

#### Amendment No. 4 to Secondary Contract No. GA120000083 for

Hot Mix-Hot Laid Asphaltic Concrete – Alternate Contract between Industrial Asphalt, LLC and the City of Austin

- 1.0 The City hereby wishes to extend the above referenced contract for a period of 180 days. Effective June 15, 2018, the term for the holdover will be June 15, 2018 to December 14, 2018.
- 2.0 The total contract amount is unchanged for the holdover period. The total contract authorization is recapped below:

Term	Action Amount	Total Contract Amount		
Initial Term 06/15/12 – 06/14/15	\$26,533,200.00	\$26,533,200.00		
Amendment No. 1: Option 1 – Extension 06/15/15 – 06/14/16	\$0.00	\$26,533,200.00		
Amendment No. 2: Option 2 – Extension 06/15/16 – 06/14/17	\$0.00	\$26,533,200.00		
Amendment No. 3: Option 3 - Extension 06/15/17 - 06/14/18	\$0.00	\$26,533,200.00		
Amendment No. 4: 180-Day Extension 06/15/18 – 12/14/18	\$0.00	\$26,533,200.00		

- 3.0 MBE/WBE goals do not apply to this contract.
- 4.0 By signing this Amendment, the Contractor certifies that the Contractor and its principles are not currently suspended or debarred from doing business with the Federal Government, as indicated by the General Services Administration (GSA) List of Parties Excluded from Federal Procurement and Non-Procurement Programs, the State of Texas, or the City of Austin.
- 5.0 All other terms and conditions remain the same.

BY THE SIGNATURES affixed below, this Amendment is hereby incorporated into and made a part of the above-referenced contract.

Signature & Date

Printed Name:

Authorized Representative

Industrial Asphalt, LLC

-1114 Lost Creek Blvd. #410

-Austin, TX 78746-6370

RILT Ste250

Austin , TX, 7875/

Signature & Date:

Michelle D. Pearson, Procurement Specialist II

4-17-18

City of Austin

Purchasing Office

Signature & Date:

Danielle Lord, Corporate Purchasing Manager

City of Austin Purchasing Office



### Amendment No. 3 Secondary Contract No. GA120000083 for Hot Mix, between Industrial Asphalt LLC. and the City of Austin

- 1.0 The City hereby exercises the extension option for the above-referenced contract. Effective June 15, 2017, to June 14, 2018. No options remain.
- 2.0 The total Contract amount is increased by \$0.00 for the extension option period. The total Contract authorization is recapped below:

Term	Action Amount	Total Contract Amount
Basic Term: 06/15/12 - 06/14/15	\$26,533,200.00	\$26,533,200.00
Amendment No. 1: Option 1 06/15/15 – 06/14/16	\$0.00	\$26,533,200.00
Amendment No. 2: Option 2 06/15/16 – 06/14/17	\$0.00	\$26,533,200.00
Amendment No. 3: Option 3 06/15/17 – 06/14/18	\$0.00	\$26,533,200.00

- 3.0 MBE/WBE goals were not established for this contract.
- By signing this Amendment the Contractor certifies that the Contractor and its principals are not currently suspended or 4.0 debarred from doing business with the Federal Government, as indicated by the General Services Administration (GSA) List of Parties Excluded from Federal Procurement and Non-Procurement Programs, the State of Texas, or the City of Austin.

All other terms and conditions remain the same.

BY THE SIGNATURES affixed below, this Amendment is hereby incorporated into and made a part of the ab contract.

Signature: Padraic Treanor Dillon

Printed Name: Padraic Treanor Dillon Authorized Representative

Signature:

Danielle Lord, Procuerment Manager

City of Austin **Purchasing Office** 

Industrial Asphalt LLC 1114 Lost Creek Blvd. #410 Austin, TX 78746-6370



Amendment No. 2
to
Contract No. GA120000083
for
Hot Mix
between
Industrial Asphalt LLC.
and the
City of Austin

- 1.0 The City hereby exercises the extension option for the above-referenced contract. Effective June 15, 2016, the term for the extension option will be June 15, 2016 to June 14, 2017 and there is one remaining option.
- 2.0 The total Contract amount is increased by \$0.00 for the extension option period. The total Contract authorization is recapped below:

Term	Action Amount	Total Contract Amount
Basic Term: 06/15/12 - 06/14/15	\$26,533,200.00	\$26,533,200.00
Amendment No. 1: Option 1 06/15/15 - 06/14/16	\$0.00	\$26,533,200.00
Amendment No. 2: Option 2 06/15/16 – 06/14/17	\$0.00	\$26,533,200.00

- 3.0 MBE/WBE goals were not established for this contract.
- 4.0 By signing this Amendment the Contractor certifies that the Contractor and its principals are not currently suspended or debarred from doing business with the Federal Government, as indicated by the General Services Administration (GSA) List of Parties Excluded from Federal Procurement and Non-Procurement Programs, the State of Texas, or the City of Austin.
- 5.0 All other terms and conditions remain the same.

BY THE SIGNATURES affixed below, this Amendment is hereby incorporated into and made a part of the above-referenced contract.

Signature:

Printed Name:

Authorized Representative

Signature:

Shawn Willett, Deputy Purchasing Officer

City of Austin

**Purchasing Office** 

Industrial Asphalt LLC 1114 Lost Creek Blvd. #410 Austin, TX 78746-6370



Amendment No. 1
to
Contract No. GAI 20000083
for
Hot Mix
between
Industrial Asphalt LLC.
and the
City of Austin

- 1.0 The City hereby exercises the extension option for the above-referenced contract. Effective June 15, 2015, the term for the extension option will be June 15, 2015 to June 14, 2016 and there are two remaining options.
- 2.0 The total Contract amount is increased by \$0.00 for the extension option period. The total Contract authorization is recapped below:

Term	Action Amount	Total Contract Amount
Basic Term: 06/15/12-06/14/15	\$26,533,200.00	\$26,533,200.00
Amendment No. 1: Option 1		
06/15/15-06/14/16	\$0.00	\$26,533,200.00

- 3.0 MBE/WBE goals were not established for this contract.
- 4.0 By signing this Amendment the Contractor certifies that the Contractor and its principals are not currently suspended or debarred from doing business with the Federal Government, as indicated by the General Services Administration (GSA) List of Parties Excluded from Federal Procurement and Non-Procurement Programs, the State of Texas, or the City of Austin.
- 5.0 All other terms and conditions remain the same.

BY THE SIGNATURES affixed below, this Amendment is hereby incorporated into and made a part of the above-referenced contract.

Signature:

Printed Name: PADRAIC Authorized Representative

Signature

Debbie DePaul, Contract Compliance Supervisor

City of Austin Michael Benson,

Purchasing Office

Signature:

Michael Benson, Chief Administrative Officer

City of Austin - Central Purchasing

Industrial Asphalt LLC 1114 Lost Creek Blvd. #410 Austin, TX 78746-6370



# Financial and Administrative Service Department Purchasing Office

PO Box 1088, Austin, Texas, 78767

June 15, 2012

Industrial Asphalt LLC Joe Cruz 1114 Lost Creek Blvd, #410 Austin, TX 78746

Dear Mr. Cruz:

The City of Austin has approved the award and execution of a contract with your company for the Alternate Hot Mix contract.

Responsible Department:	Public Works	
Department Contact Person:	Brenda Jimenez	
Department Contact Email:	brenda.jimenez@austintexas.gov	
Department Contact Telephone:	512-974-7955	
Project Name:	Alternate Contract - Hot Mix	
Contractor Name:	Industrial Asphalt LLC	
Contract Number:	GA120000083	
Contract Period:	06/15/12 - 6/14/15	
Initial Contract Period Amount	\$26,533,200	
Extension Options:	Three, 12-month extension option	
Requisition Number:	6200 12032200269	
Solicitation Number:	IFB BKH0148A	
Agenda Item Number:	14	
Council Approval Date:	06/14/12	

Thank you for your interest in doing business with the City of Austin. If you have any questions regarding this contract, please contact the person referenced under Department Contact Person above.

Sincerely,

Erin Glace, Purchasing Office

# CONTRACT BETWEEN THE CITY OF AUSTIN ("City")

#### AND

# Industrial Asphalt LLC ("Contractor")

## **Alternate Contract for Hot Mix** MA 6200 GA120000083

The City accepts the Contractor's Offer (as referenced in Section 1.1.3 below) for the above requirement and enters into the following Contract.

This Contract is between Industrial Asphalt LLC having offices at Austin, TX 78746 and the City, a home-rule municipality incorporated by the State of Texas, and is effective as of the date executed by the City ("Effective Date").

Capitalized terms used but not defined herein have the meanings given them in Solicitation Number BKH0148A.

## 1.1 This Contract is composed of the following documents:

- 1.1.1 This Contract
- 1.1.2 The City's Solicitation, Invitation for Bid (IFB), BKH0148A including all documents incorporated by reference
- 1.1.3 Industrial Asphalt LLC's Offer, dated 04/24/12, including subsequent clarifications
- 1.2 Order of Precedence. Any inconsistency or conflict in the Contract documents shall be resolved by giving precedence in the following order:
  - 1.2.1 This Contract
  - 1.2.2 The City's Solicitation as referenced in Section 1.1.2, including all documents incorporated by reference
  - 1.2.3 The Contractor's Offer as referenced in Section 1.1.3, including subsequent clarifications
- Quantity of Work. There is no guaranteed quantity of work for the period of the Contract and 1.3 there are no minimum order quantities. Work will be on an as needed basis as specified by the City for each Delivery Order.
- Term of Contract. The Contract will be in effect for an initial term of thirty-six (36) months and 1.4 may be extended thereafter for up to three (3) twelve (12) month extension option(s), subject to the approval of the Contractor and the City Purchasing Officer or his designee. See the Term of Contract provision in Section 0400 for additional Contract requirements.
- Compensation. The Contractor shall be paid a total not-to-exceed amount of \$26,533,200 for 1.5 the initial Contract term and \$8,844,400 for each extension option for a total estimated contract amount not-to-exceed \$53,066,400. Payment shall be made upon successful completion of services or delivery of goods as outlined in each individual Delivery Order.

This Contract (including any Exhibits) constitutes the entire agreement of the parties regarding the subject matter of this Contract and supersedes all prior and contemporaneous agreements and understandings, whether written or oral, relating to such subject matter. This Contract may be

altered, amended, or modified only by a written instrument signed by the duly authorized representatives of both parties.

In witness whereof, the City has caused a duly authorized representative to execute this Contract on the date set forth below.

Printed Name of Authorized Person:	Erin Grace
Signature:	1 AV
Title:	Buyer
Date	6/14/12
CITY OF AUSTIN	
Printed Name of Authorized Person:	Steve Aden
Signature:	Style The
Title:	Corporate Purchasing Manager
Date	6/18/12
CITY OF AUSTIN	
Printed Name of Authorized Person:	Yolanda Miller
Signature:	Holanda Mille
Title:	Deputy Purchasing Officer

**CITY OF AUSTIN** 

# CITY OF AUSTIN, TEXAS

Purchasing Office INVITATION FOR BID (IFB) Offer Sheet

SOLICITATION NO: BKH0148A

COMMODITY/SERVICE DESCRIPTION: ALTERNATE HOT MIX ASPHALT CONCRETE - TYPE B, C, C-SBS POLYMER, & D to

DATE ISSUED: 04/02/12

include H.M.A.C. with RAP/RAS AND WARM MIXES

REQUISITION NO.: RQM 6200 12032200269

PRE-BID CONFERENCE TIME AND DATE: N/A

COMMODITY CODE: 7452114

LOCATION: N/A

FOR CONTRACTUAL AND TECHNICAL

BID DUE PRIOR TO: 04/24/12 @ 2:00 PM

ISSUES CONTACT:

COMPLIANCE PLAN DUE PRIOR TO: N/A

Brenda Helgren Senior Buyer

BID OPENING TIME AND DATE: 04/24/12 @ 2:15 PM

Phone: (512) 974-9141

LOCATION: MUNICIPAL BUILDING, 124 W 8th STREET

RM 310, AUSTIN, TEXAS 78701

LIVE BID OPENING ONLINE:

For information on how to attend the Bid Opening online, please select

this link:

http://www.austintexas.gov/department/bid-opening-webinars

When submitting a sealed Offer and/or Compliance Plan, use the proper address for the type of service desired, as shown below.

P.O. Address for US Mail	Street Address for Hand Delivery or Courier Service
City of Austin	City of Austin, Purchasing Office
Purchasing Office	Municipal Building
P.O. Box 1088	124 W 8 <sup>th</sup> Street, Rm 310
Austin, Texas 78767-8845	Austin, Texas 78701
	Reception Phone: (512) 974-2500

Offers (including Compliance Plans) that are not submitted in a sealed envelope or container will not be considered.

SUBMIT 1 ORIGINAL AND 1 SIGNED COPIES OF OFFER

OFFER SUBMITTED BY

Signature of Person Authorized to Sign Offer

Signer's Name and Title: (please print or type

FEDERAL TAX ID NO.

Company Name: DUDUSTRIAL ASPHOLE

Address: 1114 LOST CREEK BLUD. Swite 410

City, State, Zip Code <u>AUSTM</u>, NO 78746

Phone No. (572) 275- 1900

Fax No. (5,2) 275-1171

Email Address: DOE @ RAMMING PALLYGEON

Offer Sheet 1 Revised 02/14/12

All Contractors and Subcontractors should be registered to do business with the City prior to submitting a response to a City Solicitation. In the case of Joint Ventures, each individual business in the joint venture should be registered with the City prior to submitting a response to a City solicitation. If the Joint Venture is awarded a contract, the Joint Venture must register to do business with the City. Prime Contractors are responsible for ensuring that their Subcontractors are registered. Registration can be done through the City's on-line vendor registration system. Log onto <a href="http://www.austintexas.gov/financeonline/vendor connection/index.cfm">http://www.austintexas.gov/financeonline/vendor connection/index.cfm</a> and follow the directions.

Offer Sheet 3 Revised 02/14/12

The following Supplemental Purchasing Provisions apply to this solicitation:

EXPLANATIONS OR CLARIFICATIONS (reference paragraph 5 in Section 0200)

All requests for explanations or clarifications must be submitted in writing to the Purchasing Office by April 13, 2012 at 5:00 pm either via e-mail to <a href="mailto:brenda.helgren@austintexas.gov">brenda.helgren@austintexas.gov</a> or by FAX at (512) 974-2388.

2. INSURANCE, Insurance does not apply to this solicitation.

#### 3. TERM OF CONTRACT

- A. The Contract shall be in effect for an initial term of 36 months and may be extended thereafter for up to 3 additional 12 month periods, subject to the approval of the Contractor and the City Purchasing Officer or his designee.
- B. Upon expiration of the initial term or period of extension, the Contractor agrees to hold over under the terms and conditions of this agreement for such a period of time as is reasonably necessary to resolicit and/or complete the project (not to exceed 120 days unless mutually agreed on in writing).
- C. Upon written notice to the Contractor from the City's Purchasing Officer or his designee and acceptance of the Contractor, the term of this contract shall be extended on the same terms and conditions for an additional period as indicated in paragraph A above. A price increase, subject to the provisions of this Contract, may be requested by the Contractor (for each period of extension) for approval by the City's Purchasing Officer or his designee.

#### THIS IS A 36 MONTH CONTRACT.

#### FIRM PRICES ARE TO BE SUBMITTED FOR THE FIRST TWELVE (12) MONTH PERIOD

#### 4. QUANTITIES

The quantities listed herein are estimates for the period of the Contract. The City reserves the right to purchase more or less of these quantities as may be required during the Contract term. Quantities will be as needed and specified by the City for each order. Unless specified in the solicitation, there are no minimum order quantities.

- 5. INVOICES and PAYMENT (reference paragraphs 12 and 13 in Section 0300)
  - A. Invoices shall contain a non-duplicated invoice number and the information required in Section 0300, paragraph 12, entitled "Invoices." Invoices received without all required information cannot be processed and will be returned to the vendor.

Invoices shall be mailed to the below address:

	City of Austin	
Department	Public Works Department - Street & Bridge	
Attn:	Accts Payable	
Address	4411-A Meinardus Drive	
City, State Zip Code	Austin, Texas 78744	

B. The Contractor agrees to accept payment by either credit card, check or Electronic Funds Transfer (EFT) for all goods and/or services provided under the Contract. The Contractor shall factor the cost of processing credit card payments into the Offer. There shall be no additional charges, surcharges, or penalties to the City for payments made by credit card.

### 6. NON-COLLUSION, NON-CONFLICT OF INTEREST, AND ANTI-LOBBYING

- A. On November 10, 2011, the Austin City Council adopted Ordinance No. 20111110-052 amending Chapter 2.7, Article 6 of the City Code relating to Anti-Lobbying and Procurement. The policy defined in this Code applies to Solicitations for goods and/or services requiring City Council approval under City Charter Article VII, Section 15 (Purchase Procedures). During the No-Contact Period, Offerors or potential Offerors are prohibited from making a representation to anyone other than the Authorized Contact Person in the Solicitation as the contact for questions and comments regarding the Solicitation.
- B. If during the No-Contact Period an Offeror makes a representation to anyone other than the Authorized Contact Person for the Solicitation, the Offeror's Offer is disqualified from further consideration except as permitted in the Ordinance.
- C. If a Respondent has been disqualified under this article more than two times in a sixty (60) month period, the Purchasing Officer shall debar the Offeror from doing business with the City for a period not to exceed three (3) years, provided the Respondent is given written notice and a hearing in advance of the debarment.
- D. The City requires Offerors submitting Offers on this Solicitation to provide a signed Section 0810, Non-Collusion, Non-Conflict of Interest, and Anti-Lobbying Affidavit, certifying that the Offeror has not in any way directly or indirectly made representations to anyone other than the Authorized Contact Person during the No-Contact Period as defined in the Ordinance The text of the City Ordinance is posted on the Internet at: <a href="http://www.ci.austin.tx.us/edims/document.cfm?id=161145">http://www.ci.austin.tx.us/edims/document.cfm?id=161145</a>

### 7. ECONOMIC PRICE ADJUSTMENT

A. Prices shown in this contract shall remain firm for the first 12 month period of the contract. After that, in recognition of the potential for fluctuation of the Contractor's cost, a price adjustment (increase or decrease) may be requested by either the City or the Contractor subject to the following considerations:

#### B. Price Increases

- Requests for price increases must be made in writing and submitted to the appropriate Buyer in the City's Purchasing Office. The letter must be signed by a person with the authority to bind the Contractor contractually, shall reference the contract number, and include the following documentation:
  - (1) an itemized, revised price list with the effective date of the proposed increase;
  - (2) copies of the documentation provided by the manufacturer regarding the proposed price increase if the contractor is not the manufacturer of the products. If the Contractor is the manufacturer of the products, a letter so stating must be provided;
  - (3) Contractor shall submit, as a part of the request for increase, the version of the Producer Price Index (s) (Table 5 - Producer price indices for the net output of selected industries and their products or Table 6 - Producer price indexes and percent changes for commodity groupings and individual items, not seasonally adjusted) Asphalt Paving

Mixtures/324121 and Crushed and Broken Limestone/212312 (the "Index") current as of the date of the Contractor's Offer; and a copy of the index for the most current period.

- (4) Proposed price increases must be solely for the purpose of accommodating increases in the Contractor's costs for the products or services provided. Prices for products or services unaffected by verifiable cost trends shall not be subject to change.
- ii. Requests for price increases must be made in writing and submitted to the appropriate Contract Manager prior to each yearly anniversary date of contract. Prices will only be considered for an increase at that time. Once received, the City will have 30 calendar days to review and approve/disapprove the requested increase. Should the City not agree with the requested increase, Contractor may either maintain the prices currently in effect, negotiate an acceptable increase with the City or terminate the contract.
- The proposed percentage change between the current contract price and the requested price shall not exceed the percentage change between the Index in effect at the beginning of the current review period and the one in effect at the time the price increase is requested. Except in the case of emergency situations, the requested index related or non-index related price increase shall not exceed twenty-five percent (25%) for any single line item, and in no event shall the total amount of the contract be automatically increased as a result of the increase in any one or more line items made pursuant to this provision.
- iv. Since the perceived need for price increases may be due in whole or in part to factors other than index changes, the City may consider approving fully-documented increase requests which, in the Contractor's opinion, justify price increases for one or more line items in the contract. If index changes are responsible in part for the requested change, those changes shall be documented as previously described above.

### C. Price Decreases

- i. Proposed price decreases may be offered to the City at any time, and become effective upon acceptance by the City unless a different effective date is specified by the Contractor. Request for price decreases by the City will be based on the same documentation as price increase request. Price decrease offers may also be subject to negotiation.
- Price decreases based on relevant factors may be requested by the City at any time. Such requests shall be accompanied by a complete statement of the City's justification for the request. The Contractor shall have 30 calendar days to respond to the City's request. Following receipt of the Contractor's agreement with the requested decrease, the City may implement the decrease at any time. Should the Contractor not agree with the requested decrease, the City may either maintain the prices currently in effect, negotiate with the contractor, or terminate the contract.

#### 8. CONTRACT MANAGER

The following person is designated as Contract Manager, and will act as the contact point between the City and the Contractor during the term of the Contract:

Brenda L	Jimenez,	Contract.	Administrat	or		

\*Note: The above listed Contract Manager is not the authorized Contact Person for purposes of the <u>NON-CONFLICT OF INTEREST, AND ANTI-LOBBYING Provision</u> of this Section; and therefore, contact with the Contract Manager is prohibited during the no contact period.

### 9. AWARD

The City will award a Primary contract to the vendor bidding lowest and most responsive for all line items. The City will also issue a second solicitation for an Alternate vendor. The successful vendor for the Primary solicitation cannot be awarded the contract for the secondary solicitation.

If the Primary vendor is unable to meet requirements when called, the City will call upon the Alternate vendor.

## CITY OF AUSTIN PURCHASING OFFICE BID SHEET FOR

## HOT MIX ASPHALT CONCRETE - TYPE B, C, C-SBS POLYMER, & D to include H.M.A.C. with RAP/RAS AND WARM MIXES

This is for an Alternate Vendor, if you have been awarded the contract for the Primary Vendor for IFB BKH0148-P you will not be eligible as the Alternate Vendor under this contract.

BID NO. BKH0148-A

RQM NO. 6200 12032200269

BUYER: Brenda Helgren (512) 974-9141 email: brenda.helgren@austintexas.gov

Copies of Bid: Vendor must submit two copies of its signed bid - one original and one copy

Special Instructions: Be advised that exceptions taken to any portion of the solicitations may jeopardize acceptance of the bid.

### \*\*\*\*\*\*\* THE QUANTITIES REQUESTED ARE ESTIMATED YEARLY QUANTITIES \*\*\*\*\*\*\*

ITEM NO.	ITEM DESCRIPTION	ESTIMATED YEARLY QUANTITIES	UNIT	UNIT PRICE	EXTENDED PRICE
1	SP 340 HMAC Type B F.O.B. Contractor's Plant	6,000	TON	\$ 5800	\$
2	HMAC Type C F.O.B. Contractor's Plant	1,500	TON	\$5900	\$
3	SP 340 HMAC Type C F.O.B. Contractor's Plant	1,500	TON	\$ 6050	\$
4	WMA (Warm Mix) Type C F.O.B. Contractor's Plant	1,500	TON	\$ 5860	\$
5	SP 340 HMAC Type C SBS Polymer Modified F.O.B. Contractor's Plant	3,750	TON	\$ 8280	\$
6	WMA (Warm Mix) Type C SBS Polymer Modified F.O.B. Contractor's Plant	3,750	TON	\$ 8380	\$
7	HMAC Type D F.O.B. Contractor's Plant	13,000	TON	\$ 59 B	\$
8	SP 340 HMAC Type D F.O.B. Contractor's Plant	13,000	TON	\$ 10050	\$
9	WMA (Warm Mix) Type D F.O.B. Contractor's Plant	5,000	TON	\$ 580	\$
10	SP 340 HMAC Type D SBS Polymer Modified F.O.B. Contractor's Plant	32,500	TON	\$ 8380	\$
11	WMA (Warm Mix) Type D SBS Polymer Modified F.O.B. Contractor's Plant	32,500	TON	\$ 840	\$
12	HMAC Type D-THIN Special Specification F.O.B. Contractor's Plant	5,000	TON	\$ 6800	\$

	TOTAL BID	s	
For information purpose only: Bidder to specify if applicable: Additional start-up cost/fee and/or additional hourly fee			
a. Hourly rate for after 4:30 pm MonSat.		\$	
b. Start-up cost for after 4:30 pm MonSat.		\$	
c. Hourly rate for 7:30 am - 4:30 pm Sundays		\$	
d. Start-up cost for 7:30 am - 4:30 pm Sundays		\$	

### Notes:

- 1 The City will award an alternant vendor bidding lowest and most responsive for all line items.
- The City will also issue a second solicitation BKH0148-P. The successful vendor for the primary solicitation cannot be the successful vendor for the secondary solicitation. If the primary vendor is unable to meet requirements when called, the City will call upon the secondary vendor.

