events (e.g., crashes, inclement weather, unforeseen traffic demands, etc.) occur in a project work zone where one or more lanes are closed, the RIDOT TMP Implementation Manager or his/her responsible designee should (1) determine whether or not the lane closure(s) can/should be removed in order to improve traffic operations and/or minimize delays and (2) if deemed appropriate, take action to remove the lane closure(s).

Other
Requirements:

TMP APPROVALS

All approvals must be obtained prior to start of work.

DEPUTY CHIEF ENGINEER

Signature: [signature]
Frank Corrao, P.E.
Date: 8-22-12

Revision #	Initials	Date
1	FC	8/30/12

STATE TRAFFIC ENGINEER

Signature: [signature]
Robert Rocchio, P.E.
Date: 8-7-12

Revision #	Initials	Date
1	RM	8/30/12

CHIEF ENGINEER

Signature: [signature]
Kazem Farhoumand, P.E.
Date: 8/22/12

Revision #	Initials	Date
1	KF	8/30/12

TMP IMPLEMENTATION MANAGERS

Project managers with the primary responsibility & authority for implementation of this TMP

RIDOT

Name:
Title:
Unit:
Office Phone:
Mobile Phone:
E-Mail:

CONTRACTOR (if contract work)

Name:
Title:
Company/Unit:
Office Phone:
Mobile Phone:
E-Mail:

Addendum No. 2

Attachment to Level 3 TMP - RIC No. N/A /Rubberized Asphalt Chip Sealing:
TRAFFIC-RELATED WORK RESTRICTIONS / General Restrictions:

Location	Time of Day From	To	MINIMUM NUMBER OF LANES & SHOULDERS TO REMAIN OPEN TO TRAFFIC[1,2,3,4] Day of Week SUN	MON	TUES	WED	THURS	FRI	SAT
Pippin Orchard Rd	0:00	5:00	ALL	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	ALL
	5:00	6:00	ALL	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	ALL
	6:00	9:00	1 L (alt)	ALL	ALL	ALL	ALL	ALL	1 L (alt)
	9:00	11:00	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)
	11:00	15:00	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)
	15:00	18:00	1 L (alt)	ALL	ALL	ALL	ALL	ALL	1 L (alt)
	18:00	21:00	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	ALL	ALL
	21:00	24:00	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	ALL	ALL
Reservoir Ave Bridge No.327	0:00	5:00	ALL	1L	1L	1L	1L	1L	ALL
	5:00	6:00	ALL	1L	1L	1L	1L	1L	1L
	6:00	9:00	ALL	ALL	ALL	ALL	ALL	ALL	1L
	9:00	11:00	ALL	1L	1L	1L	1L	1L	1L
	11:00	15:00	ALL	1L	1L	1L	1L	1L	ALL
	15:00	19:00	ALL	ALL	ALL	ALL	ALL	ALL	ALL
	19:00	24:00	1L	1L	1L	1L	1L	ALL	ALL
Round Top Rd (Rt 98), Sherman Farm Rd (Rt 98), Cucumber Hill Rd, Elmdale Rd, Main St (RI 3), Spring St (RI 138), East Rd (RI 116), Switch Rd	0:00	6:00	ALL	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	ALL
	6:00	9:00	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)
	9:00	15:00	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)
	15:00	18:00	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)
	18:00	24:00	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	1 L (alt)	ALL	ALL

LEGEND

ALL	All travel lanes and shoulders shall remain open to traffic
1 L (alt)	A minimum of one 11-foot wide travel lane shall remain open to alternating traffic
1 L	A minimum of 1(one) travel lane in each direction shall remain open to traffic

NOTES

1 The set-up and break-down of temporary traffic control devices within a traveled way shall be construed as a closure of that traveled way.
2 The provisions noted herein shall not free the Contractor from his responsibility to conduct all work in such a manner that assures the least possible obstruction to traffic.
3 At locations with a sidewalk(s), a minimum of one sidewalk on one side of the roadway shall remain open to pedestrians at all times.
4 Access to and egress from all side streets, driveways, buildings, and other pedestrian pathways intersecting the Project work zones shall be maintained at all times unless otherwise noted or shown on Plans.

