

ADDENDUM NO. 2

CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES

PROJECT NAME: **2013 - 2014 Task Order Contract Package 8**

DATE: 11/28/2012

ADDENDUM NO.2

This addendum should be included in and be considered part of the plans and specifications for the name of the project. The contractor shall be required to sign an acknowledgement of the receipt of this addendum and submit with their bid.

CIMS PROJECT NO.: **23-01304**



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1. Note to Contractors per pre bid meeting:
 - a. Contractor shall furnish all truck tickets for asphalt as provided by the material supplier(s). The following information will be printed on each ticket by the supplier: date, time, amount (in tons), and street name where the materials will be used. Each ticket must be submitted to City officials.
 2. Add the following special provision
 - a. Item 502 Concrete Sidewalks (502.1A Handicap Ramps)
 - b. TRMSS special provision for Item 315
 3. Add the following special specification
 - a. Item 241 Emulsion Aggregate Slurry Seal Mix
 4. Replace the following forms with the attached forms
 - a. 025 Unit Pricing Form
 - i. Add Item 205.2 HMAP (6" Compacted Depth)
 - ii. Revise Fog Seal (TRMSS)

** Addenda Acknowledgement Form for Addendum 2 is attached herein. This form must be signed and submitted with the bid package.

SPECIAL PROVISION
Item 502 Concrete Sidewalks

For this project, Item 502 "Concrete Sidewalks" of the Standard Specifications is hereby amended with respect to the clauses cited below, and no other clauses or requirements on the Item are waived or changed hereby.

Article 502.4. Construction. G. Curb Ramps. This paragraph is void and replaced with the following:

Curb ramps must include a detectable warning surface and conform to the details shown on the plans. Confirm that abrupt changes in sidewalk elevation do not exceed ¼ inch, sidewalk cross slope does not exceed 2%, curb ramp grade does not exceed 8.3%, and flares adjacent to the ramp do not exceed 10% slope.

Construct curb ramps to include the following provisions:

- Construct detectable warning surface with truncated domes conforming to the City of San Antonio Wheelchair Ramp Standards sheet.
- Remove existing flatwork in accordance with the specification for Item 103, except measurement and payment.
- Construct new curb in accordance with the specification for Item 500, except measurement and payment.
- Construct concrete retaining wall (combination type), up to a maximum height of 6 inches, in accordance with the specification for Item 506, except measurement and payment.
- Adjust or relocate existing signs as directed.
- Contractor shall not leave the ramp unattended more than 1 day.
- Concrete work shall be free from graffiti of any kind.
- Relocate irrigation systems in accordance with the specification for Item 552, except measurement and payment.
- Contractor shall deliver flyers at least 2 days in advance.
- Relocate landscape as directed.
- Avoid damage to the property of others. Contractor will be held liable for damage.

Article 502.5. Measurement. This paragraph is void and replaced with the following:

Sidewalks will be measured by the square yard of surface area at the depth specified. Curb ramps will be measured by the square yard of surface area or by each unit, as specified in the plans.

When measured by the square yard of surface area, curb ramps will consist of the curb ramps of the type specified in the plans, landings, adjacent flares or side curb as shown in the plans, detectable warning surface, concrete retaining wall (combination type up to 6" in height), sign adjustment or relocation, irrigation relocation, landscape relocation, delivery of flyers, and graffiti removal.

When measured by "each unit", each curb ramp unit will consist of one curb ramp of the type specified in the plans, removal of existing flatwork, one landing and up to two wings, one detectable warning surface, new curb, concrete retaining wall (combination type up to 6" in height), concrete surfaces up to a maximum of 14 square yards, sign adjustment or relocation, irrigation relocation, landscape relocation, delivery of flyers, and graffiti removal.

Article 502.6. Payment. The following paragraph is added:

When curb ramps are noted in the plans to be measured by "each unit", the work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Curb Ramps". Concrete surface for a curb ramp exceeding 14 SY will be paid as Concrete Sidewalk per square yard. When concrete retaining wall (combination type) is needed to exceed 6 inches in height, it shall be measured and paid for in accordance with Item 506.

Article 502.7. Bid Item. The following paragraph is added:

Item 502.1A – Curb Ramps – Each

**TRMSS
SPECIFICATIONS AND GENERAL REQUIREMENTS**

PRODUCT REQUIREMENTS:

It is understood material provided by the manufacturer is ready for use and vendor shall not dilute or thin the material by adding a liquid such as water, or any other additive of any kind or consistency.