Company Name	MISTRIAL ASPHALT
Plant Location/Address	14701 5. I-35 Byth, TX, 1101 For 2770 Bude, TX
Signature of Authorized	Representative:
Printed Name: 300	CRUZ /
Email Address: 00	E@ LAMMINGSVING.COM

Solicitation Number:	BKH0148P	
Offeror's Name	DITUSTICAL AS	ph. H Date 4/24/12
		ng information, for at least 5 recent customers to d that are similar to those required by this Solicitation.
To add additional refer	ences to this form, click the Ado	d Reference Button. —————> Add Reference
Company's Name	City of pfluggi	ville
Name of Contact		Contact Title
Present Address	P.O. BOX 589	
City	Pflugerville	State TX Zip Code XIAI
Telephone Number	512-251-2243	FAX Number
Email Address		

Solicitation Number:	BKH0148P
Offeror's Name	DINISMIN Asphalt Date 4/24/12
	ish, with the Offer, the following information, for at least 5 recent customers to or services have been provided that are similar to those required by this Solicitation.
To add additional refer	rences to this form, click the Add Reference Button. ————————————————————————————————————
Company's Name	DUT CONSTRUCTION
Name of Contact	Contact Title
Present Address	P.O. BOX 6210
City	Round Pack State X Zip Code 78683
Telephone Number	572-837-6700 FAX Number
Email Address	

Solicitation Number	: BKH0148P			1
Offeror's Name	AND STUTE	Aspet	Date 4/24	1/12
		following information, for provided that are similar		
To add additional refe	rences to this form, click	the Add Reference Button	, =======)	Add Reference
Company's Name	TX DOOR.	OF TRANSPORT	Anow	
Name of Contact		Contact Title	2	
Present Address	DEWITT C.GREE	DR SPATE Huy BL	dg. 125 E.	11 457.
City	AUSTIN	State 72	0	Zip Code 78701
Telephone Number	572-41.3-8	FAX Numbe	r	
Email Address				

Solicitation Number	BKH0148P		
Offeror's Name	INDUSTRIAL A	sphalt Date 4/2	24/12
		ng information, for at least 5 d that are similar to those requ	
To add additional refe	rences to this form, click the Add	d Reference Button.	==> Add Reference
Company's Name	Williamson Cou	NN	
Name of Contact		Contact Title	
Present Address	301 5, E, Innie	2 loge # 106	
City	GEDAGETULAU	State TX	Zip Code 78626
Telephone Number	512-943-3553	FAX Number	
Email Address			

Solicitation Number:	BKH0148P	
Offeror's Name	DUDISMIAL ASPA	2H Date 4/24/12
		g information, for at least 5 recent customers to that are similar to those required by this Solicitation.
To add additional refer	ences to this form, click the Add	Reference Button. =====> Add Reference
Company's Name	RANGER EXCA	VATION
Name of Contact		Contact Title
Present Address	5222 Thurden	CLER Ld. #01
City	AUSTIN	State 7K Zip Code 78759
Telephone Number	512-33/-5351	FAX Number
Email Address		

# City of Austin, Texas EQUAL EMPLOYMENT/FAIR HOUSING OFFICE NON-DISCRIMINATION CERTIFICATION

COLIDITATION NO	must be seen
SOLICITATION NO	BKH0148P

City of Austin, Texas Human Rights Commission

To: City of Austin, Texas, ("OWNER")

I hereby certify that our firm conforms to the Code of the City of Austin, Section 5-4-2 as reiterated below:

Chapter 5-4. Discrimination in Employment by City Contractors.

Sec. 4-2 Discriminatory Employment Practices Prohibited. As an Equal Employment Opportunity (EEO) employer, the Contractor will conduct its personnel activities in accordance with established federal, state and local EEO laws and regulations and agrees:

- (B) (1) Not to engage in any discriminatory employment practice defined in this chapter.
  - (2) To take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without discrimination being practiced against them as defined in this chapter. Such affirmative action shall include, but not be limited to: all aspects of employment, including hiring, placement, upgrading, transfer, demotion, recruitment, recruitment advertising; selection for training and apprenticeship, rates of pay or other form of compensation, and layoff or termination.
  - (3) To post in conspicuous places, available to employees and applicants for employment, notices to be provided by OWNER setting forth the provisions of this chapter.
  - (4) To state in all solicitations or advertisements for employees placed by or on behalf of the Contractor, that all qualified applicants will receive consideration for employment without regard to race, creed, color, religion, national origin, sexual orientation, gender identity, disability, veteran status, sex or age.
  - (5) To obtain a written statement from any labor union or labor organization furnishing labor or service to Contractors in which said union or organization has agreed not to engage in any discriminatory employment practices as defined in this chapter and to take affirmative action to implement policies and provisions of this chapter.
  - (6) To cooperate fully with OWNER's Human Rights Commission in connection with any investigation or conciliation effort of said Human Rights Commission to ensure that the purpose of the provisions against discriminatory employment practices are being carried out.
  - (7) To require compliance with provisions of this chapter by all subcontractors having fifteen or more employees who hold any subcontract providing for the expenditure of \$2,000 or more in connection with any contract with OWNER subject to the terms of this chapter.

For the purposes of this Offer and any resulting Contract, Contractor adopts the provisions of the City's Minimum Standard Nondiscrimination Policy set forth below.

# City of Austin Minimum Standard Non-Discrimination in Employment Policy:

As an Equal Employment Opportunity (EEO) employer, the Contractor will conduct its personnel activities in accordance with established federal, state and local EEO laws and regulations.

The Contractor will not discriminate against any applicant or employee based on race, creed, color, national origin, sex, age, religion, veteran status, gender identity, disability, or sexual orientation. This policy covers all aspects of employment, including hiring, placement, upgrading, transfer, demotion, recruitment, recruitment advertising, selection for training and apprenticeship, rates of pay or other forms of compensation, and layoff or termination.

Further, employees who experience discrimination, sexual harassment, or another form of harassment should immediately report it to their supervisor. If this is not a suitable avenue for addressing their complaint, employees are advised to contact another member of management or their human resources representative. No employee shall be discriminated against, harassed, intimidated, nor suffer any reprisal as a result of reporting a violation of this policy. Furthermore, any employee, supervisor, or manager who becomes aware of any such discrimination or harassment should immediately report it to executive management or the human resources office to ensure that such conduct does not continue.

Contractor agrees that to the extent of any Inconsistency, omission, or conflict with its current non-discrimination employment policy, the Contractor has expressly adopted the provisions of the City's Minimum Non-Discrimination Policy contained in Section 5-4-2 of the City Code and set forth above, as the Contractor's Non-Discrimination Policy or as an amendment to such Policy and such provisions are intended to not only supplement the Contractor's policy, but will also supersede the Contractor's policy to the extent of any conflict.

UPON CONTRACT AWARD, THE CONTRACTOR SHALL PROVIDE A COPY TO THE CITY OF THE CONTRACTOR'S NON-DISCRIMINATION POLICY ON COMPANY LETTERHEAD, WHICH CONFORMS IN FORM, SCOPE, AND CONTENT TO THE CITY'S MINIMUM NON-DISCRIMINATION POLICY, AS SET FORTH HEREIN, OR THIS NON-DISCRIMINATION POLICY, WHICH HAS BEEN ADOPTED BY THE CONTRACTOR FOR ALL PURPOSES (THE FORM OF WHICH HAS BEEN APPROVED BY THE CITY'S EQUAL EMPLOYMENT/FAIR HOUSING OFFICE), WILL BE CONSIDERED THE CONTRACTOR'S NON-DISCRIMINATION POLICY WITHOUT THE REQUIREMENT OF A SEPARATE SUBMITTAL.

#### Sanctions:

Our firm understands that non-compliance with Chapter 5-4 may result in sanctions, including termination of the contract and suspension or debarment from participation in future City contracts until deemed compliant with the requirements of Chapter 5-4.

#### Term:

The Contractor agrees that this Section 0800 Non-Discrimination Certificate or the Contractor's separate conforming policy, which the Contractor has executed and filed with the Owner, will remain in force and effect for one year from the date of filing. The Contractor further agrees that, in consideration of the receipt of continued Contract payments, the Contractor's Non-Discrimination Policy will automatically renew from year-to-year for the term of the underlying Contract.

# City of Austin, Texas NON-SUSPENSION OR DEBARMENT CERTIFICATION

SOLICITATION NO. BKH0148P

The City of Austin is prohibited from contracting with or making prime or sub-awards to parties that are suspended or debarred or whose principals are suspended or debarred from Federal, State, or City of Austin Contracts. Covered transactions include procurement contracts for goods or services equal to or in excess of \$25,000.00 and all non-procurement transactions. This certification is required for all Vendors on all City of Austin Contracts to be awarded and all contract extensions with values equal to or in excess of \$25,000.00 or more and all non-procurement transactions.

The Offeror hereby certifies that its firm and its principals are not currently suspended or debarred from bidding on any Federal, State, or City of Austin Contracts.

Contractor's Name;	PULLETTIAL ASPA	alt	
Signature of Officer or Authorized Representative:		Date:	4/24/12
Printed Name:	SEE CRUZ		
Title:	SALES MANAGEN		

# CITY OF AUSTIN NON-COLLUSION, NON-CONFLICT OF INTEREST, AND ANTI-LOBBYING AFFIDAVIT

SOLICITATION NO. BKH0148P

FOR

HOT MIX ASPHALT CONCRETE – TYPE B, C, C-SBS POLYMER, & D to include H.M.A.C. with RAP/RAS AND WARM MIXES

#### State of Texas

#### County of Travis

The undersigned "Affiant" is a duly authorized representative of the Offeror for the purpose of making this Affidavit, and, after being first duly sworn, has deposed and stated and hereby deposes and states, to the best of his or her personal knowledge and belief as follows:

The term "Offeror", as used herein, includes the individual or business entity submitting the Offer and for the purpose of this Affidavit includes the directors, officers, partners, managers, members, principals, owners, agents, representatives, employees, other parties in interest of the Offeror, and anyone or any entity acting for or on behalf of the Offeror, including a subcontractor in connection with this Offer.

- 1. Anti-Collusion Statement. The Offeror has not in any way directly or indirectly:
  - colluded, conspired, or agreed with any other person, firm, corporation, Offeror or potential Offeror to the amount of this Offer or the terms or conditions of this Offer.
  - b. paid or agreed to pay any other person, firm, corporation Offeror or potential Offeror any money or anything of value in return for assistance in procuring or attempting to procure a contract or in return for establishing the prices in the attached Offer or the Offer of any other Offeror.
- 2. Preparation of Solicitation and Contract Documents. The Offeror has not received any compensation or a promise of compensation for participating in the preparation or development of the underlying Solicitation or Contract documents. In addition, the Offeror has not otherwise participated in the preparation or development of the underlying Solicitation or Contract documents, except to the extent of any comments or questions and responses in the solicitation process, which are available to all Offerors, so as to have an unfair advantage over other Offerors, provided that the Offeror may have provided relevant product or process information to a consultant in the normal course of its business.
- 3. Participation in Decision Making Process. The Offeror has not participated in the evaluation of Offers or other decision making process for this Solicitation, and, if Offeror is awarded a Contract hereunder, no individual, agent, representative, consultant, subcontractor, or subconsultant associated with Offeror, who may have been involved in the evaluation or other decision making process for this Solicitation, will have any direct or indirect financial interest in the Contract, provided that the Offeror may have provided relevant product or process information to a consultant in the normal course of its business.
- 4. Present Knowledge. Offeror is not presently aware of any potential or actual conflicts of interest regarding this Solicitation, which either enabled Offeror to obtain an advantage over other Offerors or would prevent Offeror from advancing the best interests of the City in the course of the performance of the Contract.
- City Code. As provided in Sections 2-7-61 through 2-7-65 of the City Code, no individual with a substantial interest in Offeror is a City official or employee or is related to any City official or employee within the first or second degree of consanguinity or affinity.
- 6. Chapter 176 Conflict of Interest Disclosure. In accordance with Chapter 176 of the Texas Local Government Code, the Offeror:
  - a. does not have an employment or other business relationship with any local government officer of the City or a family member of that officer that results in the officer or family member receiving taxable income;

### CITY OF AUSTIN NON-COLLUSION, NON-CONFLICT OF INTEREST, AND ANTI-LOBBYING AFFIDAVIT

- b. has not given a local government officer of the City one or more gifts, other than gifts of food, lodging, transportation, or entertainment accepted as a quest, that have an aggregate value of more than \$250 in the twelve month period preceding the date the officer becomes aware of the execution of the Contract or that OWNER is considering doing business with the Offeror.
- c. as required by Chapter 176 of the Texas Local Government Code, Offeror must file a Conflict of Interest Questionnaire with the Office of the City Clerk no later than 5:00 P.M. on the seventh (7) business day after the commencement of contract discussions or negotiations with the City or the submission of an Offer, or other writing related to a potential Contract with the City. The questionnaire is available on line at the following website for the City Clerk:

http://www.austintexas.gov/department/conflict-interest-questionnaire

There are statuto	ry penalties for failure to comply with Chapter 176.
	ot affirmatively swear and subscribe to the forgoing statements, the Offeror shall written explanation in the space provided below or, as necessary, on separate ed hereto.
Offeror's Explanation:	
7N, between the da Offeror has not ma	dinance. As set forth in the Solicitation Instructions, Section 0200, paragraph ate that the Solicitation was issued and the date of full execution of the Contract, de and will not make a representation to a City official or to a City employee, other Contact Person for the Solicitation, except as permitted by the Ordinance.
Contractor's Name:	INDUSTRIAL ASPHALL
Printed Name:	DE CAUZ
Title:	SALS Manager
//	Authorized Representative:  to before me this 24 <sup>th</sup> day of <u>Agril</u> , 20 <u>/2</u> .
	^
dul Jun	n. Canta My Commission Expires 8/20/13
	and the same of th

and Anti-Lobbying Affidavit

# City of Austin, Texas NONRESIDENT BIDDER PROVISIONS

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SOLICITATION NO.	BKH0148P	

A. Bidder must answer the following questions in accordance with Vernon's Texas Statutes and Codes Annotated Government Code 2252.002, as amended:

Is the Bidder that is making and submitting this Bid a "Resident Bidder" or a "Non-resident Bidder"?

Texas Resident Bidder - A Bidder whose principal place of business is in Texas and includes a Contractor whose ultimate parent company or majority owner has its principal place of business in Texas.

Non-resident Bidder

Bidder's Name:	INDUSTRIPU, PISPA	¥	
Signature of Officer or Authorized Representative:	la Fill	Date:	4/24/12
Printed Name:	SHE CAUZ		
Title:	SAKS MAIRES		

# MINORITY- AND WOMEN-OWNED BUSINESS ENTERPRISE (MBE/WBE) PROCUREMENT PROGRAM NO GOALS FORM

SOLICITATION NUMBER: BKH0148A

PROJECT NAME: HOT MIX ASPHALT CONCRETE - TYPE B, C, C-SBS POLYMER, & D to include H.M.A.C. with RAP/RAS AND WARM MIXES

The City of Austin has determined that no goals are appropriate for this project. Even though no goals have been established for this solicitation, the Bidder/Proposer is required to comply with the City's MBE/WBE Procurement Program, if areas of subcontracting are identified.

If any service is needed to perform the Contract and the Bidder/Proposer does not perform the service with its own workforce or if supplies or materials are required and the Bidder/Proposer does not have the supplies or materials in its inventory, the Bidder/Proposer shall contact the Small and Minority Business Resources Department (SMBR) at (512) 974-7600 to obtain a list of MBE and WBE firms available to perform the service or provide the supplies or materials. The Bidder/Proposer must also make a Good Faith Effort to use available MBE and WBE firms. Good Faith Efforts include but are not limited to contacting the listed MBE and WBE firms to solicit their interest in performing on the Contract; using MBE and WBE firms that have shown an interest, meet qualifications, and are competitive in the market; and documenting the results of the contacts.

No \_\_\_\_\_ If no, please sign the No Goals Form and submit it with your Bid/Proposal in a sealed envelope.

Yes\_\_\_\_\_ If yes, please contact SMBR to obtain further instructions and an availability list and perform Good Faith Efforts. Complete and submit the No Goals Form and the No Goals Utilization Plan with your Bid/Proposal in a sealed envelope.

Will subcontractors or sub-consultants or suppliers be used to perform portions of this Contract?

After Contract award, if your firm subcontracts any portion of the Contract, it is a requirement to complete Good Faith Efforts and the No Goals Utilization Plan, listing any subcontractor, subconsultant, or supplier. Return the completed Plan to the Project Manager or the Contract Manager.

MBE/WBE Procurement Program if subcontract	een established, I must comply with the City's cting areas are identified. I agree that this No
tustin.	become a part of my Contract with the City of
DINUSTUAL ASPAIT	
Company Name	
DOE CAUX - SHIES,	
Name and Title of Authorized Representative (Pri	int or Type)
/////	Martha
Jufik	7/34/12
ignature / //	Date

# MINORITY- AND WOMEN-OWNED BUSINESS ENTERPRISE (MBE/WBE) PROCUREMENT PROGRAM NO GOALS UTILIZATION PLAN

(Please duplicate as needed)

SOLICITATION NUMBER: BKH0148A PROJECT NAME: HOT MIX ASPHALT CONCRETE - TYPE B, C, C-SBS POLYMER, & D to include H.M.A.C. with PAP/PAS AND WARM MIXES PRIME CONTRACTOR/CONSULTANT COMPANY INFORMATION Name of Contractor/Consultant Address City, State Zip Phone Fax Number Name of Contact Person No MBE WBE MBE/WBE Joint Venture Is company City certified? Yes I certify that the information included in this No Goals Utilization Plan is true and complete to the best of my knowledge and belief. I further understand and agree that the information in this document shall become part of my Contract with the City of Austin. SALES Name and Title of Authorized Representative (Print or Type) 4/24/12 Signature Provide a list of all proposed subcontractors/subconsultants/suppliers that will be used in the performance of this Contract. Attach Good Faith Efforts documentation if non MBE/WBE firms will be used. Sub-Contractor/Consultant City of Austin Certified MBE WBE Ethnic/Gender Code: NON-CERTIFIED Vendor ID Code Contact Person Phone Number: Amount of Subcontract \$ List commodity codes & description of services Sub-Contractor/Consultant City of Austin Certified MBE WBE Ethnic/Gender Code: NON-CERTIFIED Vendor ID Code Phone Number: Contact Person Amount of Subcontract \$ List commodity codes & description of services FOR SMALL AND MINORITY BUSINESS RESOURCES DEPARTMENT USE ONLY: Having reviewed this plan, I acknowledge that the proposer (HAS) or (HAS NOT) complied with City Code Chapter 2-9A/B/C/D, as amended.

Date .

Director/Deputy Director

Reviewing Counselor

# CITY OF AUSTIN, TEXAS

# **Purchasing Office INVITATION FOR BID (IFB)** Offer Sheet

**SOLICITATION NO: BKH0148A COMMODITY/SERVICE DESCRIPTION**: ALTERNATE HOT MIX

ASPHALT CONCRETE - TYPE B, C, C-SBS POLYMER, & D to **DATE ISSUED**: 04/02/12

include H.M.A.C. with RAP/RAS AND WARM MIXES

**REQUISITION NO.:** RQM 6200 12032200269 PRE-BID CONFERENCE TIME AND DATE: N/A

COMMODITY CODE: 7452114 LOCATION: N/A

FOR CONTRACTUAL AND TECHNICAL

**ISSUES CONTACT:** 

Brenda Helgren

**BID DUE PRIOR TO**: 04/24/12 @ 2:00 PM

**COMPLIANCE PLAN DUE PRIOR TO: N/A** 

Senior Buyer

Phone: (512) 974-9141

BID OPENING TIME AND DATE: 04/24/12 @ 2:15 PM

LOCATION: MUNICIPAL BUILDING, 124 W 8<sup>th</sup> STREET

RM 310, AUSTIN, TEXAS 78701

LIVE BID OPENING ONLINE:

For information on how to attend the Bid Opening online, please select

this link:

http://www.austintexas.gov/department/bid-opening-webinars

When submitting a sealed Offer and/or Compliance Plan, use the proper address for the type of service desired, as shown below.

P.O. Address for US Mail	Street Address for Hand Delivery or Courier Service
City of Austin	City of Austin, Purchasing Office
Purchasing Office	Municipal Building
P.O. Box 1088	124 W 8 <sup>th</sup> Street, Rm 310
Austin, Texas 78767-8845	Austin, Texas 78701
	Reception Phone: (512) 974-2500

Offers (including Compliance Plans) that are not submitted in a sealed envelope or container will not be considered.

### SUBMIT 1 ORIGINAL AND 1 SIGNED COPIES OF OFFER

OFF	ER SU	BMITTED BY		
Signature of Person Authorized to Sign Offer		Signer's Nan	ne and Tit	le: (please print or type)
FEDERAL TAX ID NO				Date:
Company Name:				
Address:				
City, State, Zip Code				
Phone No. ( )		Fax No. (	)	
Email Address:				
Offer Sheet	1			Revised 02/14/12

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All other Sections may be viewed at: <a href="http://www.austintexas.gov/financeonline/vendor\_connection/index.cfm">http://www.austintexas.gov/financeonline/vendor\_connection/index.cfm</a>

### RETURN THE FOLLOWING DOCUMENTS WITH YOUR OFFER\*\*

Cover Page Offer Sheet
Section 0600 Bid Sheet(s)

Section 0700 Reference Sheet (if required)

Sections 0800 - 0835 Certifications and Affidavits (return all applicable Sections)

Section 0900 MBE/WBE Procurement Program Package or No Goals Utilization Plan

Bid Guaranty (if required)

The Vendor agrees, if this Offer is accepted within  $\underline{90}$  calendar days after the Due Date, to fully comply in strict accordance with the Solicitation, specifications and provisions attached thereto for the amounts shown on the accompanying Offer.

\* INCORPORATION OF DOCUMENTS. Section 0100, Standard Purchase Definitions; Section 0200, Standard Solicitation Instructions; and Section 0300, Standard Purchase Terms and Conditions are hereby incorporated into this Solicitation by reference, with the same force and effect as if they were incorporated in full text. The full text versions of these Sections are available, on the Internet at the following online address: http://www.austintexas.gov/financeonline/vendor\_connection/index.cfm#STANDARDBIDDOCUMENTS

If you do not have access to the Internet, you may obtain a copy of these Sections from the City of Austin Purchasing Office at the address or phone number indicated on page 1 of this Offer Sheet. Please have the Solicitation number available so that the staff can select the proper documents. These documents can be mailed, expressed mailed, or faxed to you.

It is the policy of the City of Austin to involve certified Minority Owned Business Enterprises (MBEs) and Woman Owned Business Enterprises (WBEs) in City contracting. MBE and WBE goals for this Solicitation are contained in Section 0900.

<sup>\*\*</sup> See also Section 0200, Solicitation Instructions, Section 0400, Supplemental Purchase Provisions, and Section 0500, Scope of Work/Specification, for additional documents that must be submitted with the Offer.

All Contractors and Subcontractors should be registered to do business with the City prior to submitting a response to a City Solicitation. In the case of Joint Ventures, each individual business in the joint venture should be registered with the City prior to submitting a response to a City solicitation. If the Joint Venture is awarded a contract, the Joint Venture must register to do business with the City. Prime Contractors are responsible for ensuring that their Subcontractors are registered. Registration done through City's on-line vendor registration can be the system. Log http://www.austintexas.gov/financeonline/vendor\_connection/index.cfm and follow the directions.