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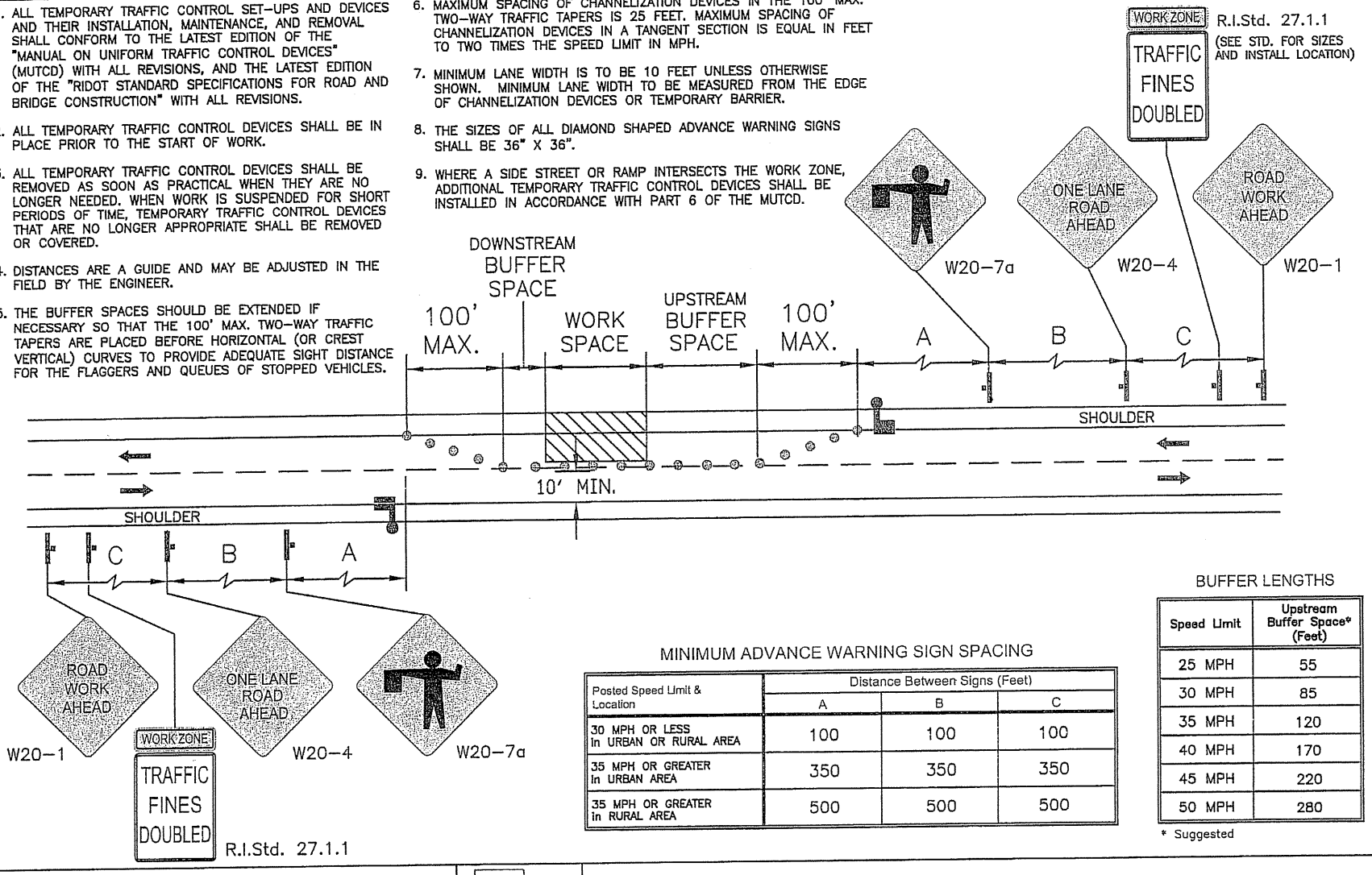
NOTES:

1. ALL TEMPORARY TRAFFIC CONTROL SET-UPS AND DEVICES AND THEIR INSTALLATION, MAINTENANCE, AND REMOVAL SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) WITH ALL REVISIONS, AND THE LATEST EDITION OF THE "RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" WITH ALL REVISIONS.
2. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF WORK.
3. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE REMOVED AS SOON AS PRACTICAL WHEN THEY ARE NO LONGER NEEDED. WHEN WORK IS SUSPENDED FOR SHORT PERIODS OF TIME, TEMPORARY TRAFFIC CONTROL DEVICES THAT ARE NO LONGER APPROPRIATE SHALL BE REMOVED OR COVERED.
4. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
5. THE BUFFER SPACES SHOULD BE EXTENDED IF NECESSARY SO THAT THE 100' MAX. TWO-WAY TRAFFIC TAPERS ARE PLACED BEFORE HORIZONTAL (OR CREST VERTICAL) CURVES TO PROVIDE ADEQUATE SIGHT DISTANCE FOR THE FLAGGERS AND QUEUES OF STOPPED VEHICLES.
6. MAXIMUM SPACING OF CHANNELIZATION DEVICES IN THE 100' MAX. TWO-WAY TRAFFIC TAPERS IS 25 FEET. MAXIMUM SPACING OF CHANNELIZATION DEVICES IN A TANGENT SECTION IS EQUAL IN FEET TO TWO TIMES THE SPEED LIMIT IN MPH.
7. MINIMUM LANE WIDTH IS TO BE 10 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF CHANNELIZATION DEVICES OR TEMPORARY BARRIER.
8. THE SIZES OF ALL DIAMOND SHAPED ADVANCE WARNING SIGNS SHALL BE 36" X 36".
9. WHERE A SIDE STREET OR RAMP INTERSECTS THE WORK ZONE, ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH PART 6 OF THE MUTCD.



MINIMUM ADVANCE WARNING SIGN SPACING

Posted Speed Limit & Location	Distance Between Signs (Feet)		
	A	B	C
30 MPH OR LESS in URBAN OR RURAL AREA	100	100	100
35 MPH OR GREATER in URBAN AREA	350	350	350
35 MPH OR GREATER in RURAL AREA	500	500	500

BUFFER LENGTHS

Speed Limit	Upstream Buffer Space* (Feet)
25 MPH	55
30 MPH	85
35 MPH	120
40 MPH	170
45 MPH	220
50 MPH	280

* Suggested

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

TEMPORARY
TRAFFIC CONTROL PLAN

TYPICAL LANE CLOSURE ON TWO-LANE ROADWAY

NOT TO SCALE

DATE: 12-23-08

(R-2)