Tire Rubber Modified Surface Seal (TRMSS) (for preventive sealing). TRMSS shall meet the following requirements:

Hazardous Materials Identification System (HMIS) ratings:

HMIS	Rating
Health	1
Flammability	0
Reactivity	0
Protective Equipment	E

American Society for Testing and Materials (ASTM):

TEST METHOD	PROPERTY	REQUIREMENT
ASTM D 562	Viscosity, Krieb Unit (KU)	35 to 65
ASTM D 2939.07	Weight/Gallon	8.3 – 8.6
ASTM D 2939.08	Residue by Evaporation %	>33.0
ASTM244 (sec. 44-47)	Sieve Analysis	0.1 max
ASTM D 93	Flash Point (of residue)	>500
ASTM D 2939.05	Emulsion Uniformity	Pass
ASTM D 2939.14	Resistance to Heat	Pass
ASTM D 2939.15	Resistance to Water	Pass
ASTM D 2939.19	Wet Flow	Pass
Performance Criteria Testing*		
ASTM G 154	Accelerated Weathering Test **	Pass
Asphalt Cement Certificate of Compliance ***		
Certificate of compliance	Ground Whole Tire Rubber %	10 min
ASTM D 5	Penetration 77°F, 100g, 5sec, dmm	15-55
ASTM D 36	Softening Point, °F	> 140
ASTM D 2042	Solubility % (3 set average)	>98.0

* TRMSS, ready to use.

** 1,000 hours. UVA-340 lamp, 0.77 W/m²(V1.0 calibration), 8 hours UV light @ 50°C, 5min. Spray, 3.55 hours condensation @ 50°C.

*** Ground whole tire rubber modified asphalt cement.

International Slurry Surfacing Association (ISSA):

TEST METHOD	PROPERTY	REQUIREMENT
Performance Testing*	Criteria	
ISSA TB-100	Wet track Abrasion, %****	<5.0%

* TRMSS, ready to use.

**** Calculated weight loss, percentage of original Volume, 1 hour soak.

MATERIAL TESTING:

Materials under this contract are subject to testing by City or its agent to insure compliance with specifications. All tests shall be made as per method used by the ASTM, unless otherwise specified. When test analysis shows material meet specifications, the City will pay for said test. When test analysis shows material does not meet specifications, Vendor will pay for said test. Vendor shall pay City within 30 days of a demand therefore. If Vendor does not pay within the time stated, City may deduct the testing fee from any amounts owed to vendor under this contract or any other contract. The City also reserves the right to test material at the manufacturing plant and the vendor's (if applicable) location to confirm material is not diluted or made thinner or less concentrated.

LIQUIDATED DAMAGES FOR UNSATISFACTORY TEST RESULTS OR DISPARITIES:

The Parties agree that the actual damages that might be sustained by City by reason of vendor's failure to perform in a satisfactory manner (as opposed to failure to perform in any manner) are uncertain and would be difficult of ascertainment, and that the sums set forth below for the particular breaches specified would be a reasonable compensation for such breaches. Vendor hereby promises to pay, and City hereby agrees to accept, such sum(s) as liquidated damages, and not as a penalty, in the event of such breach(es). Vendor shall pay such sum(s) within 5 days of receipt of notice from city, which notice shall describe the breach. If vendor fails to pay such sum(s) in a timely manner, City may withhold said sum(s) from any amounts due to vendor under this or any other contract with City. The assessment of liquidated damages shall be based on product test results. *Unsatisfactory performance is a test result showing that the product falls below the minimum requirements or test results that show more than 5% variance in any of the requirements between the time the product is loaded at the manufacturer's and the time vendor tenders the product to City (if vendor is not the manufacturer).* Continued unsatisfactory performance may result in contract termination.

For an unsatisfactory performance, a **\$300.00** daily charge will apply until test satisfactory test results are provided and approved by the City.

It is expressly understood and agreed that the above damage amounts are not to be considered a penalty, but shall be deemed, taken and treated as reasonable liquidated damages.

ITEM 241

EMULSION AGGREGATE SLURRY SEAL MIX

1.1 DESCRIPTION: This item shall govern for the asphalt emulsion aggregate slurry seal mix that will be used for pavement preservation. This item shall consist of a mixture of modified emulsified asphalt, ground tire rubber, mineral aggregate, and water. The slurry seal mix shall be produced in an approved centrally located facility and the mix shall be tested and certified by the producer to meet specifications prior to shipment to distribution location(s). The Slurry Seal mix shall be uniform and stable for placement the day of loading when proper agitation is maintained. The aggregates, emulsion, and water should form a creamy-textured slurry that, when spread, will flow ahead of the strike-off squeegee. When cured, the surface shall have a uniform appearance, fill cracks, and adhere to the existing pavement surface. Proportions shall be based on the mix design specifications herein.