Offer Sheet 3 Revised 02/14/12

By submitting an Offer in response to the Solicitation, the Contractor agrees that the Contract shall be governed by the following terms and conditions. Unless otherwise specified in the Contract, Sections 3, 4, 5, 6, 7, 8, 20, 21, and 36 shall apply only to a Solicitation to purchase Goods, and Sections 9, 10, 11 and 22 shall apply only to a Solicitation to purchase Services to be performed principally at the City's premises or on public rights-of-way.

- 1. <u>CONTRACTOR'S OBLIGATIONS</u>. The Contractor shall fully and timely provide all deliverables described in the Solicitation and in the Contractor's Offer in strict accordance with the terms, covenants, and conditions of the Contract and all applicable Federal, State, and local laws, rules, and regulations.
- 2. **EFFECTIVE DATE/TERM**. Unless otherwise specified in the Solicitation, this Contract shall be effective as of the date the contract is signed by the City, and shall continue in effect until all obligations are performed in accordance with the Contract.
- 3. CONTRACTOR TO PACKAGE DELIVERABLES: The Contractor will package deliverables in accordance with good commercial practice and shall include a packing list showing the description of each item, the quantity and unit price Unless otherwise provided in the Specifications or Supplemental Terms and Conditions, each shipping container shall be clearly and permanently marked as follows: (a) The Contractor's name and address, (b) the City's name, address and purchase order or purchase release number and the price agreement number if applicable, (c) Container number and total number of containers, e.g. box 1 of 4 boxes, and (d) the number of the container bearing the packing list. The Contractor shall bear cost of packaging. Deliverables shall be suitably packed to secure lowest transportation costs and to conform with requirements of common carriers and any applicable specifications. The City's count or weight shall be final and conclusive on shipments not accompanied by packing lists.
- 4. **SHIPMENT UNDER RESERVATION PROHIBITED**: The Contractor is not authorized to ship the deliverables under reservation and no tender of a bill of lading will operate as a tender of deliverables.
- 5. <u>TITLE & RISK OF LOSS</u>: Title to and risk of loss of the deliverables shall pass to the City only when the City actually receives and accepts the deliverables.
- 6. <u>DELIVERY TERMS AND TRANSPORTATION CHARGES</u>: Deliverables shall be shipped F.O.B. point of delivery unless otherwise specified in the Supplemental Terms and Conditions. Unless otherwise stated in the Offer, the Contractor's price shall be deemed to include all delivery and transportation charges. The City shall have the right to designate what method of transportation shall be used to ship the deliverables. The place of delivery shall be that set forth in the block of the purchase order or purchase release entitled "Receiving Agency".
- 7. RIGHT OF INSPECTION AND REJECTION: The City expressly reserves all rights under law, including, but not limited to the Uniform Commercial Code, to inspect the deliverables at delivery before accepting them, and to reject defective or non-conforming deliverables. If the City has the right to inspect the Contractor's, or the Contractor's Subcontractor's, facilities, or the deliverables at the Contractor's, or the Contractor's Subcontractor's, premises, the Contractor shall furnish, or cause to be furnished, without additional charge, all reasonable facilities and assistance to the City to facilitate such inspection.
- 8. **NO REPLACEMENT OF DEFECTIVE TENDER**: Every tender or delivery of deliverables must fully comply with all provisions of the Contract as to time of delivery, quality, and quantity. Any non-complying tender shall constitute a breach and the Contractor shall not have the right to substitute a conforming tender; provided, where the time for performance has not yet expired, the Contractor may notify the City of the intention to cure and may then make a conforming tender within the time allotted in the contract.
- 9. PLACE AND CONDITION OF WORK: The City shall provide the Contractor access to the sites where the Contractor is to perform the services as required in order for the Contractor to perform the services in a timely and efficient manner, in accordance with and subject to the applicable security laws, rules, and regulations. The Contractor acknowledges that it has satisfied itself as to the nature of the City's service requirements and specifications, the location and essential characteristics of the work sites, the quality and quantity of materials, equipment, labor and facilities necessary to perform the services, and any other condition or state of fact which

could in any way affect performance of the Contractor's obligations under the contract. The Contractor hereby releases and holds the City harmless from and against any liability or claim for damages of any kind or nature if the actual site or service conditions differ from expected conditions.

#### 10. WORKFORCE

- A. The Contractor shall employ only orderly and competent workers, skilled in the performance of the services which they will perform under the Contract.
- B. The Contractor, its employees, subcontractors, and subcontractor's employees may not while engaged in participating or responding to a solicitation or while in the course and scope of delivering goods or services under a City of Austin contract or on the City's property.
  - i. use or possess a firearm, including a concealed handgun that is licensed under state law, except as required by the terms of the contract; or
  - ii. use or possess alcoholic or other intoxicating beverages, illegal drugs or controlled substances, nor may such workers be intoxicated, or under the influence of alcohol or drugs, on the job.
- C. If the City or the City's representative notifies the Contractor that any worker is incompetent, disorderly or disobedient, has knowingly or repeatedly violated safety regulations, has possessed any firearms, or has possessed or was under the influence of alcohol or drugs on the job, the Contractor shall immediately remove such worker from Contract services, and may not employ such worker again on Contract services without the City's prior written consent.
- 11. <u>COMPLIANCE WITH HEALTH, SAFETY, AND ENVIRONMENTAL REGULATIONS</u>: The Contractor, its Subcontractors, and their respective employees, shall comply fully with all applicable federal, state, and local health, safety, and environmental laws, ordinances, rules and regulations in the performance of the services, including but not limited to those promulgated by the City and by the Occupational Safety and Health Administration (OSHA). In case of conflict, the most stringent safety requirement shall govern. The Contractor shall indemnify and hold the City harmless from and against all claims, demands, suits, actions, judgments, fines, penalties and liability of every kind arising from the breach of the Contractor's obligations under this paragraph.

#### 12. **INVOICES**:

- A. The Contractor shall submit separate invoices in duplicate on each purchase order or purchase release after each delivery. If partial shipments or deliveries are authorized by the City, a separate invoice must be sent for each shipment or delivery made.
- B. Proper Invoices must include a unique invoice number, the purchase order or delivery order number and the master agreement number if applicable, the Department's Name, and the name of the point of contact for the Department. Invoices shall be itemized and transportation charges, if any, shall be listed separately. A copy of the bill of lading and the freight waybill, when applicable, shall be attached to the invoice. The Contractor's name and, if applicable, the tax identification number on the invoice must exactly match the information in the Vendor's registration with the City. Unless otherwise instructed in writing, the City may rely on the remittance address specified on the Contractor's invoice.
- C. Invoices for labor shall include a copy of all time-sheets with trade labor rate and deliverables order number clearly identified. Invoices shall also include a tabulation of work-hours at the appropriate rates and grouped by work order number. Time billed for labor shall be limited to hours actually worked at the work site.
- D. Unless otherwise expressly authorized in the Contract, the Contractor shall pass through all Subcontract and other authorized expenses at actual cost without markup.
- E. Federal excise taxes, State taxes, or City sales taxes must not be included in the invoiced amount. The City will furnish a tax exemption certificate upon request.

#### 13. **PAYMENT**:

- A. All proper invoices received by the City will be paid within thirty (30) calendar days of the City's receipt of the deliverables or of the invoice, whichever is later.
- B. If payment is not timely made, (per paragraph A), interest shall accrue on the unpaid balance at the lesser of the rate specified in Texas Government Code Section 2251.025 or the maximum lawful rate; except, if payment is not timely made for a reason for which the City may withhold payment hereunder, interest shall not accrue until ten (10) calendar days after the grounds for withholding payment have been resolved.
- C. If partial shipments or deliveries are authorized by the City, the Contractor will be paid for the partial shipment or delivery, as stated above, provided that the invoice matches the shipment or delivery.
- D. The City may withhold or set off the entire payment or part of any payment otherwise due the Contractor to such extent as may be necessary on account of:
  - i. delivery of defective or non-conforming deliverables by the Contractor;
  - ii. third party claims, which are not covered by the insurance which the Contractor is required to provide, are filed or reasonable evidence indicating probable filing of such claims;
  - iii. failure of the Contractor to pay Subcontractors, or for labor, materials or equipment;
  - iv. damage to the property of the City or the City's agents, employees or contractors, which is not covered by insurance required to be provided by the Contractor;
  - v. reasonable evidence that the Contractor's obligations will not be completed within the time specified in the Contract, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;
  - vi. failure of the Contractor to submit proper invoices with all required attachments and supporting documentation; or
  - vii. failure of the Contractor to comply with any material provision of the Contract Documents.
- E. Notice is hereby given of Article VIII, Section 1 of the Austin City Charter which prohibits the payment of any money to any person, firm or corporation who is in arrears to the City for taxes, and of §2-8-3 of the Austin City Code concerning the right of the City to offset indebtedness owed the City.
- F. Payment will be made bycheck unless the parties mutually agree to payment by credit card or electronic transfer of funds. The Contractor agrees that there shall be no additional charges, surcharges, or penalties to the City for payments made by credit card or electronic funds transfer.
- G. The awarding or continuation of this contract is dependent upon the availability of funding. The City's payment obligations are payable only and solely from funds Appropriated and available for this contract. The absence of Appropriated or other lawfully available funds shall render the Contract null and void to the extent funds are not Appropriated or available and any deliverables delivered but unpaid shall be returned to the Contractor. The City shall provide the Contractor written notice of the failure of the City to make an adequate Appropriation for any fiscal year to pay the amounts due under the Contract, or the reduction of any Appropriation to an amount insufficient to permit the City to pay its obligations under the Contract. In the event of non or inadequate appropriation of funds, there will be no penalty nor removal fees charged to the City.
- 14. <u>TRAVEL EXPENSES</u>: All travel, lodging and per diem expenses in connection with the Contract for which reimbursement may be claimed by the Contractor under the terms of the Solicitation will be reviewed against the City's Travel Policy as published and maintained by the City's Controller's Office and the Current United States General Services Administration Domestic Per Diem Rates (the "Rates") as published and maintained on the Internet at:

http://www.gsa.gov/portal/category/21287

No amounts in excess of the Travel Policy or Rates shall be paid. All invoices must be accompanied by copies of detailed itemized receipts (e.g. hotel bills, airline tickets). No reimbursement will be made for expenses not actually incurred. Airline fares in excess of coach or economy will not be reimbursed. Mileage charges may not exceed the amount permitted as a deduction in any year under the Internal Revenue Code or Regulations.

#### 15. **FINAL PAYMENT AND CLOSE-OUT**:

- A. If an MBE/WBE Program Compliance Plan is required by the Solicitation, and the Contractor has identified Subcontractors, the Contractor is required to submit a Contract Close-Out MBE/WBE Compliance Report to the Project manager or Contract manager no later than the 15th calendar day after completion of all work under the contract. Final payment, retainage, or both may be withheld if the Contractor is not in compliance with the requirements of the Compliance Plan as accepted by the City.
- B. The making and acceptance of final payment will constitute:
  - i. a waiver of all claims by the City against the Contractor, except claims (1) which have been previously asserted in writing and not yet settled, (2) arising from defective work appearing after final inspection, (3) arising from failure of the Contractor to comply with the Contract or the terms of any warranty specified herein, (4) arising from the Contractor's continuing obligations under the Contract, including but not limited to indemnity and warranty obligations, or (5) arising under the City's right to audit; and
  - ii. a waiver of all claims by the Contractor against the City other than those previously asserted in writing and not yet settled.
- 16. **SPECIAL TOOLS & TEST EQUIPMENT**: If the price stated on the Offer includes the cost of any special tooling or special test equipment fabricated or required by the Contractor for the purpose of filling this order, such special tooling equipment and any process sheets related thereto shall become the property of the City and shall be identified by the Contractor as such.

#### 17. **RIGHT TO AUDIT**:

- A. The Contractor agrees that the representatives of the Office of the City Auditor or other authorized representatives of the City shall have access to, and the right to audit, examine, or reproduce, any and all records of the Contractor related to the performance under this Contract. The Contractor shall retain all such records for a period of three (3) years after final payment on this Contract or until all audit and litigation matters that the City has brought to the attention of the Contractor are resolved, whichever is longer. The Contractor agrees to refund to the City any overpayments disclosed by any such audit.
- B. The Contractor shall include section a. above in all subcontractor agreements entered into in connection with this Contract.

#### 18. **SUBCONTRACTORS**:

A. If the Contractor identified Subcontractors in an MBE/WBE Program Compliance Plan or a No Goals Utilization Plan the Contractor shall comply with the provisions of Chapters 2-9A, 2-9B, 2-9C, and 2-9D, as applicable, of the Austin City Code and the terms of the Compliance Plan or Utilization Plan as approved by the City (the "Plan"). The Contractor shall not initially employ any Subcontractor except as provided in the Contractor's Plan. The Contractor shall not substitute any Subcontractor identified in the Plan, unless the substitute has been accepted by the City in writing in accordance with the provisions of Chapters 2-9A, 2-9B, 2-9C and 2-9D, as applicable. No acceptance by the City of any Subcontractor shall constitute a waiver of any rights or remedies of the City with respect to defective deliverables provided by a Subcontractor. If a Plan has been approved, the Contractor is additionally required to submit a monthly Subcontract Awards and

Expenditures Report to the Contract Manager and the Purchasing Office Contract Compliance Manager no later than the tenth calendar day of each month.

- B. Work performed for the Contractor by a Subcontractor shall be pursuant to a written contract between the Contractor and Subcontractor. The terms of the subcontract may not conflict with the terms of the Contract, and shall contain provisions that:
  - i. require that all deliverables to be provided by the Subcontractor be provided in strict accordance with the provisions, specifications and terms of the Contract;
  - ii. prohibit the Subcontractor from further subcontracting any portion of the Contract without the prior written consent of the City and the Contractor. The City may require, as a condition to such further subcontracting, that the Subcontractor post a payment bond in form, substance and amount acceptable to the City;
  - iii. require Subcontractors to submit all invoices and applications for payments, including any claims for additional payments, damages or otherwise, to the Contractor in sufficient time to enable the Contractor to include same with its invoice or application for payment to the City in accordance with the terms of the Contract:
  - iv. require that all Subcontractors obtain and maintain, throughout the term of their contract, insurance in the type and amounts specified for the Contractor, with the City being a named insured as its interest shall appear; and
  - v. require that the Subcontractor indemnify and hold the City harmless to the same extent as the Contractor is required to indemnify the City.
- C. The Contractor shall be fully responsible to the City for all acts and omissions of the Subcontractors just as the Contractor is responsible for the Contractor's own acts and omissions. Nothing in the Contract shall create for the benefit of any such Subcontractor any contractual relationship between the City and any such Subcontractor, nor shall it create any obligation on the part of the City to pay or to see to the payment of any moneys due any such Subcontractor except as may otherwise be required by law.
- D. The Contractor shall pay each Subcontractor its appropriate share of payments made to the Contractor not later than ten (10) calendar days after receipt of payment from the City.

#### 19. WARRANTY-PRICE:

- A. The Contractor warrants the prices quoted in the Offer are no higher than the Contractor's current prices on orders by others for like deliverables under similar terms of purchase.
- B. The Contractor certifies that the prices in the Offer have been arrived at independently without consultation, communication, or agreement for the purpose of restricting competition, as to any matter relating to such fees with any other firm or with any competitor.
- C. In addition to any other remedy available, the City may deduct from any amounts owed to the Contractor, or otherwise recover, any amounts paid for items in excess of the Contractor's current prices on orders by others for like deliverables under similar terms of purchase.
- 20. WARRANTY TITLE: The Contractor warrants that it has good and indefeasible title to all deliverables furnished under the Contract, and that the deliverables are free and clear of all liens, claims, security interests and encumbrances. The Contractor shall indemnify and hold the City harmless from and against all adverse title claims to the deliverables.
- 21. WARRANTY DELIVERABLES: The Contractor warrants and represents that all deliverables sold the City under the Contract shall be free from defects in design, workmanship or manufacture, and conform in all material respects to the specifications, drawings, and descriptions in the Solicitation, to any samples furnished by the Contractor, to the terms, covenants and conditions of the Contract, and to all applicable State, Federal or local laws, rules, and

regulations, and industry codes and standards. Unless otherwise stated in the Solicitation, the deliverables shall be new or recycled merchandise, and not used or reconditioned.

- A. Recycled deliverables shall be clearly identified as such.
- B. The Contractor may not limit, exclude or disclaim the foregoing warranty or any warranty implied by law; and any attempt to do so shall be without force or effect.
- C. Unless otherwise specified in the Contract, the warranty period shall be at least one year from the date of acceptance of the deliverables or from the date of acceptance of any replacement deliverables. If during the warranty period, one or more of the above warranties are breached, the Contractor shall promptly upon receipt of demand either repair the non-conforming deliverables, or replace the non-conforming deliverables with fully conforming deliverables, at the City's option and at no additional cost to the City. All costs incidental to such repair or replacement, including but not limited to, any packaging and shipping costs, shall be borne exclusively by the Contractor. The City shall endeavor to give the Contractor written notice of the breach of warranty within thirty (30) calendar days of discovery of the breach of warranty, but failure to give timely notice shall not impair the City's rights under this section.
- D. If the Contractor is unable or unwilling to repair or replace defective or non-conforming deliverables as required by the City, then in addition to any other available remedy, the City may reduce the quantity of deliverables it may be required to purchase under the Contract from the Contractor, and purchase conforming deliverables from other sources. In such event, the Contractor shall pay to the City upon demand the increased cost, if any, incurred by the City to procure such deliverables from another source.
- E. If the Contractor is not the manufacturer, and the deliverables are covered by a separate manufacturer's warranty, the Contractor shall transfer and assign such manufacturer's warranty to the City. If for any reason the manufacturer's warranty cannot be fully transferred to the City, the Contractor shall assist and cooperate with the City to the fullest extent to enforce such manufacturer's warranty for the benefit of the City.
- 22. <u>WARRANTY SERVICES</u>: The Contractor warrants and represents that all services to be provided the City under the Contract will be fully and timely performed in a good and workmanlike manner in accordance with generally accepted industry standards and practices, the terms, conditions, and covenants of the Contract, and all applicable Federal, State and local laws, rules or regulations.
  - A. The Contractor may not limit, exclude or disclaim the foregoing warranty or any warranty implied by law, and any attempt to do so shall be without force or effect.
  - B. Unless otherwise specified in the Contract, the warranty period shall be <u>at least</u> one year from the Acceptance Date. If during the warranty period, one or more of the above warranties are breached, the Contractor shall promptly upon receipt of demand perform the services again in accordance with above standard at no additional cost to the City. All costs incidental to such additional performance shall be borne by the Contractor. The City shall endeavor to give the Contractor written notice of the breach of warranty within thirty (30) calendar days of discovery of the breach warranty, but failure to give timely notice shall not impair the City's rights under this section.
  - C. If the Contractor is unable or unwilling to perform its services in accordance with the above standard as required by the City, then in addition to any other available remedy, the City may reduce the amount of services it may be required to purchase under the Contract from the Contractor, and purchase conforming services from other sources. In such event, the Contractor shall pay to the City upon demand the increased cost, if any, incurred by the City to procure such services from another source.
- 23. ACCEPTANCE OF INCOMPLETE OR NON-CONFORMING DELIVERABLES: If, instead of requiring immediate correction or removal and replacement of defective or non-conforming deliverables, the City prefers to accept it, the City may do so. The Contractor shall pay all claims, costs, losses and damages attributable to the City's evaluation of and determination to accept such defective or non-conforming deliverables. If any such acceptance occurs prior

to final payment, the City may deduct such amounts as are necessary to compensate the City for the diminished value of the defective or non-conforming deliverables. If the acceptance occurs after final payment, such amount will be refunded to the City by the Contractor.

- 24. **RIGHT TO ASSURANCE**: Whenever one party to the Contract in good faith has reason to question the other party's intent to perform, demand may be made to the other party for written assurance of the intent to perform. In the event that no assurance is given within the time specified after demand is made, the demanding party may treat this failure as an anticipatory repudiation of the Contract.
- 25. **STOP WORK NOTICE**: The City may issue an immediate Stop Work Notice in the event the Contractor is observed performing in a manner that is in violation of Federal, State, or local guidelines, or in a manner that is determined by the City to be unsafe to either life or property. Upon notification, the Contractor will cease all work until notified by the City that the violation or unsafe condition has been corrected. The Contractor shall be liable for all costs incurred by the City as a result of the issuance of such Stop Work Notice.
- 26. <u>DEFAULT</u>: The Contractor shall be in default under the Contract if the Contractor (a) fails to fully, timely and faithfully perform any of its material obligations under the Contract, (b) fails to provide adequate assurance of performance under Paragraph 24, (c) becomes insolvent or seeks relief under the bankruptcy laws of the United States or (d) makes a material misrepresentation in Contractor's Offer, or in any report or deliverable required to be submitted by the Contractor to the City.
- **TERMINATION FOR CAUSE:.** In the event of a default by the Contractor, the City shall have the right to terminate 27. the Contract for cause, by written notice effective ten (10) calendar days, unless otherwise specified, after the date of such notice, unless the Contractor, within such ten (10) day period, cures such default, or provides evidence sufficient to prove to the City's reasonable satisfaction that such default does not, in fact, exist. The City may place Contractor on probation for a specified period of time within which the Contractor must correct any non-compliance issues. Probation shall not normally be for a period of more than nine (9) months, however, it may be for a longer period, not to exceed one (1) year depending on the circumstances. If the City determines the Contractor has failed to perform satisfactorily during the probation period, the City may proceed with suspension. In the event of a default by the Contractor, the City may suspend or debar the Contractor in accordance with the "City of Austin Purchasing Office Probation, Suspension and Debarment Rules for Vendors" and remove the Contractor from the City's vendor list for up to five (5) years and any Offer submitted by the Contractor may be disgualified for up to five (5) years. In addition to any other remedy available under law or in equity, the City shall be entitled to recover all actual damages, costs, losses and expenses, incurred by the City as a result of the Contractor's default, including, without limitation, cost of cover, reasonable attorneys' fees, court costs, and prejudgment and post-judgment interest at the maximum lawful rate. All rights and remedies under the Contract are cumulative and are not exclusive of any other right or remedy provided by law.
- 28. **TERMINATION WITHOUT CAUSE**: The City shall have the right to terminate the Contract, in whole or in part, without cause any time upon thirty (30) calendar days' prior written notice. Upon receipt of a notice of termination, the Contractor shall promptly cease all further work pursuant to the Contract, with such exceptions, if any, specified in the notice of termination. The City shall pay the Contractor, to the extent of funds Appropriated or otherwise legally available for such purposes, for all goods delivered and services performed and obligations incurred prior to the date of termination in accordance with the terms hereof.
- 29. **FRAUD**: Fraudulent statements by the Contractor on any Offer or in any report or deliverable required to be submitted by the Contractor to the City shall be grounds for the termination of the Contract for cause by the City and may result in legal action.

#### 30. **DELAYS**:

A. The City may delay scheduled delivery or other due dates by written notice to the Contractor if the City deems it is in its best interest. If such delay causes an increase in the cost of the work under the Contract, the City and the Contractor shall negotiate an equitable adjustment for costs incurred by the Contractor in the Contract price and execute an amendment to the Contract. The Contractor must assert its right to an

adjustment within thirty (30) calendar days from the date of receipt of the notice of delay. Failure to agree on any adjusted price shall be handled under the Dispute Resolution process specified in paragraph 49. However, nothing in this provision shall excuse the Contractor from delaying the delivery as notified.

B. Neither party shall be liable for any default or delay in the performance of its obligations under this Contract if, while and to the extent such default or delay is caused by acts of God, fire, riots, civil commotion, labor disruptions, sabotage, sovereign conduct, or any other cause beyond the reasonable control of such Party. In the event of default or delay in contract performance due to any of the foregoing causes, then the time for completion of the services will be extended; provided, however, in such an event, a conference will be held within three (3) business days to establish a mutually agreeable period of time reasonably necessary to overcome the effect of such failure to perform.

#### 31. **INDEMNITY**:

#### A. Definitions:

- i. "Indemnified Claims" shall include any and all claims, demands, suits, causes of action, judgments and liability of every character, type or description, including all reasonable costs and expenses of litigation, mediation or other alternate dispute resolution mechanism, including attorney and other professional fees for:
  - (1) damage to or loss of the property of any person (including, but not limited to the City, the Contractor, their respective agents, officers, employees and subcontractors; the officers, agents, and employees of such subcontractors; and third parties); and/or
  - (2) death, bodily injury, illness, disease, worker's compensation, loss of services, or loss of income or wages to any person (including but not limited to the agents, officers and employees of the City, the Contractor, the Contractor's subcontractors, and third parties),
- ii. "Fault" shall include the sale of defective or non-conforming deliverables, negligence, willful misconduct, or a breach of any legally imposed strict liability standard.
- B. THE CONTRACTOR SHALL DEFEND (AT THE OPTION OF THE CITY), INDEMNIFY, AND HOLD THE CITY, ITS SUCCESSORS, ASSIGNS, OFFICERS, EMPLOYEES AND ELECTED OFFICIALS HARMLESS FROM AND AGAINST ALL INDEMNIFIED CLAIMS DIRECTLY ARISING OUT OF, INCIDENT TO, CONCERNING OR RESULTING FROM THE FAULT OF THE CONTRACTOR, OR THE CONTRACTOR'S AGENTS, EMPLOYEES OR SUBCONTRACTORS, IN THE PERFORMANCE OF THE CONTRACTOR'S OBLIGATIONS UNDER THE CONTRACT. NOTHING HEREIN SHALL BE DEEMED TO LIMIT THE RIGHTS OF THE CITY OR THE CONTRACTOR (INCLUDING, BUT NOT LIMITED TO, THE RIGHT TO SEEK CONTRIBUTION) AGAINST ANY THIRD PARTY WHO MAY BE LIABLE FOR AN INDEMNIFIED CLAIM.
- 32. **INSURANCE**: (reference Section 0400 for specific coverage requirements). The following insurance requirement applies. (Revised 6/01/98).

#### A. General Requirements.

- i. The Contractor shall at a minimum carry insurance in the types and amounts indicated in Section 0400, Supplemental Purchase Provisions, for the duration of the Contract, including extension options and hold over periods, and during any warranty period.
- ii. The Contractor shall provide Certificates of Insurance with the coverages and endorsements required in Section 0400, Supplemental Purchase Provisions, to the City as verification of coverage prior to contract execution and within fourteen (14) calendar days after written request from the City. Failure to provide the required Certificate of Insurance may subject the Offer to disqualification from consideration for award. The Contractor must also forward a Certificate of Insurance to the City whenever a previously identified policy period has expired, or an extension option or hold over period is exercised, as verification of continuing coverage.

- iii. The Contractor shall not commence work until the required insurance is obtained and until such insurance has been reviewed by the City. Approval of insurance by the City shall not relieve or decrease the liability of the Contractor hereunder and shall not be construed to be a limitation of liability on the part of the Contractor.
- iv. The Contractor must submit certificates of insurance to the City for all subcontractors prior to the subcontractors commencing work on the project.
- v. The Contractor's and all subcontractors' insurance coverage shall be written by companies licensed to do business in the State of Texas at the time the policies are issued and shall be written by companies with A.M. Best ratings of B+VII or better. The City will accept workers' compensation coverage written by the Texas Workers' Compensation Insurance Fund.
- vi. The "other" insurance clause shall not apply to the City where the City is an additional insured shown on any policy. It is intended that policies required in the Contract, covering both the City and the Contractor, shall be considered primary coverage as applicable.
- vii. If insurance policies are not written for amounts specified in Section 0400, Supplemental Purchase Provisions, the Contractor shall carry Umbrella or Excess Liability Insurance for any differences in amounts specified. If Excess Liability Insurance is provided, it shall follow the form of the primary coverage.
- viii. The City shall be entitled, upon request, at an agreed upon location, and without expense, to review certified copies of policies and endorsements thereto and may make any reasonable requests for deletion or revision or modification of particular policy terms, conditions, limitations, or exclusions except where policy provisions are established by law or regulations binding upon either of the parties hereto or the underwriter on any such policies.
- ix. The City reserves the right to review the insurance requirements set forth during the effective period of the Contract and to make reasonable adjustments to insurance coverage, limits, and exclusions when deemed necessary and prudent by the City based upon changes in statutory law, court decisions, the claims history of the industry or financial condition of the insurance company as well as the Contractor.
- x. The Contractor shall not cause any insurance to be canceled nor permit any insurance to lapse during the term of the Contract or as required in the Contract.
- xi. The Contractor shall be responsible for premiums, deductibles and self-insured retentions, if any, stated in policies. All deductibles or self-insured retentions shall be disclosed on the Certificate of Insurance.
- xii. The Contractor shall endeavor to provide the City thirty (30) calendar days' written notice of erosion of the aggregate limits below occurrence limits for all applicable coverages indicated within the Contract.
- xiii. The insurance coverages specified in Section 0400, Supplemental Purchase Provisions, are required minimums and are not intended to limit the responsibility or liability of the Contractor.
- B. <u>Specific Coverage Requirements: Specific insurance requirements are contained in Section 0400, Supplemental Purchase Provisions</u>
- 33. <u>CLAIMS</u>: If any claim, demand, suit, or other action is asserted against the Contractor which arises under or concerns the Contract, or which could have a material adverse affect on the Contractor's ability to perform thereunder, the Contractor shall give written notice thereof to the City within ten (10) calendar days after receipt of notice by the Contractor. Such notice to the City shall state the date of notification of any such claim, demand, suit,

or other action; the names and addresses of the claimant(s); the basis thereof; and the name of each person against whom such claim is being asserted. Such notice shall be delivered personally or by mail and shall be sent to the City and to the Austin City Attorney. Personal delivery to the City Attorney shall be to City Hall, 301 West 2<sup>nd</sup> Street, 4<sup>th</sup> Floor, Austin, Texas 78701, and mail delivery shall be to P.O. Box 1088, Austin, Texas 78767.

- 34. **NOTICES**: Unless otherwise specified, all notices, requests, or other communications required or appropriate to be given under the Contract shall be in writing and shall be deemed delivered three (3) business days after postmarked if sent by U.S. Postal Service Certified or Registered Mail, Return Receipt Requested. Notices delivered by other means shall be deemed delivered upon receipt by the addressee. Routine communications may be made by first class mail, telefax, or other commercially accepted means. Notices to the Contractor shall be sent to the address specified in the Contractor's Offer, or at such other address as a party may notify the other in writing. Notices to the City shall be addressed to the City at P.O. Box 1088, Austin, Texas 78767 and marked to the attention of the Contract Administrator.
- 35. RIGHTS TO BID, PROPOSAL AND CONTRACTUAL MATERIAL: All material submitted by the Contractor to the City shall become property of the City upon receipt. Any portions of such material claimed by the Contractor to be proprietary must be clearly marked as such. Determination of the public nature of the material is subject to the Texas Public Information Act, Chapter 552, Texas Government Code.
- NO WARRANTY BY CITY AGAINST INFRINGEMENTS: The Contractor represents and warrants to the City that: 36. (i) the Contractor shall provide the City good and indefeasible title to the deliverables and (ii) the deliverables supplied by the Contractor in accordance with the specifications in the Contract will not infringe, directly or contributorily, any patent, trademark, copyright, trade secret, or any other intellectual property right of any kind of any third party; that no claims have been made by any person or entity with respect to the ownership or operation of the deliverables and the Contractor does not know of any valid basis for any such claims. The Contractor shall, at its sole expense, defend, indemnify, and hold the City harmless from and against all liability, damages, and costs (including court costs and reasonable fees of attorneys and other professionals) arising out of or resulting from: (i) any claim that the City's exercise anywhere in the world of the rights associated with the City's' ownership, and if applicable, license rights, and its use of the deliverables infringes the intellectual property rights of any third party: or (ii) the Contractor's breach of any of Contractor's representations or warranties stated in this Contract. In the event of any such claim, the City shall have the right to monitor such claim or at its option engage its own separate counsel to act as co-counsel on the City's behalf. Further, Contractor agrees that the City's specifications regarding the deliverables shall in no way diminish Contractor's warranties or obligations under this paragraph and the City makes no warranty that the production, development, or delivery of such deliverables will not impact such warranties of Contractor.
- CONFIDENTIALITY: In order to provide the deliverables to the City, Contractor may require access to certain of the City's and/or its licensors' confidential information (including inventions, employee information, trade secrets, confidential know-how, confidential business information, and other information which the City or its licensors consider confidential) (collectively, "Confidential Information"). Contractor acknowledges and agrees that the Confidential Information is the valuable property of the City and/or its licensors and any unauthorized use, disclosure, dissemination, or other release of the Confidential Information will substantially injure the City and/or its licensors. The Contractor (including its employees, subcontractors, agents, or representatives) agrees that it will maintain the Confidential Information in strict confidence and shall not disclose, disseminate, copy, divulge, recreate, or otherwise use the Confidential Information without the prior written consent of the City or in a manner not expressly permitted under this Agreement, unless the Confidential Information is required to be disclosed by law or an order of any court or other governmental authority with proper jurisdiction, provided the Contractor promptly notifies the City before disclosing such information so as to permit the City reasonable time to seek an appropriate protective order. The Contractor agrees to use protective measures no less stringent than the Contractor uses within its own business to protect its own most valuable information, which protective measures shall under all circumstances be at least reasonable measures to ensure the continued confidentiality of the Confidential Information.
- 38. **OWNERSHIP AND USE OF DELIVERABLES**: The City shall own all rights, titles, and interests throughout the world in and to the deliverables.

- A. <u>Patents</u>. As to any patentable subject matter contained in the deliverables, the Contractor agrees to disclose such patentable subject matter to the City. Further, if requested by the City, the Contractor agrees to assign and, if necessary, cause each of its employees to assign the entire right, title, and interest to specific inventions under such patentable subject matter to the City and to execute, acknowledge, and deliver and, if necessary, cause each of its employees to execute, acknowledge, and deliver an assignment of letters patent, in a form to be reasonably approved by the City, to the City upon request by the City.
- B. <u>Copyrights</u>. As to any deliverables containing copyrightable subject matter, the Contractor agrees that upon their creation, such deliverables shall be considered as work made-for-hire by the Contractor for the City and the City shall own all copyrights in and to such deliverables, provided however, that nothing in this Paragraph 38 shall negate the City's sole or joint ownership of any such deliverables arising by virtue of the City's sole or joint authorship of such deliverables. Should by operation of law, such deliverables not be considered works made-for-hire, the Contractor hereby assigns to the City (and agrees to cause each of its employees providing services to the City hereunder to execute, acknowledge, and deliver an assignment to the City of) all worldwide right, title, and interest in and to such deliverables. With respect to such work made-for-hire, the Contractor agrees to execute, acknowledge, and deliver and cause each of its employees providing services to the City hereunder to execute, acknowledge, and deliver a work-made-for-hire agreement, in a form to be reasonably approved by the City, to the City upon delivery of such deliverables to the City or at such other time as the City may request.
- C. Additional Assignments. The Contractor further agrees to, and if applicable, cause each of its employees to, execute, acknowledge, and deliver all applications, specifications, oaths, assignments, and all other instruments which the City might reasonably deem necessary in order to apply for and obtain copyright protection, mask work registration, trademark registration and/or protection, letters patent, or any similar rights in any and all countries and in order to assign and convey to the City, its successors, assigns and nominees, the sole and exclusive right, title, and interest in and to the deliverables. The Contractor's obligation to execute, acknowledge, and deliver (or cause to be executed, acknowledged, and delivered) instruments or papers such as those described in this Paragraph 38 a., b., and c. shall continue after the termination of this Contract with respect to such deliverables. In the event the City should not seek to obtain copyright protection, mask work registration or patent protection for any of the deliverables, but should desire to keep the same secret, the Contractor agrees to treat the same as Confidential Information under the terms of Paragraph 37 above.
- 39. **PUBLICATIONS**: All published material and written reports submitted under the Contract must be originally developed material unless otherwise specifically provided in the Contract. When material not originally developed is included in a report in any form, the source shall be identified.
- 40. **ADVERTISING**: The Contractor shall not advertise or publish, without the City's prior consent, the fact that the City has entered into the Contract, except to the extent required by law.
- 41. **NO CONTINGENT FEES**: The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure the Contract upon any agreement or understanding for commission, percentage, brokerage, or contingent fee, excepting bona fide employees of bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty, the City shall have the right, in addition to any other remedy available, to cancel the Contract without liability and to deduct from any amounts owed to the Contractor, or otherwise recover, the full amount of such commission, percentage, brokerage or contingent fee.
- 42. **GRATUITIES**: The City may, by written notice to the Contractor, cancel the Contract without liability if it is determined by the City that gratuities were offered or given by the Contractor or any agent or representative of the Contractor to any officer or employee of the City of Austin with a view toward securing the Contract or securing favorable treatment with respect to the awarding or amending or the making of any determinations with respect to the performing of such contract. In the event the Contract is canceled by the City pursuant to this provision, the City

shall be entitled, in addition to any other rights and remedies, to recover or withhold the amount of the cost incurred by the Contractor in providing such gratuities.

- 43. PROHIBITION AGAINST PERSONAL INTEREST IN CONTRACTS: No officer, employee, independent consultant, or elected official of the City who is involved in the development, evaluation, or decision-making process of the performance of any solicitation shall have a financial interest, direct or indirect, in the Contract resulting from that solicitation. Any willful violation of this section shall constitute impropriety in office, and any officer or employee guilty thereof shall be subject to disciplinary action up to and including dismissal. Any violation of this provision, with the knowledge, expressed or implied, of the Contractor shall render the Contract voidable by the City.
- 44. **INDEPENDENT CONTRACTOR**: The Contract shall not be construed as creating an employer/employee relationship, a partnership, or a joint venture. The Contractor's services shall be those of an independent contractor. The Contractor agrees and understands that the Contract does not grant any rights or privileges established for employees of the City.
- 45. **ASSIGNMENT-DELEGATION**: The Contract shall be binding upon and enure to the benefit of the City and the Contractor and their respective successors and assigns, provided however, that no right or interest in the Contract shall be assigned and no obligation shall be delegated by the Contractor without the prior written consent of the City. Any attempted assignment or delegation by the Contractor shall be void unless made in conformity with this paragraph. The Contract is not intended to confer rights or benefits on any person, firm or entity not a party hereto; it being the intention of the parties that there be no third party beneficiaries to the Contract.
- 46. <u>WAIVER</u>: No claim or right arising out of a breach of the Contract can be discharged in whole or in part by a waiver or renunciation of the claim or right unless the waiver or renunciation is supported by consideration and is in writing signed by the aggrieved party. No waiver by either the Contractor or the City of any one or more events of default by the other party shall operate as, or be construed to be, a permanent waiver of any rights or obligations under the Contract, or an express or implied acceptance of any other existing or future default or defaults, whether of a similar or different character.
- 47. **MODIFICATIONS**: The Contract can be modified or amended only by a writing signed by both parties. No preprinted or similar terms on any the Contractor invoice, order or other document shall have any force or effect to change the terms, covenants, and conditions of the Contract.
- 48. **INTERPRETATION**: The Contract is intended by the parties as a final, complete and exclusive statement of the terms of their agreement. No course of prior dealing between the parties or course of performance or usage of the trade shall be relevant to supplement or explain any term used in the Contract. Although the Contract may have been substantially drafted by one party, it is the intent of the parties that all provisions be construed in a manner to be fair to both parties, reading no provisions more strictly against one party or the other. Whenever a term defined by the Uniform Commercial Code, as enacted by the State of Texas, is used in the Contract, the UCC definition shall control, unless otherwise defined in the Contract.

#### 49. **DISPUTE RESOLUTION**:

A. If a dispute arises out of or relates to the Contract, or the breach thereof, the parties agree to negotiate prior to prosecuting a suit for damages. However, this section does not prohibit the filing of a lawsuit to toll the running of a statute of limitations or to seek injunctive relief. Either party may make a written request for a meeting between representatives of each party within fourteen (14) calendar days after receipt of the request or such later period as agreed by the parties. Each party shall include, at a minimum, one (1) senior level individual with decision-making authority regarding the dispute. The purpose of this and any subsequent meeting is to attempt in good faith to negotiate a resolution of the dispute. If, within thirty (30) calendar days after such meeting, the parties have not succeeded in negotiating a resolution of the dispute, they will proceed directly to mediation as described below. Negotiation may be waived by a written agreement signed by both parties, in which event the parties may proceed directly to mediation as described below.

- B. If the efforts to resolve the dispute through negotiation fail, or the parties waive the negotiation process, the parties may select, within thirty (30) calendar days, a mediator trained in mediation skills to assist with resolution of the dispute. Should they choose this option, the City and the Contractor agree to act in good faith in the selection of the mediator and to give consideration to qualified individuals nominated to act as mediator. Nothing in the Contract prevents the parties from relying on the skills of a person who is trained in the subject matter of the dispute or a contract interpretation expert. If the parties fail to agree on a mediator within thirty (30) calendar days of initiation of the mediation process, the mediator shall be selected by the Travis County Dispute Resolution Center (DRC). The parties agree to participate in mediation in good faith for up to thirty (30) calendar days from the date of the first mediation session. The City and the Contractor will share the mediator's fees equally and the parties will bear their own costs of participation such as fees for any consultants or attorneys they may utilize to represent them or otherwise assist them in the mediation.
- 50. <u>JURISDICTION AND VENUE</u>: The Contract is made under and shall be governed by the laws of the State of Texas, including, when applicable, the Uniform Commercial Code as adopted in Texas, V.T.C.A., Bus. & Comm. Code, Chapter 1, excluding any rule or principle that would refer to and apply the substantive law of another state or jurisdiction. All issues arising from this Contract shall be resolved in the courts of Travis County, Texas and the parties agree to submit to the exclusive personal jurisdiction of such courts. The foregoing, however, shall not be construed or interpreted to limit or restrict the right or ability of the City to seek and secure injunctive relief from any competent authority as contemplated herein.
- 51. **INVALIDITY**: The invalidity, illegality, or unenforceability of any provision of the Contract shall in no way affect the validity or enforceability of any other portion or provision of the Contract. Any void provision shall be deemed severed from the Contract and the balance of the Contract shall be construed and enforced as if the Contract did not contain the particular portion or provision held to be void. The parties further agree to reform the Contract to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken provision. The provisions of this section shall not prevent this entire Contract from being void should a provision which is the essence of the Contract be determined to be void.
- 52. **HOLIDAYS:** The following holidays are observed by the City:

Holiday	Date Observed
New Year's Day	January 1
Martin Luther King, Jr.'s Birthday	Third Monday in January
President's Day	Third Monday in February
Memorial Day	Last Monday in May
Independence Day	July 4
Labor Day	First Monday in September
Veteran's Day	November 11
Thanksgiving Day	Fourth Thursday in November
Friday after Thanksgiving	Friday after Thanksgiving
Christmas Eve	December 24
Christmas Day	December 25

If a Legal Holiday falls on Saturday, it will be observed on the preceding Friday. If a Legal Holiday falls on Sunday, it will be observed on the following Monday.

53. **SURVIVABILITY OF OBLIGATIONS:** All provisions of the Contract that impose continuing obligations on the parties, including but not limited to the warranty, indemnity, and confidentiality obligations of the parties, shall survive the expiration or termination of the Contract.

#### 54. NON-SUSPENSION OR DEBARMENT CERTIFICATION:

The City of Austin is prohibited from contracting with or making prime or sub-awards to parties that are suspended or debarred or whose principals are suspended or debarred from Federal, State, or City of Austin Contracts. By accepting a Contract with the City, the Vendor certifies that its firm and its principals are not currently suspended or debarred from doing business with the Federal Government, as indicated by the General Services Administration List of Parties Excluded from Federal Procurement and Non-Procurement Programs, the State of Texas, or the City of Austin.

#### 55. EQUAL OPPORTUNITY

- A. **Equal Employment Opportunity:** No Offeror, or Offeror's agent, shall engage in any discriminatory employment practice as defined in Chapter 5-4 of the City Code. No Offer submitted to the City shall be considered, nor any Purchase Order issued, or any Contract awarded by the City unless the Offeror has executed and filed with the City Purchasing Office a current Non-Discrimination Certification. Non-compliance with Chapter 5-4 of the City Code may result in sanctions, including termination of the contract and the Contractor's suspension or debarment from participation on future City contracts until deemed compliant with Chapter 5-4.
- B. Americans with Disabilities Act (ADA) Compliance: No Offeror, or Offeror's agent, shall engage in any discriminatory employment practice against individuals with disabilities as defined in the ADA.

#### 56. BUY AMERICAN ACT-SUPPLIES (Applicable to certain Federally funded requirements)

- A. Definitions. As used in this paragraph
  - i. "Component" means an article, material, or supply incorporated directly into an end product.
  - ii. "Cost of components" means -
    - (1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the end product (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or
    - (2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the end product.
  - iii. "Domestic end product" means-
    - (1) An unmanufactured end product mined or produced in the United States; or
    - (2) An end product manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind as those that the agency determines are not mined, produced, or manufactured in sufficient and reasonably available commercial quantities of a satisfactory quality are treated as domestic. Scrap generated, collected, and prepared for processing in the United States is considered domestic.
  - iv. "End product" means those articles, materials, and supplies to be acquired under the contract for public use.
  - v. "Foreign end product" means an end product other than a domestic end product.
  - vi. "United States" means the 50 States, the District of Columbia, and outlying areas.

- B. The Buy American Act (41 U.S.C. 10a 10d) provides a preference for domestic end products for supplies acquired for use in the United States.
- C. The City does not maintain a list of foreign articles that will be treated as domestic for this Contract; but will consider for approval foreign articles as domestic for this product if the articles are on a list approved by another Governmental Agency. The Offeror shall submit documentation with their Offer demonstrating that the article is on an approved Governmental list.
- D. The Contractor shall deliver only domestic end products except to the extent that it specified delivery of foreign end products in the provision of the Solicitation entitled "Buy American Act Certificate".

The following Supplemental Purchasing Provisions apply to this solicitation:

1. EXPLANATIONS OR CLARIFICATIONS (reference paragraph 5 in Section 0200)

All requests for explanations or clarifications must be submitted in writing to the Purchasing Office by April 13, 2012 at 5:00 pm either via e-mail to <a href="mailto:brenda.helgren@austintexas.gov">brenda.helgren@austintexas.gov</a> or by FAX at (512) 974-2388.

2. **INSURANCE**. Insurance does not apply to this solicitation.

#### 3. TERM OF CONTRACT

- A. The Contract shall be in effect for an initial term of 36 months and may be extended thereafter for up to 3 additional 12 month periods, subject to the approval of the Contractor and the City Purchasing Officer or his designee.
- B. Upon expiration of the initial term or period of extension, the Contractor agrees to hold over under the terms and conditions of this agreement for such a period of time as is reasonably necessary to resolicit and/or complete the project (not to exceed 120 days unless mutually agreed on in writing).
- C. Upon written notice to the Contractor from the City's Purchasing Officer or his designee and acceptance of the Contractor, the term of this contract shall be extended on the same terms and conditions for an additional period as indicated in paragraph A above. A price increase, subject to the provisions of this Contract, may be requested by the Contractor (for each period of extension) for approval by the City's Purchasing Officer or his designee.

#### THIS IS A 36 MONTH CONTRACT.

#### FIRM PRICES ARE TO BE SUBMITTED FOR THE FIRST TWELVE (12) MONTH PERIOD

#### 4. QUANTITIES

The quantities listed herein are estimates for the period of the Contract. The City reserves the right to purchase more or less of these quantities as may be required during the Contract term. Quantities will be as needed and specified by the City for each order. Unless specified in the solicitation, there are no minimum order quantities.

- 5. **INVOICES and PAYMENT** (reference paragraphs 12 and 13 in Section 0300)
  - A. Invoices shall contain a non-duplicated invoice number and the information required in Section 0300, paragraph 12, entitled "Invoices." Invoices received without all required information cannot be processed and will be returned to the vendor.

Invoices shall be mailed to the below address:

	City of Austin
Department	Public Works Department - Street & Bridge
Attn:	Accts Payable
Address	4411-A Meinardus Drive
City, State Zip Code	Austin, Texas 78744

B. The Contractor agrees to accept payment by either credit card, check or Electronic Funds Transfer (EFT) for all goods and/or services provided under the Contract. The Contractor shall factor the cost of processing credit card payments into the Offer. There shall be no additional charges, surcharges, or penalties to the City for payments made by credit card.