MATERIALS

2.1 AGGREGATE: The aggregate shall consist of sound and durable Trap Rock 100% crushed in accordance with these specifications. The aggregate shall be clean and free from vegetable matter, dirt, and other deleterious substances. The aggregate shall have a sand equivalent of not less than 45 percent when tested in accordance with ASTM D 2419. The aggregate shall show a loss of not more than 35 percent when tested in accordance with ASTM C 131. The sodium sulfate soundness loss shall not exceed 12 percent, or the magnesium soundness loss shall not exceed 20 percent after 5 cycles when tested in accordance with ASTM C 88.

The combined aggregate shall conform to the gradation shown in Table 1 when tested in accordance with ASTM C 136 and ASTM C 117.

TABLE 1

GRADATION OF AGGREGATES

Sieve Size	Percent by Weight Passing Sieve
No.4 (4.75 mm)	100
No.8 (2.36 mm)	75 – 85
No.16 (1.18 mm)	30 – 40
No.30 (600 micro m)	10 – 20
No.50 (300 micro m)	3 – 8
No.100 (150 micro m)	0 – 2
No.200 (75 micro m)	0 – 1
Emulsion content by dry weight of aggregate	14% - 17%
Ground tire rubber by dry weight of aggregate	5% Minimum

The mix formula (mix design) shall be run using aggregate within the gradation band shown in Table 1. Once the mix design has been submitted and approved, the aggregate used on the project shall be within the gradation bands in Table 1.

- 2.2 MINERAL FILLER:** If mineral filler, in addition to that naturally present in the aggregate, is necessary, it shall meet the requirements of ASTM D 242 and shall be used in the amounts required by the mix design. The mineral filler shall be considered as part of the aggregate.
- 2.3 GROUND TIRE RUBBER:** The material shall be granulated tire rubber specifically designed for use with the Slurry Seal mixes. The rubber shall have a specific gravity between 1.15 and 1.20. One hundred percent of the granulated tire rubber shall pass a No. 16 sieve, 95% shall pass a No. 20 sieve, and a maximum of 2 percent shall pass a No. 200 sieve.
- 2.4 POLYMER MODIFIER:** Polymer modifier shall be latex and shall be added at a minimum of 2 percent polymer solids by weight of the emulsion.
- 2.5 WATER:** All water used in making the slurry shall be potable and free from harmful soluble salts and chemicals.
- 2.6 EMULSION:** The emulsion shall be a slow-set or a quick-set type of emulsion as approved by the Engineer. The emulsion shall contain ground tire rubber and polymer modifiers and shall conform to the following quality requirements as shown in Table 2:

TABLE 2
TESTS ON EMULSION

Emulsion Property	Test Procedure	Min	Max
Rotational viscosity at 77°F, cP	ASTM D 7226	200	2000
Uniformity	ASTM D 2939		Pass ₁
Resistance to heat	ASTM D 2939		Pass ₂
Resistance to water	ASTM D 2939		Pass ₃
Wet flow, mm	ASTM D 2939	--	0
Residue by evaporation, % by weight	ASTM D 2939	33	--
Tests on residue from evaporation:			
Penetration, 77°F, 100 g, 5 sec.	ASTM D5	15	30
Flash point, Cleveland open cup, °F	ASTM D92	500	
Softening Point, °F ⁴	ASTM D36	230	--
1. Product shall be homogenous and show no separation or coagulation that cannot be overcome by moderate stirring. 2. No sagging or slippage of film beyond the initial reference line. 3. No blistering or re-emulsification. 4. Cure the emulsion in the softening point ring in a 200°F ± 5°F oven for 2 hr.			

COMPOSITION AND APPLICATION

- 3.1 COMPOSITION:** The slurry shall consist of a mixture of polymer emulsified asphalt, mineral aggregate, ground tire rubber, and water.
- 3.2 JOB MIX FORMULA:** The Vendor shall submit to the Engineer for approval a complete mix design on the materials proposed for use, prepared and certified by an approved laboratory. Compatibility of the aggregate, emulsion, mineral filler, and other additives shall be verified by the mix design. The mix design shall be made with the same aggregate and emulsion that the Vendor will supply. The

slurry seal mix shall be produced in an approved centrally located facility and the mix shall be pretested and certified to meet specifications by the producer prior to shipment to distribution location.

3.3 APPLICATION RATE: Unless otherwise specified, the slurry seal shall be applied to at the application rates of 10-15 pounds of mixture per square yard. The rate of application shall not vary more than +/- 2 pounds per square yard.