#### 6. NON-COLLUSION, NON-CONFLICT OF INTEREST, AND ANTI-LOBBYING

- A. On November 10, 2011, the Austin City Council adopted Ordinance No. 20111110-052 amending Chapter 2.7, Article 6 of the City Code relating to Anti-Lobbying and Procurement. The policy defined in this Code applies to Solicitations for goods and/or services requiring City Council approval under City Charter Article VII, Section 15 (Purchase Procedures). During the No-Contact Period, Offerors or potential Offerors are prohibited from making a representation to anyone other than the Authorized Contact Person in the Solicitation as the contact for questions and comments regarding the Solicitation.
- B. If during the No-Contact Period an Offeror makes a representation to anyone other than the Authorized Contact Person for the Solicitation, the Offeror's Offer is disqualified from further consideration except as permitted in the Ordinance.
- C. If a Respondent has been disqualified under this article more than two times in a sixty (60) month period, the Purchasing Officer shall debar the Offeror from doing business with the City for a period not to exceed three (3) years, provided the Respondent is given written notice and a hearing in advance of the debarment.
- D. The City requires Offerors submitting Offers on this Solicitation to provide a signed Section 0810, Non-Collusion, Non-Conflict of Interest, and Anti-Lobbying Affidavit, certifying that the Offeror has not in any way directly or indirectly made representations to anyone other than the Authorized Contact Person during the No-Contact Period as defined in the Ordinance The text of the City Ordinance is posted on the Internet at: http://www.ci.austin.tx.us/edims/document.cfm?id=161145

#### 7. ECONOMIC PRICE ADJUSTMENT

A. Prices shown in this contract shall remain firm for the first 12 month period of the contract. After that, in recognition of the potential for fluctuation of the Contractor's cost, a price adjustment (increase or decrease) may be requested by either the City or the Contractor subject to the following considerations:

#### B. Price Increases

- i. Requests for price increases must be made in writing and submitted to the appropriate Buyer in the City's Purchasing Office. The letter must be signed by a person with the authority to bind the Contractor contractually, shall reference the contract number, and include the following documentation:
  - (1) an itemized, revised price list with the effective date of the proposed increase;
  - (2) copies of the documentation provided by the manufacturer regarding the proposed price increase if the contractor is not the manufacturer of the products. If the Contractor is the manufacturer of the products, a letter so stating must be provided;
  - Contractor shall submit, as a part of the request for increase, the version of the Producer Price Index (s) (Table 5 - Producer price indices for the net output of selected industries and their products or Table 6 - Producer price indexes and percent changes for commodity groupings and individual items, not seasonally adjusted) Asphalt Paving

<u>Mixtures/324121 and Crushed and Broken Limestone/212312</u> (the "Index") current as of the date of the Contractor's Offer; and a copy of the index for the most current period.

- (4) Proposed price increases must be solely for the purpose of accommodating increases in the Contractor's costs for the products or services provided. Prices for products or services unaffected by verifiable cost trends shall not be subject to change.
- ii. Requests for price increases must be made in writing and submitted to the appropriate Contract Manager prior to each yearly anniversary date of contract. Prices will only be considered for an increase at that time. Once received, the City will have 30 calendar days to review and approve/disapprove the requested increase. Should the City not agree with the requested increase, Contractor may either maintain the prices currently in effect, negotiate an acceptable increase with the City or terminate the contract.
- iii. The proposed percentage change between the current contract price and the requested price shall not exceed the percentage change between the Index in effect at the beginning of the current review period and the one in effect at the time the price increase is requested. Except in the case of emergency situations, the requested index related or non-index related price increase shall not exceed twenty-five percent (25%) for any single line item, and in no event shall the total amount of the contract be automatically increased as a result of the increase in any one or more line items made pursuant to this provision.
- iv. Since the perceived need for price increases may be due in whole or in part to factors other than index changes, the City may consider approving fully-documented increase requests which, in the Contractor's opinion, justify price increases for one or more line items in the contract. If index changes are responsible in part for the requested change, those changes shall be documented as previously described above.

#### C. Price Decreases

- i. Proposed price decreases may be offered to the City at any time, and become effective upon acceptance by the City unless a different effective date is specified by the Contractor. Request for price decreases by the City will be based on the same documentation as price increase request. Price decrease offers may also be subject to negotiation.
- ii. Price decreases based on relevant factors may be requested by the City at any time. Such requests shall be accompanied by a complete statement of the City's justification for the request. The Contractor shall have 30 calendar days to respond to the City's request. Following receipt of the Contractor's agreement with the requested decrease, the City may implement the decrease at any time. Should the Contractor not agree with the requested decrease, the City may either maintain the prices currently in effect, negotiate with the contractor, or terminate the contract.

#### 8. CONTRACT MANAGER

The following person is designated as Contract Manager, and will act as the contact point between the City and the Contractor during the term of the Contract:

Brenda L Jimenez, Contract Administrator	

\*Note: The above listed Contract Manager is not the authorized Contact Person for purposes of the **NON-CONFLICT OF INTEREST, AND ANTI-LOBBYING Provision** of this Section; and therefore, contact with the Contract Manager is prohibited during the no contact period.

#### 9. AWARD

The City will award a Primary contract to the vendor bidding lowest and most responsive for all line items. The City will also issue a second solicitation for an Alternate vendor. The successful vendor for the Primary solicitation cannot be awarded the contract for the secondary solicitation.

If the Primary vendor is unable to meet requirements when called, the City will call upon the Alternate vendor.

#### **CITY OF AUSTIN**

### PURCHASE SPECIFICATIONS FOR

### HOT MIX ASPHALT CONCRETE – TYPE B, C, C-SBS POLYMER, & D to include H.M.A.C. with RAP/RAS AND WARM MIXES

#### 1.0 SCOPE AND CLASSIFICATION

- 1.1. SCOPE This specification is intended to cover requirements for Hot Mix Asphaltic Concrete (HMAC). The scope of this specification covers the following: Applicable Specifications, General Requirements, Ordering and Invoicing Requirements.
- 1.2. **CLASSIFICATION** The Hot Mix Asphalt Concrete (HMAC) material will be used for street maintenance repairs and street paving projects, within the City of Austin limits by Street and Bridge Operations.

This specification, until revised or rescinded, shall apply to each future purchase and contract for the commodity described herein. Retain for future reference.

#### 2.0 APPLICABLE SPECIFICATIONS

2.1. The Hot Mix Asphaltic Concrete (HMAC) types provided shall meet the applicable requirements of the following specifications:

Item No. 301S Asphalt, Oils and Emulsions of the City of Austin Special Specifications, dated August 20, 2007. (ATTACHMENT #1)

Item No. 340S Hot Mix Asphaltic Concrete Pavement of the City of Austin Standard Specification dated July 1, 2009. (ATTACHMENT #2)

Item No. SP340S Dense-Graded Hot-Mix (QC/QA) of the City of Austin Special Specification dated March 19, 2012. (ATTACHMENT #3)

#### 3.0 GENERAL REQUIREMENTS

- 3.1. The Contractor shall supply the material at an asphalt plant located within a twenty-five (25) mile radius of the State of Texas Capitol Building.
- 3.2. The submittal requirement of the specification items may include:
  - A. A mix design submittal including the plant corrected Job Mix Formula (JMF) for the hot mix asphaltic concrete.
  - B. Certification that the aggregate materials meet appropriate quality requirements.
  - C. Particle size gradation and specific gravity tests on all aggregate materials.
  - D. Certification that the asphalt cements for paving materials meets appropriate quality materials.
- 3.3. All HMAC supplied shall be subject to standard laboratory tests by the City's contracted testing laboratory. HMAC that does not meet the City specification 340S/340S Special Provision shall be subject to the Pay Adjustment Acceptance schedule as listed in the City specification.
- 3.4. Special Specification HMAC Type D –Thin Lift Mix shall include the following specifications:
  - A. Materials, Aggregate.

Warm mix additives may be used for thin lift mixes; however, NO RAP or RAS will be allowed in this thin lift mixture.

B. Materials, Asphalt Material, Paving Mixture.

Asphalt cement for paving mixture SS340-Type D THIN shall include a polymer modifier and conform to the requirements of AC-45P or PG76-22S.

C. Paving Mixtures, Types.

A new type designated "D-Thin" is hereby created for thin lift overlays of around 1" in thickness. And although TxDOT mixes are occasionally accepted in lieu of the COA specified materials; absolutely no ¾" rock will be allowed in a Type D-thin mixture. While this requirement is already consistent with our normal COA specification gradation, we note that the TxDOT specification allows up to 2% of the ¾" rock which will not be accepted in this 1" thin lift mixture

#### 4.0 MATERIAL ORDERING REQUIREMENTS

**Weekly Forecast** – The Street and Bridge Division Project Coordinator will provide a weekly HMAC forecast to the Contractor by 12:00 PM on Friday for the preceding week HMAC requirements. The forecast is the estimated usage and is subject to change depending on weather, project priority, labor availability, and equipment downtime. The Street and Bridge Project Coordinator will notify the Contractor to confirm, add or delete orders in the event of inclement weather.

Next Day Order – HMAC orders for the following day will be faxed or called into the Contractor by 3:00PM. Weekend and Monday orders will be faxed or called into the Contractor by 10:00AM on Thursday. The Project Coordinator will call the Contractor same day to verify that the order was received and the material can be provided as requested. Thereafter the Contractor shall be responsible for notifying the Project Coordinator or Designee when delays or unavailability of hot mix orders occur. Notification to the Project Coordinator is to be made by 4:00 PM same day.

4.1 The Contractor shall have the HMAC materials available for pick up at the plant during the following normal working hours and days:

Monday through Saturday 6:30 am to 4:30 pm. Sunday pick up shall be available with three (3) working days advance notice. Pick up after normal working hours shall be available with two (2) working days advance notice.

- 4.2. There shall be no penalty for minimum order quantity for HMAC when the type of mix requested is already being produced. A forecast estimate will be provided to assist the Contractor in planning material requirements/usage; however, Hot Mix must be made available on an as needed basis (in excess of the projected forecast in order to complete a project within stated normal working hours). The HMAC material shall be measured by the ton, (2000) pounds of the type actually picked up at the plant.
- 4.3. The Contractor shall provide Hot Mix service as per outlined requirements below to ensure efficient and prompt service:
  - A. HMAC is currently batched and stored in the silo.
  - B. HMAC pickup shall be received in the order of vehicle arrival if the type of HMAC is currently being processed.

- C. Once in line, City vehicles shall not be removed from the order in which they arrive. The City shall not provide payment for HMAC orders placed (confirmed) and not picked up due to the City vehicle(s) being removed from the waiting line, due to plant operations break down, or due to waiting periods longer than 30 minutes after arrival.
- D. The City of Austin Street & Bridge Project Coordinator or Designee will determine if an alternate supplier will provide HMAC for project completion if there is a significant delay in HMAC primary plant operations.
- E. The City of Austin requests information for any and all additional costs associated with plant start-up and/or hourly fees for HMAC production after normal working hours and on Sundays.

#### 5.0 CONTRACT ADMINISTRATOR

5.1 The Contractor shall participate in monthly coordination meetings with the Street and Bridge Division Project Coordinator or other division personnel. The time and place of the meetings shall be mutually agreed upon.

Brenda L Jimenez, Contract Clayton Craig, Project Coordinator

Administrator

Public Works Department
Street & Bridge Operation
4411-A Meinardus Drive
Austin, TX 78744

Public Works Department
Street & Bridge Operations
4411-A Meinardus Drive
Austin, TX 78744

6.0 INVOICING

6.1 All invoices shall reference at a minimum the following items:

Invoice Number Date
Contract Number Unit Price

Delivery Ticket Numbers Product Description

Total Amount of Invoice Quantity

Remit to Address

6.2 The HMAC material invoices shall be reviewed by the Contract Administrator and approved for payment at the unit prices, provided that the material meets the specification requirements. Invoices are to be mailed to:

Public Works Department Street and Bridge Operations

Attn: Accts Payable 4411-A Meinardus Drive Austin, Texas 78744

### Item No. 301S Asphalts, Oils and Emulsions

#### 301S.1 Description

This item includes the requirements for cutback asphalts, emulsified asphalts, polymer modified asphalt cements, performance graded asphalt binders and other miscellaneous asphaltic materials and latex additives.

This specification is applicable for projects or work involving either inch-pound or SI units. Within the text the inch-pound units are given preference followed by SI units shown within parentheses.

#### 301S.2 Submittals

Submittals shall include test results for each the materials described herein when specifically identified on the Drawings and/or referenced in associated standard specification items and standard details.

Submittals may include samples of the base asphalt cement and polymer additives.

#### 301S.3 Materials

When tested in accordance with designated TxDoT, AASHTO and/or ASTM Test Methods, the various materials shall meet the applicable requirements of this specification.

#### A. Acronyms

The acronyms used in this specification are defined in the following table.

Table 1: Acronyms

Acronym	Definition	Acronym	Definition
Test Method Prefix		Polymer Modifier	
Tex	TxDOT	SBR or L	Styrene-Butadiene Rubber (Latex)
Т	AASHTO	SBS	Styrene-Butadiene-Styrene Block Copolymer
D	ASTM		Tire Rubber, from ambient temperature
		TR	grinding of truck and passenger tires
		Р	Polymer Modified
AC	Asphalt Cement	SS	Slow Setting
RC	Rapid Curing	H-suffix	Harder Residue (Lower Penetration)
MC	Medium Curing	AE	Asphalt Emulsion
SCM	Special Cutback	S-suffix	Stockpile Usage
	Material		
HF	High Float	AE-P	Asphalt Emulsion Prime
С	Cationic	EAP&T	Emulsified Asphalt Prime and Tack
RS	Rapid Setting	PCE	Prime, Cure, and Erosion Control
MS	Medium Setting	PG	Performance Grade

#### B. Asphalt Cement

The material shall be homogeneous, free from water, shall not foam when heated to 350°F (177°C) and shall meet the requirements in Table 2.

Table 2: Asphalt Cement Requirements

Viscosity Grade		AC	-10	AC-	-20	AC-	30
Property Test N	/lethod	Min	Max	Min	Max	Min	Max
Viscosity: 140°F, poises (60°C, pascals)	T202	800 (80)	1200 (120)	1600 (160)	2400 (240)	2400 (240)	3600 (360)
Viscosity: 275°F, stokes (135°C, pascals)	T202	1.9 (.19)	-	2.5 (.25)	-	3.0 (.30)	-
Penetration: 77°F (25°C), 100g, 5s	T49	85	-	55	-	45	-
Flash Point, C.O.C. °F (°C)	T48	450 (232)	-	450 (232)	-	450 (232)	-
% Solubility trichloroethylene	T44	99.0	-	99.0	-	99.0	-
Spot test Tex	₹509-C						
Viscosity: 140°F stokes (60°C pascals)	T202	-	3000 (300)	-	6000 (600)	-	9000 (900)
Ductility 77°F (25°C), 5 cm/min, cm	T202	100	-	70	-	50	-

#### C. Polymer Modified Asphalt Cement.

Polymer modified asphalt cement must be smooth, homogeneous, and shall comply with the requirements listed in Table 3.

Table 3: Polymer Modified Asphalt Cement Requirements

Polymer Modified Viscosity Grade		AC	AC-5		AC-10		AC-15P		5P*
Polymer Type			SBR		SBR		SBS		S
Property	Test Method	Min	Max	Min	Max	Min	Max	Min	Max
Polymer in % (solids basis)	Tex-533-C	2.0	-	2.0	-	3.0	-	3.0	-
Viscosity									
140°F, poise (60°C, pascals)	T 202	700 (70)	-	1300 (130)	-	1500 (150)	-	4500 (450)	-
275°F, poise (135°C, pascals)	T 202		7.0 (0.7)	1	8.0 (0.8)	-	8.0 (0.8)	14.0 (1.4)	
Penetration, 77°F (25°C), 100 g, 5 s.	T 49	120	-	80	-	100	150	50	74
Ductility, 5cm/min., 39.2°F, cm	T 51	70	-	60	-	-	-	15	-
Elastic Recovery, 50°F (10°C), %	Tex-539-C	-	-	-	-	55	-		-
Polymer Separation, 48 hrs**.	Tex-540-C	No	ne	None		None		Noi	ne
Flash Point, C.O.C., °F (°C),	T 48	425 (218)	-	425 (218)	-	425 (218)	-	425 (218)	-
Tests on Residue from Thin Film Ov	en Test: (T17	9)							
Retained Penetration Ratio, 77°F (25°C), % original	T 49	-	-	-	-	0.60	1.00	0.60	0.90

<sup>\*</sup> The SBS block copolymer may be pre-blended with a polymer processing oil (up to a 1:1 ratio of polymer to oil) to aid the solution of the polymer in the asphalt.

<sup>\*\*</sup> A 350-gram (0.77 pound) sample of the asphalt-SBS blend is stored for 48 hours at 325°F (163°C). Upon completion of the storage time, the sample is visually examined for separation of the SBS from the asphalt (smoothness and homogeneity). If a question still exists about the separation of the SBS, samples shall be taken from the top and bottom of the sample for Infrared Spectroscopy analysis. A difference of 0.4% or more in the concentration of the SBS between the top and bottom samples shall constitute separation.

#### D. Cutback Asphalt

Cutback Asphalt shall meet the requirements presented in tables 4, and 5 for the specified type and grade.

Table 4: RAPID CURING TYPE CUTBACK ASPHALT Requirements

Type-Grade	RC-2	250	RC-8	300	RC-3	000	
Properties T	est Method	Min	Max	Min	Max	Min	Max
Water, percent	T55	-	0.2	-	0.2	-	0.2
Flash Point, T.O.C.,°F [°C]	T79	80 (27)	ı	80 (27)	-	80 (27)	-
Kinematic viscosity @ 140°F, cst [60°C, mm²/s]	T201	250	400	800	1600	3000	6000
Distillation Test:	T78						
Distillate, % by volume of total distillate	to 680°F [ 3	60°C]:					
to 437°F [225°C]:		40	75	35	70	20	55
to 500°F [260°C]:		65	90	55	85	45	75
to 600°F [316°C]:		85	•	80	-	70	-
Residue from Distillation, Volume	e %	70	ı	75	-	82	-
Tests of Distillation Residue:							
Penetration, 100g, 5 sec., 77°F [25°C], cn	n T49	80	120	80	120	80	120
Ductility, 5 cm/min., 77°F, 5 cm/min., cm	T51	100	1	100	-	100	-
[25°C, 50 mm/min., mm]		1000	•	1000	-	1000	-
Solubility in trichloroethylene, % T44		99.0	•	99.0	-	99.0	-
Spot Test	Tex 509-C		A	ALL NEG	SATIVI	E	

Table 5: MEDIUM CURING TYPE CUTBACK ASPHALT Requirements

Туре		MC	-30	MC-	-70	MC-	250	MC-	-800	MC-	3000
Properties Test N	Method	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Water, %	T55	-	0.2	-	0.2	-	0.2	-	0.2	-	0.2
Flash Point, T.O.C.,°F	T79	100	-	100	-	150	1	150	-	150	
[°C]		[38]		[38]		[65]		[65]		[65]	
Kinematic viscosity.	T201	30	60	70	140	250	500	800	1600	3000	6000
@ 140°F. cst [60°C, mm²/s	]										
Distillation Test:	Distillation Test: T78										
Distillate, as % by volume	to total	distilla	te to 6	80°F[3	360°C	)]:, sha	all be a	as follo	ws:		
to 437°F [225°C]:		-	25	-	20	-	10	-	-	-	-
to 500°F [260°C]:		40	70	20	60	15	55	-	35	-	15
to 600°F [316°C]:		75	93	65	90	60	87	45	80	15	75
Residue from 80°F [225°C	] distilla	tion									
Volume Percent		50	-	55	-	67	-	75	-	80	ı
Tests on Distillation Residu	ıe:										
Penetration	T49	120	250	120	250	120	250	120	250	120	250
@ 77°F [25°C], 100g, s, 0	)1mm:										
Ductility	T51										
@ 77°F, 5 cm/min, cms		100*	-	100*	-	100*	-	100*	-	100*	-
[25°C, 50 mm/min., mm	າ]	1000*	-	1000*	-	1000*	-	1000*	-	1000*	-
% Solubility in	T44	99.0	-	99.0	-	99.0	-	99.0	-	99.0	-
trichloroethylene											
Spot Test Tex	509-C				F	ALL NE	GATI	VE			

If penetration of residue is more than 200 and the ductility at 77°F [25°C] is less than 100 cm [1000 mm], the material will be acceptable if its ductility at 60°F [16°C] is more than 100cm [1000 mm].

#### E. Emulsified Asphalt

The material shall be homogenous. It shall show no separation of asphalt after thorough mixing and shall meet the requirements for the specified type and grade presented in Tables 6, 7 and 8.

Table 6: ANIONIC EMULSION Requirements

	Туре		Medium	n Setting	(	Slow S	Setting	
	Grade		M	S-2	SS-	-1	SS-1h	
Property	Test M	ethod	Min	Max	Min	Max	Min	Max
Furol Viscosity @ 77°F	•	T72	-	-	20	100	30	100
@ 122°F	[50°C], sec		100	300	-	-	1	1
Sieve Test, %.		T59	-	0.1	-	0.1	-	0.1
Miscibility (Standard Tes	st)	T59	-	-	Pass	ing	Pas	ssing
Cement Mixing, %		T59	-	-	-	2.0	-	2.0
% Demulsibility: 35 cc 0.02N CaCl <sub>2</sub>			-	30	-	-	-	-
Storage Stability 1 day,	%	T59	-	1	-	1	-	1
Freezing Test, 3 Cycles	*	T59	Pas	sing	Passi	ng	Passing	
Distillation Test		T59						
Distillation Residue, 9	%		65	-	60	-	60	-
Distillate Oil Portion,	%		-	1/2	-	1/2	-	1/2
Tests of Residue from D	istillation:							
Penetration @ 77°F [25	5°C], 100g, 5s	T49	120	160	120	160	70	100
Solubility in Trichloroethylene, %			97.5	-	97.5	-	97.5	-
Ductility @ 77F, 5 cm/min., cm		T51	100	-	100	-	80	-
[@ 25°C, 50 mm	/min., mm]		1000	-	1000	-	800	-

<sup>\*</sup> Applies only when Engineer or designated representative specifies the material for winter use.

Table 7: HIGH FLOAT ANIONIC EMULSION Requirements

	•	Туре	Rapid Setting		Medium		
		Brade	HFR	RS-2	AES-	300	
Property	T	est Method	Min	Max	Min	Max	
Viscosity, Saybolt Furol		T72					
@ 77°F [25°C], sec.			-	-	75	400	
@ 122°F [50°C], sec.			150	400	•	-	
Oil Portion of Distillate, %		T59	-	2	ı	7	
Sieve Test, %		T59	-	0.1	•	0.1	
Particle Charge		T59	pos	itive	posit	ive	
Coating Ability and Water Resista	ance:	T59					
Coating, dry aggregate			-	-	good		
Coating, after spraying			-	-	fai	r	
Coating, wet aggregate					fai	r	
Coating, after spraying					fai	r	
% Demulsibility: 35 ml 0.02 N Ca	Cl <sub>2</sub>	T59	50	-	-	-	
Storage Stability Test, 1 day, %		T59	-	1	-	1	
Distillation Test		T59					
Residue by Distillation, % by we			65	-	65	-	
Oil Distillate, by volume of emu		1	-	1/2	-	5	
Tests on Residue from Distillation							
Penetration at 77°F [25°C], 100		T49	100	140	300	-	
Solubility in Trichloroethylene, 9		T44	97.5	-	97.5	-	
Ductility @ 77°F., 5 cm/min, cm	S	T51	100	-	-	-	
[25°C., 50 mm/min, mm]			[1000]				
Float Test at 140°F [60°C], se	C.	Tex 509-C	1200	-	1200	-	

PRESENT VERSION: 08/20/07

Table 8: CATIONIC EMULSION Requirements

	Туре		R	apid :	Settir	ıg	Medium Setting				Slow Setting			
_	Grade		CR	S-2	CR	S-2h	CM	S-2	CMS	S-2s	CSS	S-1	CSS	S-1h
Property	Test Metho	od N	∕lin	Max	Min	Max	Min.	Max	Min	Max	Min	Max	Min	Max
Viscosity, Sa	aybolt Furol T	72												
@ 77°	°F [25°C], sec.		-	-	-	-	-	-	-	-	20	100	20	100
@ 122	2°F [50°C],sec.	1	50	400	150	400	100	300	100	300	-	-	-	-
Storage stat	oility test, 1 day % T	59	-	1	-	1	-	1	-	1	-	1	-	1
% Demulsib	ility: *'** T	59 4	40		40	-	-	-	-	-	-	-	-	-
	ity & water resistan	ce T	59											
	ry aggregate		-	-	-	-	go			od	-	-	-	-
	fter spraying		-	-	-	-	fa		fa		-	-	-	-
	et aggregate fter spraying		-	-	-	-	fa fa		fa fa		-	-	-	-
			<u>-</u>			. 141						4:	- D	141
Particle char	<u> </u>			itive		sitive	Pos		Pos		Posi			itive
Sieve test, %		59		0.10	-	0.10	-	0.10	-	0.10	-	0.10	-	0.10
Cement Mix		59	-	-	-	-	-	-	•	-	-	2.0	-	2.0
Distillation T		59												•
% Oil distilla	ate, vol. of emulsion	1	-	1/2	-	1/2	-	7	-	5	-	1/2	-	1/2
Residue by	Distillation,% by wo	it 6	65	-	65	•	65	-	65	-	60	-	60	-
Tests on Re	sidue from Distillati	on:												
Penetration	,77°F T	49 1	20	160	80	110	120	200	300	-	120	160	80	110
[25°C], 100	g, 5s.													
Ductility,	T	51												
77°F, 5 c	m/min, cm	1	00	-	80	-	100	-	-	-	100	-	80	-
[25°C, 50	mm/min, mm]	10	000	-	800	-	1000	-	-	-	1000	-	800	-
% Solubility		14 9	7.5	-	97.5	1	97.5	-	97.5	-	97.5	-	97.5	-
trichloroeth	nylene													

<sup>\*</sup> At a level of 35 ml 0.8% sodium dioctyl sulfosuccinate.

#### F. Polymer Modified Emulsions

The material shall be homogenous. It shall show no separation of asphalt after thorough mixing and shall meet the requirements for the specified type and grade presented in Tables 9 and 10.

#### G. Specialty Emulsions.

Specialty emulsions may be either asphaltic-based or resin-based and must meet the requirements included in Table 11.

#### H. Recycling Agent.

Recycling agent and emulsified recycling agent must meet the requirements of table 12. Additionally, recycling agent and residue from emulsified recycling agent, when added in the specified proportions to the recycled asphalt, must meet the properties specified on the drawings.

<sup>\*\*</sup> The demulsibility test shall be made within 30 days from date of shipment.

Table 9: Polymer Modified Emulsified Asphalt Requirements

Time Crade	F	Rapid S	Setting	9		Me	dium	Settir	ng		Slo Set	ow ting
Type-Grade	RS	-1P	HFR	S-2P	AES-	150P		S- 0P		S- 0S	SS	-1P
Property Test Method	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Viscosity, Saybolt Furol T 72												
77°F, sec.	-	-	-	-	75	400	75	400	75	400	30	100
122°F, sec.	50	200	150	400	-	-	-	-	-	-	-	-
Sieve Test, % T 59	-	0.1	-	0.1	-	0.1	-	0.1	-	0.1	-	0.1
Miscibility T 59		-		-		-		-		-	pa	ss
Coating Ability and Water Resistance	<b>)</b> :	T59										
dry aggregate/after spray		-		-	good	d/fair	good	d/fair	good	d/fair	-	-
wet aggregate/after spray		-		•	fair	/fair	fair	/fair	fair	/fair	-	•
Demulsibility, 35 ml of T 59 0.02 N CaCl <sub>2</sub> , %	60	-	50	-	-	•	-	-	-	-	-	-
Storage Stability, 1 day, % T 59	-	1	-	1	-	1	-	1	-	1	-	1
Breaking Index, g Tex-542-C	-	80	-	-	-	-	-	-	-	-	-	-
Distillation Test: <sup>1</sup> T 59												
Residue by Distillation, % by wt.	65	-	65	-	65	ı	65	-	65	-	60	-
Oil Distillate, % by vol of emulsion		3	-	0.5	-	3	-	5	-	7	-	0.5
Tests: Residue from Distillation:												
Polymer Content, wt. % (solids basis) Tex-533-C	-	-	3.0	-	-	-	-	-	-	-	3.0	-
Penetration, T 49 77°F, (25°C) 100 g, 5 sec.	225	300	90	140	150	300	300	-	300	-	100	140
Solubility in T 44 Trichloroethylene, %	97.0	-	97.0	-	97.0	-	97.0	-	97.0	-	97.0	-
Viscosity, 140°F, poise T 202 60°C, Pa-s	-	-	1500	-	-	-	-	-	-	-	1300	-
Float Test, 140°F, sec. T 50	-	-	1200	-	1200	-	1200	-	1200	-	-	-
Ductility <sup>2</sup> , 39.2°F, 5 cm/min., cm T 51 (4°C, 5 cm/min., mm)	-	-	50 500	-	-	-	-	-	-	-	50 500	-
Elastic Recovery <sup>2</sup> , Tex-539-C 50°F,(10°C), %	55	-	55	-	-	-	-	-	-	-	-	-
Tests on RTFO Tex-541-C Curing of Distillation Residue:												
Elastic Recovery, Tex-539-C 50°F,(10°F) %	-	-	-	-	50		50	-	30	-	-	-

<sup>&</sup>lt;sup>1</sup> Exception to AASHTO T 59: Bring the temperature on the lower thermometer slowly to 350°F +/- 10°F. Maintain at this temperature for 20 min. Complete total distillation in 60 +/- 5 min. from the first application of heat.

<sup>&</sup>lt;sup>2</sup> HFRS-2P must meet one of either the Ductility or Elastic Recovery.

Table 10: Polymer Modified Cationic Emulsified Asphalt Requirements

Type-Grade		ļ	Rapid	Settin	g	Slow Setting		
		CRS	S-1P	CRS	S-2P	CSS	S-1P	
Property	Test Method	Min	Max	Min	Max	Min	Max	
Viscosity, Saybolt Furol	T 72							
77°F (25°C), sec.		-	-	-	-	20	100	
122°F (50°C), sec.		50	150	150	400	1	-	
Sieve Test, %	T 59	-	0.1	-	0.1	ı	0.1	
Demulsibility, 35 ml of 0.8%								
sodium dioctyl sulfosuccinate, %	T 59	60	-	70	-	-	-	
Storage Stability, 1 day, %	T 59	-	1	-	1	ı	1	
Breaking Index, g	Tex-542-C	- 80		-	-			
Particle Charge	T 59	posi	tive	pos	sitive	pos	sitive	
Distillation Test:1	T 59							
Residue by Distillation, % by wt.		65	-	65	ı	62	-	
Oil Distillate, % by volume of emulsion		-	3	-	0.5	-	0.5	
Tests on Residue from Distillation:								
Polymer Content, wt. % (solids basis)	Tex-533-C	-	-	3.0	ı	3.0	-	
Penetration, 77°F (25°C), 100 g, 5 sec.	T 49	225	300	90	150	55	90	
Viscosity, 140°F, poise (60°C, Pa-s)	T 202	-	-	1300	-	1	-	
Solubility in Trichloroethylene, %	T 44	97.0	-	97.0	-	97.0	-	
Softening Point, °F	T 53	-	-	-	-	135	-	
Ductility, 77°F, 5 cm/min., cm	T 51					70		
(25°C, 5 cm/min., mm)	1 31					700	-	
Ductility <sup>2</sup> , 39.2°F, 5 cm/min., cm	T 51			50			_	
(4°C, 5 cm/min., mm)	1 31	_	-	50	-	-	-	
Elastic Recovery <sup>2</sup> , 50°F (10°C), %	Tex-539-C	45	-	55	-	-	-	

Exception to AASHTO T 59: Bring the temperature on the lower thermometer slowly to 350°F +/- 10°F. Maintain at this temperature for 20 min. Complete total distillation in 60 +/- 5 min. from the first application of heat.

<sup>&</sup>lt;sup>2</sup> CRS-2P must meet one of either the Ductility or Elastic Recovery.

Type-Grade		Medium Setting			g	Slow Setting		
		ΑE	E-P	EAF	P&T	P	CE <sup>1</sup>	
Property	Test Method	Min	Max	Min	Max	Min	Max	
Viscosity, Saybolt Furol	T 72							
77°F (25°C), sec.		-	1	-	-	10	100	
122°F (50°C), sec.		15	150	ı	-	-	-	
Sieve Test, %	T 59		0.1	-	0.1	-	0.1	
Miscibility <sup>2</sup>	T 59		-	ра	ISS	pa	ass	
Demulsibility, 35 ml of 0.10 N CaCl <sub>2</sub> , %	T 59	-	70	-	-	-	-	
Storage Stability, 1 day, %	T 59	-	1	-	1	-	-	
Particle Size <sup>3</sup> , % by volume < 2.5 ☐m	Tex-238-F	-	-	90	-	-	-	
Asphalt Emulsion Distillation to 500°F (260°C) followed by Cutback Asphalt Distillation of Residue to 680°F (360°C):	T 59 & T 78							
Residue after both Distillations, % by wt.		40	-	-	-	-	-	
Total Oil Distillate from both distillations, % by volume of emulsion		25	40	-	-	-	-	
Distillation:	T 59							
Residue by Distillation, % by wt.		-	-	60	-	-	-	
Evaporation: <sup>4</sup>	T 59							
Residue by Evaporation, % by wt.		-	-	-	-	60	-	
Tests on Residue after all Distillation(s):								
Viscosity, 140°F, poise (60°C, Pa-s)	T 202	-	-	800	-	-	-	
Kinematic Viscosity, 140°F, cSt [60°C, mm²/s]	T 201		-	-	-	100	350	
Flash Point, C.O.C., °F [°C]	T 48	-	-	-	-	400 204	-	
Solubility in Trichloroethylene, %	T 44	97.5	-	-	_	_	-	
Float Test, 122°F (50°C), sec.	T 50	50	200	-	-	-	-	

Supply with each shipment of PCE:

Table 12: Recycling Agent and Emulsified Recycling Agent Requirements

Property	Test	Recyclin	g Agent	<b>Emulsified Recycling Agent</b>			
	Method	Min	Max	Min	Max		
Viscosity, Saybolt Furol, 77°F, sec.	T 72	-	-	15	100		

a) a copy of a lab report from an approved analytical lab, signed by a lab official, indicating the PCE formulation does not meet any characteristics of a Resource Conservation Recovery Act (RCRA) hazardous waste;

b) a certification from the producer that the formulation supplied does not differ from the one tested and that no listed RCRA hazardous wastes or PCB's have been mixed with the product; and

c) a Materials Safety Data Sheet.

Exception to AASHTO T 59: In dilution, use 350 ml of distilled or deionized water and a 1000-ml beaker.

<sup>&</sup>lt;sup>3</sup> Tex-238-F, beginning at "Particle Size Analysis by Laser Diffraction," "Procedure" (using - medium: distilled or deionized water and dispersant: none), or other approved method.

<sup>&</sup>lt;sup>4</sup> Exception to AASHTO T 59: Leave sample in the oven until foaming ceases, then cool and weigh.

Asphalts, Oils and Emulsions

Sieve Test, %	T 59	-	-	-	0.1
Miscibility <sup>1</sup>	T 59	-		No Coag	ulation
Evaporation Test: <sup>2</sup>	T 59				
Residue by Evaporation, % by wt.		-	-	60	-
Tests on Recycling Agent or Residue from Evaporation:					
Flash Point, C.O.C., °F	T 48	400	-	400	-
Kinematic Viscosity,	T 201				
140°F, cSt		75	200	75	200
275°F, cSt		-	10.0	-	10.0

<sup>&</sup>lt;sup>1</sup>Exception to AASHTO T 59: Use 0.02 N CaCl<sub>2</sub> solution in place of water.

#### Crack Sealer

This section sets forth the requirements for a polymer modified emulsion suitable for sealing fine cracks, and a rubber asphalt compound suitable for sealing cracks of 1/8 inch [3 mm] or greater width.

#### 1. Polymer Modified Asphalt Emulsion Crack Sealer

For cracks on the order of 1/8 inch [3 mm] width, HFRS-2P polymer modified emulsion as described in the table included in Section F, Polymer Modified Emulsions of this item may be used. Requirements for the polymer modified emulsion and rubber-asphalt crack-sealing compound are presented in Table 13.

Table 13: Polymer Modified Asphalt Emulsion Crack Sealer Requirements

Property	Test Methods	Min	Max
Rotational Viscosity, 77°F, cP	ASTM D 2196, Method A	10,000	25,000
Sieve Test, %	T 59	-	0.1
Storage Stability, 1 day, %	T 59	-	1
Evaporation	Tex-543-C		
Residue by Evaporation, % by wt.		65	-
Tests on Residue from Evaporation:			
Penetration, 77°F, 100 g, 5 sec.	T 49	35	75
Softening Point, °F	T 53	140	-
Ductility, 39.2°F, 5 cm/min., cm	T 51	100	-

#### 2. Rubber-Asphalt Crack Sealing Compound

This specification item may be a proprietary product. The compound shall be capable of being melted and applied at a temperature of 400°F [200°C] or less by a suitable oil jacketed kettle equipped with a pressure pump, a hose and a nozzle. It shall contain no water or highly-volatile matter. It shall not be tracked by vehicular traffic once it cools to road pavement temperature.

The rubber-asphalt crack sealing compound shall meet requirements in Table 14.

Table 14: Rubber-Asphalt Crack Sealer Requirements

Proporty	Test Methods	Clas	s A	Class B		
Property	Test Methods	Min	Max	Min	Max	
CRM Content, Grade A or B, % by wt.	Tex-544-C	22	26	-	-	

<sup>&</sup>lt;sup>2</sup>Exception to AASHTO T 59: Maintain sample at 300°F until foaming ceases, then cool and weigh.

CRM Content, Grade B, % by wt.	Tex-544-C	-	-	13	17	
Virgin Rubber Content <sup>1</sup> , % by wt.		-	-	2	-	
Flash Point <sup>2</sup> , COC, <sup>o</sup> F	T 48	400	-	400	-	
Penetration <sup>3</sup> , 77°F, 150g, 5 sec.	T 49	30	50	30	50	
Penetration <sup>3</sup> , 32°F, 200g, 60 sec.	T 49	12	-	12	-	
Softening Point, °F	T 53	-	-	170	-	
Bond <sup>4</sup> , 3 cycles, 20°F	Tex-525-C	-		Pass		

<sup>1</sup> Provide certification that the min. % virgin-rubber was added.

- a. Properties of Rubber Used in Sealer. The rubber shall be one of the following types;
  - 1) Type I Ground tire rubber.
  - Type II A mixture of ground tire rubber and high natural reclaimed scrap rubber. The natural rubber content, determined by ASTM D 297, shall be a minimum of 25 percent.
- b. Ground Rubber. The ground rubber shall comply with the following gradation requirements when tested by TxDoT Test Method Tex-200-F, Part I.

Table 15: Ground Rubber Gradation Requirements

Sieve	Size	Percent Retained					
U.S.	SI	Type I	Type II				
No. 8	2.36 mm	0	-				
No. 10	2.00 mm	0-5	0				
No. 30	600μm	90-100	50-70				
No. 50	300μm	95-100	70-95				
No. 100	150μm	-	95-100				

The ground rubber shall be free from fabric, wire, cord or other contaminating materials.

c. Packaging. The rubber-asphalt crack sealing compound shall be packaged in boxes, which contain two (2) 30-35 pound [14-16 kilogram] blocks that are individually packaged in a liner made of polyethylene, or other packaging approved by the Engineer or designated representative.

#### J. Performance Graded Binders.

Performance graded binders must be smooth, homogeneous, show no separation when tested in accordance with Test Method Tex-540-C, and must meet the requirements in the following table.

Before passing the test flame over the cup, agitate the sealing compound with a 3/8 to 1/2 in. (9.5 to 12.7 mm) wide, square-end metal spatula in a manner so as to bring the material on the bottom of the cup to the surface, i.e., turn the material over. Start at one side of the thermometer, move around to the other, and then return to the starting point using 8 to 10 rapid circular strokes. Accomplish agitation in 3 to 4 sec. Pass the test flame over the cup immediately after stirring is completed.

Exception to AASHTO T 49: Substitute the cone specified in ASTM D 217 for the penetration peedle

No crack in the crack sealing materials or break in the bond between the sealer and the mortar blocks over 1/4 in. deep for any specimen after completion of the test.

Separation testing is not required if:

- a modifier is introduced separately at the mix plant either by injection in the asphalt line or mixer, or
- the binder is blended on site in continuously agitated tanks, or
- binder acceptance is based on field samples taken from an in-line sampling port at the hot mix plant after the addition of modifiers.

Table 16 Performance Graded Binder Requirements

Performance Grade	<u>P</u>	G 58 -28		<u>-16</u>	<u>PG</u> -22		<u>-34</u>	-16		70 -28	-34	<u>-16</u>		76 -28	-34		PG 8 -22	_
Average 7-day Max Pavement  Design Temperature, °C <sup>1</sup>		<u>58</u>		<u>64</u>			<u>70</u>			<u>76</u>				<u>82</u>				
Min Pavement Design Temperature, ⁰C <sup>1</sup>	>- 22	<u>&gt;-</u> 28	<u>&gt;-</u> 34	<u>&gt;-</u> 16	<u>&gt;-</u> 22	<u>&gt;-</u> 28	<u>&gt;-</u> <u>34</u>	<u>&gt;-</u> 16	>- 22	<u>&gt;-</u> 28	>- 34	<u>&gt;-</u> 16	>- 22	>- 28	<u>&gt;-</u> 34	<u>&gt;-</u> 16	<u>&gt;-</u> 22	>- 28
			<u>C</u>	RIG	INA	L BI	NDE	<u>R</u>										
Flash Point, AASHTO T 48: Min,									23	0ºC								
Viscosity, AASHTO TP 48: <sup>2, 3</sup> Max, 3.0 Pas, Test Temperature,									13	5ºC								
Dynamic Shear, AASHTO TP 5: <sup>4</sup> G*/sin (δ), Min, 1.00 kPa Test Temperature @ 10 rad/sec.,		58°C 64°C 70°C 76°C							82°C									
Elastic Recovery, ASTM D 6084, 50°F, % Min	-	-	30	-	-	30	50	-	30	50	60	30	50	60	70	50	60	70
ROLLING THIN FILM OVEN (Tex-541-C)																		
Mass Loss, Max, %									1	.0								
Dynamic Shear, AASHTO TP 5: G*/sin (δ), Min, 2.20 kPa Test Temperature @10 red/sec.,	,	58ºC	;		64	°C		70°C				76°C				82°C		;
PRESSUR	E A	GINC	3 VE	SSI	EL (F	PAV	) RE	SID	UE	(AAS	SHTO	) PI	P 1)					
PAV Aging Temperature									10	0ºC								
Dynamic Shear, AASHTO TP 5: G*/sin (δ), Max, 5000 kPa Test Temperature10 rad/sec., ºC	25	22	19	28	25	22	19	28	25	22	19	28	25	22	19	28	25	22
Creep Stiffness, AASHTO TP 1: <sup>5, 6</sup> S, Max, 300 mPa, M - value, Min, 0.300 Test Temperature @ 60 sec., °C	-12	-18	-24	-6	-12	-18	-24	-6	-12	-18	-24	-6	-12	-18	-24	-6	-12	-18
Direct Tension, AASHTO TP 3: <sup>6</sup> Failure Strain, Min, 1.0% Test Temperature @1.0 mm/min.,  °C	-12	-18	-24	-6	-12	-18	-24	-6	-12	-18	-24	-6	-12	-18	-24	-6	-12	-18

Pavement temperatures are estimated from air temperatures using an algorithm contained in the PGEXCEL3.xls software program, may be provided by the Department or by following the procedures as outlined in AASHTO MP 2 and PP 28.

This requirement may be waived at the Department's discretion if the supplier warrants that the asphalt binder can be adequately pumped, mixed and compacted at temperatures that meet all applicable safety, environmental, and constructability requirements. At test temperatures where the binder is a Newtonian fluid, any suitable standard means of viscosity measurement may be used, including capillary (AASTHO T 201 or T 202) or rotational viscometry (AASHTO TP 48).

Viscosity at 135°C is an indicator of mixing and compaction temperatures that can be expected in the lab and field. High values may indicate high mixing and compaction temperatures. Additionally, significant variation can occur from batch to batch. Contractors should be aware that variation could significantly impact their mixing and compaction operations. Contractors are therefore responsible for addressing any constructability issues that may arise.

For quality control of unmodified asphalt binder production, measurement of the viscosity of the original asphalt binder may be substituted for dynamic shear measurements of G\*/sin ( asphalt is a Newtonian fluid. Any suitable standard means of viscosity measurement may be used, including capillary (AASHTO T 201 or T 202) or rotational viscometry (AASHTO TP 48).

- <sup>5</sup> Silicone beam molds, as described in AASHTO TP 1-93, are acceptable for use.
- If creep stiffness is below 300 mPa, direct tension test is not required. If creep stiffness is between 300 and 600 mPa, the direct tension failure strain requirement can be used instead of the creep stiffness requirement. The m-value requirement must be satisfied in both cases.

#### 301S.4 Equipment.

All equipment necessary to transport, store, sample, heat, apply, and incorporate asphalts, oils, and emulsions shall be provided.

#### 301S.5 Construction

Typical materials used for specific applications are identified in table 17. These are typical uses only and circumstances may require use of other material.

Table 17: Typical Material Use

Material Application	Typically Used Materials
Hot-Mixed, Hot-Laid Asphalt Mixtures	PG Binders, Modified PG Binders
Surface Treatment	AC-5, AC-10, AC-5 w/2% SBR, AC-10 w/2% SBR, AC-15P, AC-15-5TR, HFRS-2, MS-2, CRS-2, CRS-2H, HFRS-2P, CRS-2P,
Surface Treatment	RS-1P, CRS-1P, RC-250, RC-800, RC-3000, MC-250, MC-800, MC-3000,
(Cool Weather)	MC-2400L
Precoating	AC-5, AC-10, PG 64-22, SS-1, SS-1H, CSS-1, CSS-1H
Tack Coat	RC-250, SS-1, SS-1H, CSS-1, CSS-1H, EAP&T
Fog Seal	SS-1, SS-1H, CSS-1, CSS-1H
Hot-Mixed, Cold-Laid Asphalt Mixtures	AC-0.6, AC-1.5, AC-3, AES-300, AES-300P, CMS-2, CMS-2S
Patching Mix	MC-800, SCM I, SCM II, AES-300S
Recycling	AC-3, AES-150P, AES-300P, Recycling Agent, Emulsified Recycling Agent
Crack Sealing	SS-1P, Polymer Mod AE Crack Sealant, Rubber Asphalt Crack Sealers (Class A, Class B)
Prime	MC-30, AE-P, EAP&T, PCE
Curing Membrane	SS-1, SS-1H, CSS-1, CSS-1H, PCE
Erosion Control	SS-1, SS-1H, CSS-1, CSS-1H, PCE

#### 301S.6 Storage, Heating and Application Temperatures

Asphaltic materials should be applied at the temperature, which provides proper and uniform distribution. Within practical limits higher temperatures than necessary to produce the desired results shall be avoided. Satisfactory application usually should be obtained within the recommended ranges shown below.