4.1 CERTIFICATE OF ANALYSIS: The producer of the Slurry Seal Mix shall make available a certificate of analysis (C of A) for the slurry seal mix supplied under the contract. The C of A shall indicate the proportions of aggregates, mineral filler, ground tire rubber, water and emulsion based on the dry aggregate weight. The main items of design in the Emulsion Slurry Seal are aggregate gradation, emulsion content and consistency of the mixture.

The Vendor shall submit to the Engineer for approval a complete mix design on the materials proposed for use, prepared and certified by an approved laboratory. Compatibility of the aggregate, emulsion, mineral filler, and other additives shall be verified by the mix design. The mix design shall be made with the same aggregate and emulsion that the Vendor will supply.

CITY OF SAN ANTONIO
025 UNIT PRICING FORM

PROJECT NAME: 2013 - 2014 Task Order Contract Package 8
PROJECT NO. 23-01304

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	103.1			REMOVE CONCRETE CURB	LF	6,500			
	103.3			REMOVE SIDEWALKS & DRIVEWAYS	SF	2,000			
	103.4			REMOVE MISCELLANEOUS CONCRETE	SF	1,500			
	104.1			STREET EXCAVATION	CY	1,500			
	107.1			EMBANKMENT (FINAL) (DENS CONT) (TY A)	CY	500			
	200.1			FLEXIBLE BASE (6" COMPACTED DEPTH)	SY	1,000			
	200.1			FLEXIBLE BASE (8" COMPACTED DEPTH)	SY	1,000			
	202.1			PRIME COAT	GAL	38,000			
	203.1			TACK COAT	GAL	5,000			
	205.2			HOT MIX ASPHALTIC PAVEMENT TYPE B (6" THICK)	SY	5,000			
	205.4			HOT MIX ASPHALTIC PAVEMENT TYPE D (1.5" THICK)	SY	27,000			
	205.4			HOT MIX ASPHALTIC PAVEMENT TYPE D (2" THICK)	SY	300,000			
	205.4A			HOT MIX ASPHALTIC PAVEMENT TYPE D (LEVEL UP)	SY	10,000			
	**205.4B			HOT MIX ASPHALTIC PAVEMENT TYPE D (LOOSE)	TON	3,700			
	208.2			SALVAGING, HAULING AND STOCKPILING RECLAIMABLE ASPHALTIC PAVEMENT (LOOSE VEHICLE MEASUREMENT)	CY	11,000			
	209.1			BUS STOP CONCRETE PAD (10" DEPTH)	SY	1,500			
	230.3A			REPLACING BASE & PVMT WITH TYPE A PVMT (6" COMPACTED DEPTH)	SY	30,000			
	230.3B			REPLACING BASE & PVMT WITH TYPE A PVMT (8" COMPACTED DEPTH)	SY	1,500			
	230.3C			REPLACING BASE & PVMT WITH TYPE A PVMT (12" COMPACTED DEPTH)	SY	500			
	241			EMULSION AGGREGATE SLURRY SEAL MIX	SY	5,000			
	250			SEAL COAT	SY	300,000			
	315			FOG SEAL (TRMSS)	SY	35,000			
	407.4			CONCRETE COLLARS	CY	140			
	500.1			CONCRETE CURB, CURB AND GUTTER, AND MOUNTABLE CURB	LF	7,500			
	502.1			CONCRETE SIDEWALKS	SY	3,500			
	502.1A			HANDICAP RAMPS (TYPES 1 THRU 5)	EA	600			
	503.1			PORTLAND CEMENT CONCRETE DRIVEWAY	SY	2,800			
	503.2			PORTLAND CEMENT CONCRETE DRIVEWAY - COMMERCIAL	SY	700			

**CITY OF SAN ANTONIO
DEPARTMENT OF CAPITAL IMPROVEMENTS MANAGEMENT SERVICES
CONTRACT SERVICES DIVISION**

RECEIPT OF ADDENDUM NUMBER(S) 2 IS HEREBY ACKNOWLEDGED FOR PLANS AND

SPECIFICATIONS FOR CONSTRUCTION OF 2013 - 2014 Task Order Contract Package 8

FOR WHICH BIDS WILL BE OPENED ON TUESDAY, DECEMBER 4, 2012 AT 2:00 P.M.

THIS ACKNOWLEDGEMENT MUST BE SIGNED AND RETURNED WITH
THE BID PACKAGE.

Company Name: _____

Address: _____

City/State/Zip Code: _____

Date: _____

Signature

Print Name/Title