No material shall be heated above the following maximum temperatures:

Table: 18 Recommended Temperature Ranges

	Recommended	Range; °F [°C]	Maximum Temperature; °F [°C] for					
Type-Grade	Applicatio	n/Mixing	Allowable A	Storage				
AC-5, 10,20,30	275-350	[135-177]	375	[191]	400	[204]		
AC-5 or AC-10 + 2% SBR	300-375	[142-191]	390*	[199]	375	[191]		

Asphalts, Oils and Emulsions

PRESENT VERSION: 08/20/07

AC-10 + 3% SBR, AC-45P	300-350	[142-191]	350	[177]	360	[182]
RC-250	125-180	[52-82]	200	[93]	200	[93]
RC-800	170-230	[77-110]	260	[127]	260	[127]
RC-3000	215-275	[102-135]	285	[141]	285	[141]
MC-30, AEP	70-150	[21-66]	175	[79]	175	[79]
MC-70	125-175	[52-79]	200	[93]	200	[93]
MC-250	125-210	[52-99]	240	[116]	240	[116]
MC-800, SCM I, SCM II	175-260	[79-127]	275	[135]	275	[135]
MC-3000 & MC-2400 Latex	225-275	[107-135]	290	[143]	290	[143]
HFRS-2, MS-2, CRS-2, CRS-2H, HFRS-2P, CRS-2P, CMS-2, CMS-2S, AES-300, AES-300S, AES-150P, AES-300P	120	- 160	18	30		180
SS-1, SS-1h, SS-1P, CSS-1, CSS-1h, PCE, EAP & T, SS-1P, RS-1P, CRS-1P, CSS-1P, recycling agent, emulsified recycling agent, polymer modified AE crack sealant.	50-130	[10-54]	140	[60]	140	[60]
RS-2, RS-2h, MS-2, CRS-2, CRS- 2h, CRS-2p, CMS-2, CMS-2S, HFRS-2, HFRS-2p, AES-300	110-160	[43-71]	170	[77]	170	[77]
Special Precoat Material	125-250	[52-121]	275	[135]	275	[135]
PG Binders, Modified PG Binders	275 - 350		35	50	350	
Rubber Asphalt Crack Sealers (Class A, Class B)	350	- 375	4(	00		-
Rubber-Asphalt Crack Sealer	350-375	[177-191]	400	[204]		-

<sup>\*</sup> AC-5 + 2% SBR and AC-10 + 2% SBR, which is designated for surface treatment work, may be heated to a maximum temperature of 390°F [200°C] by the supplier loading through an in-line heater, or with the permission of the Engineer or designated representative, these materials may be heated to maximum of 390°F [200°C] by the Contractor just prior to application. When any of the SBR-modified asphalt cements are used in asphaltic concrete, the storage temperature at the mix plant should not exceed 350°F [177°C].

Attention is called to the fact that asphaltic materials (except emulsions) are very flammable and constitute fire hazards. Proper precautions should be used in all cases, especially with RC cutbacks.

Utmost care shall be taken to prevent open flames from coming in contact with the asphaltic material or the gases of it. The Contractor shall be responsible for any fires or accidents, which may result from heating the asphaltic materials.

#### 301S.7 Measurement and Payment

All asphaltic materials included in this specification will not be paid for directly but shall be included in the unit price bid for the item of construction in which this item is used.

#### **End**

<u> </u>			
	<u>Specific</u> CROSS REFERENCE MATERIALS		
	Specification Item 301S "Asphalts, Oils and Emulsions"		

American Association of State Highway and Transportation Officials (AASHTO)

Designation Description

AASHTO T-44 Solubility Of Bituminous Materials in Organic Solvents

AASHTO T-48 Flash and Fire Points By Cleveland Open Cup

AASHTO T-49 Penetration of Bituminous Materials

AASHTO T-50 AASHTO T-51 AASHTO T-53 AASHTO T-55 AASHTO T-59 AASHTO T-72 AASHTO T-78 AASHTO T-79 AASHTO T-201 AASHTO T-202 AASHTO TP-1 AASHTO TP-1 AASHTO TP-3	Float Test for Bituminous Materials Ductility of Bituminous Materials Distillation of Road Tar Water in Petroleum Products and Bituminous Materials by Distillation Testing Emulsified Asphalt Saybolt Viscosity Distillation of Cut-Back Asphaltic (Bituminous) Products Flash Point With Tag Open-Cup Apparatus Kinematic Viscosity of Asphalts Viscosity of Asphalts by Vacuum Capillary Viscometer Creep Stiffness Direct Tension
AASHTO TP-5 AASHTO TP-48	Dynamic Shear Rotational Viscometry

#### Toyas Department of Transportation: Manual of Testing Procedures

Transportation: Manual of Testing Procedures
<u>Description</u>
Sieve Analysis of Fine and Coarse Aggregates
Laser Diffraction Particle Size Distribution Analyzer
Spot Test of Asphaltic Materials
Tests for Asphalt and Concrete Joint Sealers
Determination of Polymer Additive Percentages in Polymer Modified Asphalt Cements
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#### American Society for Testing and Materials (ASTM)

Designation	Description
D 217	Test Methods for Cone Penetration of Lubricating Grease
D 297	Test Methods for Rubber Products-Chemical Analysis
D 0400 Made at A	Tool Mathagle for Donasit Familian Languities in Olassa

Test Methods for Deposit-Forming Impurities in Steam D 2186 Method A

D 6084 Test Method for Elastic Recovery of Bituminous Materials by

Ductilometer

### **RELATED** CROSS REFERENCE MATERIALS Specification Item 301S "Asphalts, Oils and Emulsions"

#### City of Austin Standard Specifications

RELATED C	ROSS REFERENCE MATERIALS - Contin
Item No. 311S	Emulsified Asphalt Repaving
Item No. 310S	Emulsified Asphalt Treatment
Item No. 307S	Tack Coat
Item No. 306S	Prime Coat
Item No. 302S	Aggregates for Surface Treatments
Item No. 210S	Flexible Base
Item No. 206S	Asphalt Stabilized Base
Designation	Description

#### RELATED CROSS REFERENCE MATERIALS - Continued Specification Item 301S "Asphalts, Oils and Emulsions"

#### City of Austin Standard Specifications

<u>Designation</u>	<u>Description</u>
Item No. 312S	Seal Coat
Item No. 313S	Rubber Asphalt Joint and Crack Sealant
Item No. 315S	Milling Asphaltic Concrete Paving

City of Austin Standard Details         Descipation           Designation         Description           1000S-10         Local Street Sections           1000S-11(1)         Residential and Neighborhood collector Street Sections           1000S-12(1)         Primary Collector Street Sections           1000S-12(2)         Primary Arterial Street Sections (4 Lanes)           1000S-13(1)         Minor Arterial Street Sections (4 Lanes)           1000S-13(2)         Minor Arterial Street Sections (4 Lanes divided)           1000S-13(2)         Minor Arterial Street           Texas Department of Transportation: Standard Specifications for Construction           And Maintenance of Highways, Streets, and Bridges           Designation         Description           Item 301         Asphalt, Oils and Emulsions           Item 301         Asphalt, Oils and Emulsions           Item 310         Asphalt Antistripping Agents           Item 314         Emulsified Asphalt Treatment           Item 316         Surface Treatments           Item 316         Surface Treatments           Item 321         Planing and/or Texturing Pavement           Item 324         Planing and/or Texturing Pavement           Item 325         Planing and/or Texturing Pavement           Item 326         Molding, Testing	Item No. 320S Item No. 340S Item No. 341S Item No. 350S Item No. 351S	Two Course Surface Treatment Hot Mix Asphaltic Concrete Pavement Paving Fabric Heating, Scarifying and Repaving Recycling Agent		
Designation         Description           1000S-101         Local Street Sections           1000S-11(1)         Residential and Neighborhood collector Street Sections           1000S-12(2)         Industrial and Collector Street Sections           1000S-12(2)         Primary Collector Street Sections           1000S-13(1)         Minor Arterial Street Sections (4 Lanes)           1000S-13(2)         Minor Arterial Street Sections (4 Lanes divided)           1000S-14         Major Arterial Street           Texas Department of Transportation: Standard Specifications for Construction           And Maintenance of Highways, Streets, and Bridges           Designation         Description           Item 300         Asphalts, Oils and Emulsions           Item 310         Prime Coat (Cutback Asphaltic Materials)           Item 310         Prime Coat (Cutback Asphaltic Materials)           Item 316         Surface Treatments           Item 345         Asphalt Stabilized Base (Plant Mixed)           Item 354         Planing and/or Texturing Pavement           Item 354         Planing and/or Texturing Pavement           Item 354         Planing and Featuration of Bituminous Black Base Materials           Tex-216-E         Description           Tex-227-F         Determination of Density of Compacted Bituminous Mixtures	City of Austin Standa	rd Details		
1000S-11(1) Residential and Neighborhood collector Street Sections 1000S-12(1) Industrial and Collector Street Sections 1000S-12(1) Primary Collector Street Sections 1000S-12(2) Primary Arterial Street Sections 1000S-13(1) Minor Arterial Street Sections (4 Lanes) 1000S-13(2) Minor Arterial Street Sections (4 Lanes) 1000S-13(2) Minor Arterial Street Sections (4 Lanes divided) 1000S-14 Major Arterial Street Sections (6 Lanes) 1000S-14 Major Arterial Street Sections (7 Lanes divided) 1000S-14 Major Arterial Street Sections (8 Lanes) 1000S-14 Major Arterial Street Sections (9 Lanes divided) 10				
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And Maintenance of Highways, Streets, and Bridges         Designation           Item 300         Asphalts, Oils and Emulsions           Item 301         Asphalt Antistripping Agents           Item 310         Prime Coat (Cutback Asphaltic Materials)           Item 314         Emulsified Asphalt Treatment           Item 316         Surface Treatments           Item 345         Asphalt Stabilized Base (Plant Mixed)           Item 354         Planing and/or Texturing Pavement           Item 520         Weighing and Measuring Equipment           Texas Department of Transportation: Manual of Testing Procedures           Designation         Description           Tex-126-E         Molding, Testing and Evaluation of Bituminous Black Base Materials           Tex-207-F         Determination of Density of Compacted Bituminous Mixtures           Tex-211-F         Recovery of Asphalt From Bituminous Mixtures By Abson           Tex-215-         Determination of Poshalt Content of Rock Asphalt Process           by Hot Solvent Method         Sounds Material and Decantation Test           For Coarse Aggregates           Tex-217-F         Determination of Deleterious Material and Decantation Test           For Coarse Aggregates           Tex-400-A         Method of Sampling Stone, Gravel, Sand and Mineral Aggregates           Tex-410-A		•		
Designation         Description           Item 300         Asphalts, Oils and Emulsions           Item 310         Prime Coat (Cutback Asphaltic Materials)           Item 310         Prime Coat (Cutback Asphaltic Materials)           Item 314         Emulsified Asphalt Treatment           Item 316         Surface Treatments           Item 351         Asphalt Stabilized Base (Plant Mixed)           Item 352         Planing and/or Texturing Pavement           Item 520         Weighing and Measuring Equipment           Texas Department of Transportation: Manual of Testing Procedures           Designation         Description           Tex-126-E         Molding, Testing and Evaluation of Bituminous Black Base Materials           Tex-207-F         Determination of Density of Compacted Bituminous Mixtures           Tex-211-F         Recovery of Asphalt From Bituminous Mixtures By Abson           Tex-215-         Determination of Asphalt Content of Rock Asphalt Process by Hot Solvent Method           Tex-217-F         Determination of Deleterious Material and Decantation Test For Coarse Aggregates           Tex-24-F         Determination of Flakiness           Tex-400-A         Method of Sampling Stone, Gravel, Sand and Mineral Aggregates           Tex-411-A         Soundness of Aggregate by Use of Sodium Sulfate or Magnesium Sulfate           Tex-400-A				
Item 300 Item 301 Item 301 Asphalts, Öils and Emulsions Item 310 Prime Coat (Cutback Asphaltic Materials) Item 314 Emulsified Asphalt Treatment Item 316 Surface Treatments Item 345 Asphalt Stabilized Base (Plant Mixed) Item 354 Item 520 Planing and/or Texturing Pavement Item 520 Weighing and Measuring Equipment  Texas Department of Transportation: Manual of Testing Procedures Designation Tex-126-E Molding, Testing and Evaluation of Bituminous Black Base Materials Tex-207-F Determination of Density of Compacted Bituminous Mixtures Tex-211-F Recovery of Asphalt From Bituminous Mixtures By Abson Determination of Asphalt Content of Rock Asphalt Process by Hot Solvent Method  Tex-217-F Determination of Deleterious Material and Decantation Test For Coarse Aggregates  Tex-224-F Determination of Flakiness Tex-400-A Method of Sampling Stone, Gravel, Sand and Mineral Aggregates Tex-410-A Abrasion of Coarse Aggregate by Use of Sodium Sulfate or Magnesium Sulfate Tex-438-A Accelerated Polish Test for Aggregate Tex-460-A Determination of Crushed Face Particle Tex-501-C Test for Water in Petroleum Products and Other Bituminous Materials Tex-502-C Test for Penetration of Bituminous Materials Tex-503-C Test for Flash and Fire Points of Petroleum Materials by Cleveland Open Cup  RELATED CROSS REFERENCE MATERIALS - Continued Specification Item 301S "Asphalts, Oils and Emulsions"				
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Specification Item 301S "Asphalts, Oils and Emulsions"				
Texas Department of Transportation: Manual of Testing Procedures				
	Texas Department of	Transportation: Manual of Testing Procedures		

<u>Designation</u>	Description
Tex-505-C Tex-506-C Tex-507-C	Test for Softening Point of Bituminous Materials by Ring-and-Ball Method Test for Loss on Heating of Oils and Asphaltic Compounds Proportion of Bitumen Soluble in Trichloroethylene

Tex-510-C	Determining the Effect of Heat and Air on Asphaltic Materials when Exposed in Thin Films
Tex-512-C	Test for Flash Points of Volative Flammable Materials By Tag Open-Cup
Tex-512-C	Apparatus
Tex-513-C	Test for Saybolt Viscosity
Tex-515-C	Distillation of Cut-Back Asphalt Products
Tex-519-C	Float Test for Bituminous Materials
Tex-520-C	Test for Residue of Specified Penetration
Tex-521-C	Testing Emulsified Asphalts
Tex-528-C	Test for Absolute Viscosity of Asphalt Cements
Tex-529-C	Test for Kinematic Viscosity of Asphalts

#### Item No. 340S Hot Mix Asphaltic Concrete Pavement

#### 340S.1 Description

This item shall govern base, level up, and pavement surface courses composed of a compacted mixture of aggregate and asphaltic cement mixed hot in a mixing plant. The hot mix asphaltic (HMA) concrete pavement shall be constructed on a previously completed and approved subgrade, subbase material, base material, concrete slab or existing pavement.

This specification is applicable for projects or work involving either inch-pound or SI units. Within the text and accompanying tables, the inch-pound units are given preference followed by SI units shown within parentheses.

#### 340S.2 Submittals

The submittal requirements of this specification item may include:

- A. A mix design submittal including the plant corrected Job Mix Formula (JMF) for the hot mix asphaltic concrete,
- B. Certification that the aggregate materials meet appropriate quality requirements.
- C. Particle-size gradation and specific gravity tests on all aggregate materials.
- D. Certification that the asphalt cement for paving materials meet appropriate quality requirements.

#### 340S.3 Materials

The Contractor shall furnish materials to meet the requirements specified herein and shall be solely responsible for the quality and consistency of the product delivered to the Project.

A. Aggregate: The aggregate shall be composed of coarse aggregate, a fine aggregate and, if required or allowed, mineral filler and reclaimed asphalt pavement (RAP). RAP use will be allowed in all base course mixtures except as specifically excluded herein, in the Contract Documents or on the Drawings, provided no more than 20% RAP is used.

RAP use will not be permitted in pavement surface courses.

Aggregates shall meet the quality requirements of Table 1 and other requirements as specified herein. The aggregate contained in RAP will not be required to meet Table 1 requirements unless indicated otherwise on the Drawings.

- 1. Coarse Aggregate: Coarse aggregate is defined as that part of the aggregate retained on the No. 10 (2.00 mm) sieve and shall consist of clean, tough, durable fragments of crushed stone or crushed gravel of uniform quality throughout.
  - Gravel from each source shall be crushed to the extent that it has a minimum of 85% of the particles retained on the No. 4 (4.75 mm) sieve with two or more mechanically induced crushed faces as determined by TxDOT Test Method TEX-460-A (Part I). The material passing the No. 4 (4.75 mm) sieve and retained on the No. 10 (2.00 mm) sieve must be the produced from crushing aggregate that was originally retained on the No. 4 (4.75 mm) sieve.
- 2. Reclaimed Asphalt Pavement (RAP): RAP is defined as a salvaged, milled, pulverized, broken or crushed asphaltic pavement. The RAP to be used in the mix shall be crushed or broken to the extent that 100 percent will pass the 2-inch (50 mm) sieve.

The RAP shall be stockpiled in such a manner that assures that it will not become contaminated by dirt or other objectionable materials. Unless indicated otherwise on the Drawings, stockpiled, crushed RAP must not exhibit a decantation more than 5 percent or a plasticity index more than 8, when tested in accordance with TxDOT Test Method Tex-406-A, Part I, or Test Method Tex-106-E, respectively.

3. Fine Aggregate: Fine aggregate is defined as that part of the aggregate passing the No. 10 (2.00 mm) sieve and shall be of uniform quality throughout. A maximum of 15 percent of the total aggregate may be field sand or other uncrushed fine aggregate.

Screenings shall be supplied from sources whose coarse aggregate meets the abrasion and magnesium sulfate soundness loss requirements shown in Table 1.

a) Unless indicated otherwise on the Drawings, stone screenings, which are the product of a rock crushing operation, are required and shall meet the following gradation requirements when tested in accordance with TxDOT Test Method Tex-200-F, Part I.

	Materia	I	Percent by Weight (Mass)
Passing	3/8 inch	(9.50 mm) sieve	100
Passing	No. 10	(2.00 mm) sieve	70-100
Passing	No. 200	( 75 μm) sieve	0-15

- b) Crushed gravel screenings may be used with, or in lieu of, stone screenings only when indicated on the Drawings. Crushed gravel screenings must be the product of crushing aggregate that was originally retained on the No. 4 (4.75 mm) sieve and must meet the gradation for stone screenings shown above.
- 4) Mineral Filler: Mineral filler shall consist of thoroughly dried stone dust, Portland cement, fly ash, lime or other mineral dust approved by the Engineer or designated representative. The mineral filler shall be free from foreign matter.

Portland cement manufactured in a cement kiln fueled by hazardous waste shall be considered as an approved product if the production facility is authorized to operate under regulation of the Texas Natural Resource Conservation Commission (TNRCC) and the U. S. Environmental Protection Agency (EPA). Supplier shall provide current TNRCC and EPA authorizations to operate the facility.

Fly ash obtained from a source using a process fueled by hazardous waste shall be considered as an approved product if the production facility is authorized to operate under regulation of the Texas Natural Resource Conservation Commission (TNRCC) and the U. S. Environmental Protection Agency (EPA). Supplier shall provide current TNRCC and EPA authorizations to operate the facility.

The addition of baghouse fines or other collected fines will be permitted if the mixture quality is not adversely affected in the opinion of the Engineer or designated representative. In no case shall the amount of material passing the No. 200 (75  $\mu$ m) sieve exceed the tolerances of the job-mix formula or the master gradation limits.

When tested by TEX-200-F (Part I or Part III, as applicable), the mineral filler shall meet the following gradation requirements. Baghouse fines are not required to meet the gradation requirements.

Material	Percent by Weight (mass)
Passing No. 30 (600 μm) Sieve	95 - 100
Passing No. 80 (187.5 µm) Sieve, not less th	an75
Passing No. 200 (75 μm) Sieve, not less than	า 55

<u>TABLE 1:</u> AGGREGATE QUALITY REQUIREMENTS \*

Requirement	Test Method	Amount			
COARSE AGGR	COARSE AGGREGATE				
Deleterious Material, percent, maximum	Tex-217-F, I	1.5			
Decantation, percent, maximum	Tex-217-F, II	1.5			
Los Angeles Abrasion, percent, maximum	Tex-410-A	40			
Magnesium Sulfate Soundness Loss	Tex-410-A	30			
5 cycle, percent, maximum					
FINE AGGREG	FINE AGGREGATE				
Linear Shrinkage, maximum	Tex-107-E, II	3			
COMBINED AGGREGATES					
Sand Equivalent Value, minimum	Tex-203-F	45			

<sup>\* -</sup> Aggregates, without added mineral filler or additives, combined as used in the job-mix formula (Plant Corrected).

### B. Asphaltic Material

- 1. Paving Mixture. Asphalt cement for the paving mixture shall conform to the requirements of Standard Specification Item No. 301S, "Asphalts, Oils and Emulsions", for AC-20 or PG64-22, Styrene (SBS) Modified Asphalt Cement, AC-SBS Blend AC-45P or PG76-22S, unless otherwise indicated in the Project Documents.
- 2. Tack Coat: Tack Coat shall conform to Standard Specification Item No. 307S, "Tack Coat".
- C. Additives: Additives to facilitate mixing and/or improve the quality of the asphaltic mixture or tack coat may be used with the authorization of the Engineer or designated representative. The Contractor may choose to use either lime or a liquid anti-stripping agent to reduce moisture susceptibility of the aggregate.

#### 340S.4 Paving Mixtures

An asphalt mixture design is developed by a laboratory process, which includes the determination of the quality and quantity of the asphalt cement and the individual aggregates, and the testing of the combined mixture (Laboratory Design). The Laboratory Design is subsequently revised to produce an appropriate job mix formula.

The job mix formula (JMF) lists the quantity of each component to be used in the mix after the laboratory design has been adjusted by running it through a particular plant (i.e. the mix design is Plant Corrected). The JMF will be the standard to which the Acceptance Plan will be applied. The JMF of one drum or batching unit shall not be used for another unit.

The Contractor shall submit to the Engineer on forms provided by the Engineer or designated representative, an asphalt mixture design reviewed, signed and sealed by a Registered

Professional Engineer licensed in the State of Texas or certified by a TxDOT Level II Certified Asphalt Technician. An asphalt mixture design shall be submitted for a comprehensive review every two (2) years. Mix designs older than one year will not be accepted without a review of current test data of the proposed materials and current mix design to ensure that the materials meet specification requirements.

The JMF (Plant Corrected) shall be submitted to the Engineer or designated representative on a form provided by the Engineer through the Construction Inspector or Project Manager of the Project for review, for each individual Project, a minimum of three (3) working days before the mixture is to be placed. Under no circumstances will a mixture be placed before its use is reviewed and approved by the Engineer or designated representative.

Performance of the mix design shall remain the responsibility of the Contractor.

- A. Mixture Design: The mix shall be designed in accordance with TxDOT Construction Bulletin C-14 and Test Method Tex-204-F to conform with the requirements herein. The master grading limits of the appropriate type and the JMF will be plotted on a graduated chart with sieve sizes raised to the 0.45 power and will be submitted to the Engineer or designated representative with the asphalt mixture design.
  - The Bulk Specific Gravity of aggregates in RAP will be determined on extracted aggregates.
- B. Types: The blend of coarse aggregate, fine aggregate, and mineral filler, if allowed, that is established by TxDOT Test Method Tex-200-F, Dry Sieve Analysis, shall conform to the master gradation shown in Table 2 for the type of specified mixture. The voids in the mineral aggregate (VMA) will be determined as a mixture design requirement only, in accordance with TxDOT Test Method Tex-207-F, and shall not be less than the value indicated in Table 2.

TABLE 2: Master Grading - Percent Passing by Weight (Mass) or Volume

Sie	ve Size	Type A	Type B	Type C	Type D	Type F
L	JS (SI)	Coarse Base	Fine Base	Coarse Surface	Fine Surface	Fine Mixture
1-1/2"	(37.5 mm)	100				
1-1/4""	(31 mm)	95-100				
1"	(25 mm)		100			
7/8"	(22 mm)	70-90	95-100	100		
5/8	(15.5 mm)"		75-95	95-100		
1/2"	(12.5 mm)	50-70			100	
3/8"	(9.5 mm)		60-80	70-85	85-100	100
1/4"	(6.25 mm)					95-100
No. 4	(4.75 mm)	30-50	40-60	43-63	50-70	
No. 10	(2.00 mm)	20-34	27-40	30-40	32-42	32-42
No. 40	(425 µm)	5-20	10-25	10-25	11-26	9-24
No. 80	(187.5 µm)	2-12	3-13	3-13	4-14	3-13
No. 200	(75 µm)	1-6*	1-6*	1-6*	1-6*	1-6*
VMA %	minimum	11	12	13	14	15
Rec. M	lin. Lift	3" (75 mm)	2" (50 mm)	1-3/4" (45 mm)	1" (25 mm)	3/4" (20 mm)

C. Tolerances: Fluctuations in the aggregate gradation and asphalt content of the Job Mix Formula (JMF) shall not vary by more than the following criteria but the aggregate gradation shall be limited to the range of the master gradation as established by TEX-210-F.

SIEVES	Percent By Weight (Mass)	
2" " (50 mm) Sieve through No. 10 " (2.00 mm) Sieve	±5.0	
No. 40 (425 μm) through No. 200 (75 μm) Sieve	± 3.0	
Asphalt Content	±0.5	

D. Stability and Density: The mixture shall be designed at or near optimum density, as indicated on the Drawings, to conform to the following percent of Maximum Theoretical Density as measured by TxDOT Test Method TEX-227-F and Stability conforming to TxDOT Test Method TEX-208-F. The laboratory mixture shall be molded in accordance with TxDOT Test Method TEX-206-F and the Bulk Specific Gravity determined in accordance with TxDOT Test Method TEX-207-F.

Optimum Laboratory Density (%)		•	Stability
96 96	94.5 94.5	97.5 97.5	35 Min. 40-60 35 Min.
	Laboratory Density (%)	Laboratory Density (%)         Density Min.           96         94.5           96         94.5	Laboratory Density (%)         Density (%)           Min.         Max.           96         94.5         97.5           96         94.5         97.5

E. Job Mix Formula Field Adjustments: The Contractor shall produce a mixture of uniform composition closely conforming to the reviewed JMF, that falls within the limits of the tolerances given above and the Acceptance Plan.

If it is determined by the City of Austin that adjustments to the JMF are necessary to achieve the specified requirements, the Engineer or designated representative may allow adjustments of the JMF within the following limits without a laboratory redesign of the mixture. The adjusted JMF shall not exceed the master grading criteria for the type of mixture specified. The proposed JMF adjustments shall not exceed 5 percent on any one sieve, ½-inch (12.5 mm) size and larger, or 3 percent on the sieve size below the 1/2-inch (12.5 mm) sieve of the JMF (Plant Corrected) reviewed for the Project.

When the proposed adjustments exceed either the 5 or 3 percent limits, and the Engineer or designated representative determines that the impact of these changes may adversely affect pavement performance, a new laboratory mixture design will be required.

The asphalt content may be adjusted with the concurrence of the Engineer or designated representative to maintain desirable laboratory density near the optimum value while achieving other mix requirements. However, increasing the asphalt content of the mixture in order to reduce pavement air voids will not be allowed. Also, if the percent air voids is determined to be less than 4 percent, adjustments shall be made to the plant production by the Contractor, within the tolerances as outlined above, so that an adequate air void level is attained.

#### 340S.5 Equipment

The trucks that deliver the hot mix asphalt concrete material to the project shall be of sufficient number to insure a continuous paving operation. All equipment used for the production,

placement and compaction of the mixture shall be maintained in good repair and operating conditions to the satisfaction of the Engineer or designated representative. All equipment shall be made available for inspection. If the Engineer or designated representative expresses concern about the condition of any equipment, it shall not be used until it is repaired to the satisfaction of the Engineer or designated representative.

- A. Mixing Plants: Plants may be of the weigh-batch type, the modified weigh-batch type or drum-mix type equipped with suitable material conveyers, power units, mixing equipment, aggregate proportioning devices, dryers, bins, dust collectors and sensing and recording devices as appropriate for the mixing plant type. The mixing plants shall meet the requirements specified in Section 340.4, 'Equipment' of TxDOT Specification Item No. 340, "Hot Mix Asphaltic Concrete Pavement".
- B. Spreading and Finishing Paving Machine: The paving machine shall be self-propelled and equipped with a heated compacting screed capable of producing a finish surface meeting the requirements of the street cross-section indicated on the Drawings and all surface criteria. Extensions to the screed shall have the same heating and compacting capabilities as the primary unit, except for use on variable depth tapered areas and/or as approved by the Engineer or designated representative.

The paving machine shall be equipped with an approved automatic dual longitudinal screed control system and an automatic transverse screed control system. The longitudinal controls shall be capable of operating from any longitudinal grade reference including a string line, ski, mobile string line or matching shoe. Unless indicated otherwise on the Drawings, the Contractor may use any one of these grade references. The selected grade reference equipment shall be maintained in good operating condition by personnel trained in the use of the specific type of equipment.

The Contractor shall furnish all labor and equipment required for establishing and maintaining appropriate grade reference.

- C. Rollers: The Contractor shall select rollers conforming to Item 230S, "Rolling (Flat Wheel)" and Item 232S, "Rolling (Pneumatic Tire)". Rollers that do not conform to these requirements shall be immediately removed from the Project.
- D. Motor Grader: A self-propelled power motor grader may only be used, when its use is approved by the Engineer or designated representative. It shall have a blade of not less than 12 feet (3.66 meters) and a wheelbase of not less than 16 feet (4.88 meters). Smaller graders may be used for small irregular areas when approved by the Engineer or designated representative.
- E. Material Transfer Equipment: Equipment for transferring the HMA mixture from the hauling units or the roadbed to the spreading and finishing machine will be allowed unless indicated otherwise on the Drawings.
  - Windrow pick-up equipment, if permitted by the Engineer or designated representative, shall be constructed in such a manner that substantially all of the HMA mixture deposited on the roadbed is picked up and loaded into the spreading and finishing machine. The HMA mixture shall not be contaminated with foreign material. The loading equipment shall be designed so that it does not interfere with the spreading and finishing machine in obtaining the required line, grade and surface without resorting to hand finishing.
- F. Straightedges and Templates: The Contractor shall provide a ten-foot (3.05 meter) straightedge acceptable to the Engineer or designated representative for surface testing.

Satisfactory templates shall be provided as required by the Engineer or designated representative.

# 340S.6 Stockpiling Aggregates

Aggregates shall be stockpiled to facilitate blending. When the aggregate is not stockpiled on a hard, non-contaminant base, the bottom six-inch (150 mm) depth of the stockpiles shall not be used in asphaltic mixtures. Where space is limited at the plant site, the aggregate stockpiles shall be separated by walls or other appropriate barriers.

Aggregates shall be stockpiled and handled in a manner that will insure minimization of segregation and contamination. Aggregate and RAP stockpiles shall only contain material from a single source.

## **340S.7 Mixture Temperature**

The Contractor shall select a target temperature for discharge of the HMA mixture from the mixer between 250°F (120°C) and 350°F (176°C) that is suitable to weather and Project conditions. The target temperature shall be reported to the Engineer or designated representative daily and recorded in the Daily Progress Report. The HMA mixture temperature shall not vary by more than 25°F (14°C) from the target temperature for discharge from the mixer. HMA mixtures that are discharged from the mixer at a temperature exceeding 360°F (182°C) or a temperature more than 50°F (28°C) below the target temperature shall not be accepted and shall not be placed on the Project.

### 340S.8 Mixture Storage

A surge-storage system may be used to minimize production interruptions during a normal day of operation. When approved by the Engineer or designated representative, overnight storage of HMA mixture in insulated storage bins may be used provided that material temperature and physical properties of the HMA mixture are not adversely affected. HMA mixtures that include hardened lumps shall not be used. Stored HMA mixtures shall not be exempt from any requirements provided in this specification.

When a surge-storage system is used, it shall be equipped with a device such as a gob hopper or other device approved by the Engineer or designated representative to prevent segregation in the surge-storage bin.

#### **340S.9 Mixture Moisture Content**

Hot mix asphalt (HMA) mixtures produced from any plant shall not have a moisture content in excess of 1 percent by weight (mass) when discharged from the mixer. The moisture content shall be determined in accordance with TxDOT Test Method Tex-212-F, Part II, except that the sample shall be left in the oven a total of not less than four (4) hours.

#### 340S10 Construction Methods

A General: The Contractor shall be responsible for the production, transportation, placement and compaction of the specified HMA paving mixture to the requirements of this specification. The Contractor shall also be responsible for providing a safe environment for inspection personnel to inspect the equipment and to acquire samples.

All hot mix asphalt concrete pavement surface courses shall be placed with a spreading and finishing (lay-down) machine only. All hot mix asphalt concrete pavement base layers with the possible exception of the first lift of the base layer shall also be placed with a spreading and finishing (lay-down) machine. Longitudinal pavement joints shall be located under the proposed lane lines. Density tests shall be taken prior to opening to traffic.

The first lift of a base layer may be placed with a motor grader if approved in advance by the Engineer or designated representative. The loose measure thickness of this first lift shall not exceed 6 inches (150 mm). If placed with a motor grader, the first lift shall achieve a minimum in-place relative density of 89% as determined by TxDOT test procedures TEX-207-F and TEX-227-F. All subsequent lifts should be placed with a spreading and finishing (lay-down) machine and shall be subject to the requirements of Section 340S.12, "Acceptance Plan". Density tests will be taken randomly to confirm compliance with the specification requirements.

For hot mix asphalt overlays, an automatic screed shall be used with outriggers.

Any material delivered to the Project that by visual inspection can reasonably be expected not to meet specification requirements (i.e. segregated or burned material, deficient or excess asphalt, low mixing temperature, visible contaminants, etc.), as determined by the Engineer or designated representative, shall not be used or left in place.

Equipment shall be inspected prior to use and, if found to be defective or in an operating condition that could potentially affect the quality of the finished pavement, as determined by the Engineer or designated representative, its use shall not be allowed. Leakage of fuels, oils, grease, hydraulic or brake fluids or other contaminants onto the prepared surface or newly-laid HMA layer will not be allowed and may require replacement of the affected pavement area.

The HMA paving mixture, when placed with a spreading and finishing machine, shall not be placed when the air temperature is below 50°F (10°C) and is falling, but it may be placed when the air temperature is above 40°F (4°C) and is rising.

The paving mixture, when used as a level-up course or when spread with a motor grader, shall not be placed when the air temperature is below 60°F (15°C) and is falling, but it may be placed when the air temperature is 50°F (10°C) and is rising. An HMA layer with a thickness of 1-1/2 inches (37.5 mm) and less shall not be placed when the temperature of the surface on which the layer is to be placed is below 50°F (10°C). The temperature shall be taken in a shaded area away from artificial heat.

Additional surface temperature requirements may be included in the Contract Documents or indicated on the Drawings.

Surfaces to be paved shall be finished, primed, cured, broomed and tacked, as appropriate, to the satisfaction of the Engineer or designated representative. If the surface on which the first course of the paving mixture is to be placed is a flexible base course, and a cut-back asphalt is to be used as a prime coat, the flexible base shall have been primed and cured a minimum of 24 hours before the paving mixture may be placed. The 24-hour restriction will not apply to a flexible base that has been primed with material other than a cutback. However, the surface on which the tack coat and/or paving mixture are to be placed shall be in a dry condition.

Pavement shall be opened to traffic as soon as possible after temporary pavement markings or permanent markings are in place as indicated on the Drawings) or as directed by the Engineer or designated representative. Construction traffic allowed on pavements open to the public will be subject to all laws governing traffic on streets and highways.

B. Tack Coat: The surface upon which the tack is to be placed shall be cleaned thoroughly to the satisfaction of the Engineer or designated representative. The surface shall be given a uniform application of tack coat as governed by Standard Specification Item No. 307S, "Tack Coat". The tack coat shall be applied, as directed by the Engineer or designated representative, with an approved sprayer at a rate not to exceed 0.05 gallons per square yard. (0.225 liters per square meter) of surface area. Where the paving mixture will adhere to the surface on which it is to be placed without the use of a tack coat, the tack coat may be eliminated when approved by the Engineer or designated representative. All contact surfaces of curbs, castings and all structures and all joints shall be painted with a thin uniform application of tack coat.

During the application of tack coat, care shall be taken to prevent splattering of adjacent pavement, curb and gutter and structures. Before the Work can be accepted, all splatter shall be removed by the Contractor at his own expense.

C. Transporting Hot Mix Asphaltic (HMA) Concrete: The HMA mixture shall be hauled to the Work site in tight vehicles that were previously cleaned of all foreign material. Dispatching of the vehicles shall normally be arranged so that all material delivered is placed and all rolling completed during daylight hours. Nighttime paving may be allowed, when approved in advance by the Engineer or designated representative.

In cool weather or for long hauls, truck bodies containing the HMA mixture shall be covered.

If necessary, to prevent the HMA mixture from adhering to the truck body, the inside of the truck may be given a light coating of a release agent satisfactory to the Engineer or designated representative.

D. HMA Placement: The HMA mixture shall be dumped and spread on the approved prepared surface with the spreading and finishing machine. When properly compacted, the finished pavement shall be smooth, of uniform texture and density and shall meet the requirements of the typical cross sections and the surface tests. In addition the placement of the HMA mixture shall be done without tearing, shoving, gouging or segregating the mixture and without producing streaks in the HMA layer.

Discharge of the HMA mixture into the finishing machine shall be controlled so that the spreading and finishing machine is not bounced or jarred and the required lines and grades shall be obtained without resorting to hand finishing except as permitted below in this Section.

Unless indicated otherwise on the Drawings, dumping of the HMA material in a windrow and then placing the HMA mixture in the finishing machine with windrow pick-up equipment will be permitted provided the temperature of the HMA mixture does not drop more than 50°F (28°C) below the target temperature before being placed by the finishing machine.

Under no circumstances will the HMA material be permitted to be dumped on or near the job site and then reloaded for hauling to the site of placement. Exceptions may be allowed if approved by the Engineer or designated representative.

The windrow pick-up equipment shall be operated in such a manner that substantially all the mixture deposited on the roadbed or prepared surface is picked up and loaded into the finishing machine without contamination by foreign material. The windrow pick-up equipment will also be so operated that the finishing machine will obtain the required line, grade and surface without resorting to hand finishing. Any operation of the windrow pick-

up equipment resulting in accumulation and subsequent shedding of accumulated material into the HMA mixture will not be permitted.

When approved by the Engineer or designated representative, level-up courses may be spread with a motor grader that meets the requirements of this specification item.

The spreading and finishing machine shall be operated at a uniform forward speed consistent with the plant production rate, hauling capability and roller train capacity to result in a continuous operation. Stopping of the spreading and finishing machine between trucks is to be held to a minimum. If, in the opinion of the Engineer or designated representative, delivery of material is adversely affecting the condition of the HMA layer (excessive stopping of the spreading and finishing machine, loss of mixture temperature, etc.), the Engineer or designated representative may require paving operations to cease until acceptable methods are provided to minimize starting and stopping of the spreading and finishing machine.

The hopper gates of the spreading and finishing machine shall be adjusted to provide an adequate and consistent flow of material. This shall result in enough material being delivered to the augers so that they are operating approximately 85 percent of the time or more. The augers shall provide means to supply adequate flow of material to the center of the paver. Augers shall supply an adequate flow of material for the full width of the mat being placed, as approved by the Engineer or designated representative. Augers should be kept approximately one-half to three-quarters full of HMA mixture at all times during the paving operation.

When the HMA mixture is placed in a narrow strip along the edge of an existing pavement, or is used to level up small areas of an existing pavement or is placed in small irregular areas where the use of a finishing machine is not practical, the finishing machine may be eliminated when permitted by the Engineer or designated representative.

The paving material adjacent to castings and flush curb and gutter and structures shall be finished uniformly high so that when compacted, it will be slightly above but not more than 1/8 inch (3 mm) above the edge of the casting or gutter lip.

Construction joints of successive courses of HMA material shall be offset at least 6 inches (150 mm). Longitudinal joints in the layer shall be placed to coincide with lane lines as directed the Engineer or designated representative. Transverse joints shall be offset a minimum of 5 feet (1.5 meters).

E. Compaction: The pavement layers/lifts shall be compacted thoroughly and uniformly to obtain the compaction and cross section meeting the requirements indicated on the Drawings and this specification item.

Regardless of the method used for compaction, all rolling to achieve specified density shall cease before the temperature of the HMA mixture drops below 175°F (80°C).

Rolling with a pneumatic tire roller shall be used to seal the surface. Rolling with a tandem or other steel-wheel roller shall be provided if required to iron out any roller marks. Surface sealing and removal of roller marks may be accomplished at HMA temperatures below 175°F (80°C).

Vibratory rollers shall not be allowed in the vibrating mode on layers with a plan thickness less than 1-1/2 inches (37.5 mm).

The motion of the rollers shall be slow enough to avoid other than usual initial displacement. If any displacement occurs, it shall be corrected to the satisfaction of the Engineer or designated representative.

The roller shall not be allowed to stand on pavement, which has not been compacted to minimum density requirements. In order to prevent adhesion of the surface mixture to the steel-wheel rollers, the wheels shall be thoroughly moistened with water; however an excess of water will not be allowed. Necessary precautions shall be taken to prevent the dropping of diesel, gasoline, oil, grease or other foreign matter on the pavement, either when the rollers are in operation or when standing.

The edges of the pavement along curbs, headers and similar structures, and all places not accessible to the roller, or in such positions as will not allow thorough compaction with the rollers, shall be thoroughly compacted with lightly oiled tamps.

Rolling with a trench roller will be required on widened areas, in trenches and other limited areas where satisfactory density cannot be obtained with the approved rollers.

# 340S.11 Sampling and Testing

The HMA mixture shall be tested daily at the Project site for conformance to specification requirements. The Engineer or designated representative shall utilize a random selection method to determine sample locations based on the Contractor's anticipated production. Each day's anticipated production shall be divided into three (3) essentially equal single-pass, sub-area lots. Each day's sample locations shall be equally distributed over the three (3) sub-areas. If, due to the weather or plant malfunctions, the Contractor's daily-anticipated production is not attained, the random locations will not be recalculated. Also, no more than one location of the three (3) sub-areas shall be located in an irregular shaped area such as a cul-de-sac.

Unless directed otherwise by the Engineer or designated representative, a minimum of three bag samples and three correlating 6-inch (150-mm) cores will be obtained from each day's production.

Bag samples shall be taken during lay-down operations. The primary sampling point for the bag samples shall be from the windrow if a windrow elevator is used. If a windrow elevator is not used, the sample shall be taken from the middle of the paving machine hopper. This sampling location will require a stoppage in the paving operation in order for the Inspector to safely secure a sample from the hopper.

One core shall be taken for every 2,000 single-pass square yards (1 675 single-pass square meters) with a minimum of three (3) cores for all projects. One core shall be taken at the same station and pass sampled for each of the bag samples. Cores shall be taken by the City's laboratory within 48 hours of pavement laydown unless otherwise directed by the Engineer or designated representative.

For total areas of less than 500 square yards (420 square meters), a total of only two bag samples and two correlating cores will be obtained. If the Contractor desires additional testing, it shall be at its own entire expense.

The Engineer or designated representative may alter, increase or waive the testing schedule to ensure material and workmanship compliance with specification requirements. Acceptability of the completed pavement shall be based on the average of test results for the Project as defined in Section 340S.12, "Acceptance Plan" of this item.

Gradation, asphalt content and stability value of the HMA mixture shall be reported for each of the bag samples. The stability value reported for each of the bag samples shall be the average of three (3) tests per bag.

Pavement thickness and density shall be determined from 6-inch (150 mm) field cores. For each day's placement, density of cores for which no corresponding bag samples were taken shall be determined by using the average Maximum Theoretical Density of the day's three (3) bag samples or as may otherwise be determined by the Engineer or designated representative.

When, in the opinion of the Engineer or designated representative, test results appear unrepresentative, additional testing may be authorized. The retesting will be at the expense of the Contractor and the results of the retesting shall be averaged with the results of the original testing. If the results of retesting indicate that the original test results were erroneous, the original test results will be discarded. In the instance of erroneous original test results the subsequent first set of retests will be at the expense of the City of Austin.

Pavements with low-density results may be recored; but the pavement shall not receive any additional compactive effort.

Pavements that will not or cannot be cored within 48 hours shall be closed to both public and construction traffic.

# 340S.12 Acceptance Plan

For the purpose of the Acceptance Plan only, the "Paving Project" of each of the specified mixture types shall be defined by the Engineer or designated representative before the paving operation begins

Considerations for defining the Paving Project shall include paving operations staged due to traffic considerations, pavement structural section (i.e. with varying layer thicknesses), time required for paving, changes to the Job Mix Formula, phasing of large projects, or other factors affecting the consistency in the production, lay-down/compaction, use of completed portions, and/or aging of in-place material.

Acceptability of the completed pavement structure for a Paving Project shall be based on all daily averages of three test results and when approved by the Engineer or designated representative the overall average of all test results for each of the mixture/layer types specified on the Drawings.

Pay adjustments for two or more acceptance factors shall be accumulative. Pay adjustments of 100% unit price reduction shall require removal and replacement of the Work. Replacement materials shall be subject to all requirements of this specification. Alternatively, the Engineer or designated representative may allow the Work to remain in place without payment provided that the Work is warranted for an extended period under conditions as determined by the Engineer or designated representative. The decision of the Engineer or designated representative related to the removal and replacement of the Work shall be the final authority.

# A. Non-Pay-Adjustment Acceptance Factors:

1 Surface Characteristics: Unless otherwise directed by the Engineer or designated representative, all pavements shall be tested for smoothness. Surfaces shall be tested with a 10-foot (3.05 meter) straightedge parallel to the roadway centerline and perpendicular to the centerline on flat, cross-slope sections. Maximum allowable deviation in 10 feet shall be 1/8 inch (1-mm per meter) parallel to the centerline and 1/4 inch (2-mm per meter) perpendicular to the centerline. Sections exceeding these maximums shall be corrected to the satisfaction of the Engineer or designated representative. The completed surface must meet the approval of the Engineer or designated representative for surface smoothness, finish and appearance.

If the surface ravels, ruts or deteriorates in any manner prior to the end of the warranty period, it will be the Contractor's responsibility to correct this condition at its own entire expense to the satisfaction of the Engineer or designated representative in conformance with the requirements of this specification.

For HMAC rehabilitation and overlay projects, if cracks develop in the pavement surface within the one-year warranty period, the Contractor shall seal the cracks in accordance with Standard Specification Item No. 313S, "Cleaning and/or Sealing Joints and Cracks (Asphaltic Concrete). Payment for this work will be measured and paid for as Mobilization (LS) and Crack Sealing (LF).

For new HMAC roadways constructed in accordance with the Drawings and specifications, if cracks less than 1/4 inch (6 mm) in width develop in the pavement surface within the one year warranty period the Contractor shall seal the cracks in accordance with Standard Specification Item No. 313S, "Cleaning and/or Sealing Joints and Cracks (Asphaltic Concrete). Payment for this Work will be measured and paid for as Mobilization (LS) and Crack Sealing (LF).

If cracks equal to or greater than 1/4 inch (6 mm) in width develop in the pavement surface within the one-year warranty period, the cracking shall be reviewed and evaluated by the Engineer or designated representative before corrective action is taken.

- 2. Stability: Stability test results shall be used as indicators of potential problems. Where stability test results fall below the range specified in this specification, additional tests shall be taken as directed by the Engineer or designated representative for further evaluation and monitoring of the paving mixture. This additional stability testing will be at the expense of the Contractor. When, in the opinion of the Engineer or designated representative, the stability is deemed unacceptable for the intended use of the pavement, the paving mixture shall be removed and replaced to the limits indicated by test results or may be left in place on conditions acceptable to the Engineer or designated representative. When the paving mixture is removed and replaced, it shall be at the sole expense of the Contractor.
- 3. Laboratory Density: Laboratory density results as determined by TxDOT Test Method Tex-207-F shall be used as indicators of potential problems. Where laboratory density test results are less than 94.5% or more than 97.5% of mix design maximum density, additional tests shall be taken as directed by the Engineer or designated representative for further evaluation and monitoring of the paving mixture. This additional laboratory density testing will be at the expense of the Contractor. When, in the opinion of the Engineer or designated representative, the laboratory density is deemed unacceptable for the intended use of the pavement, the paving mixture shall be removed and replaced to the limits indicated by test results.

The removal and replacement of the paving mixture shall be at the sole expense of the Contractor.

- 4. Limited Areas: Irrespective of an acceptable overall Paving Project average for any or all of the Pay-Adjustment Acceptance Factors, limited substandard portions of the Work, as determined by the Engineer or designated representative, shall be remedied or removed and replaced to the satisfaction of the Engineer or designated representative at the sole expense of the Contractor.
- B. Pay-Adjustment Acceptance Factors: Contract unit prices shall be adjusted for paving mixtures that fail to meet acceptance criteria for gradation, asphalt content, density and mat thickness in accordance with the following:

# **Gradation Acceptance Schedule (TEX-210-F)**

	Deviation From	Job Mix Formula	Percent Contract Unit	
Sieve	Daily Average	Overall Average	Price Reduction	
Total retained on	± 6.5	± 5.0	0	
No. 10 (2.00 mm)	6.6±	5.1±	10	
Passing No. 200	± 3.9	± 3.0	0	
(75 µm)	4.0±	3.1±	5	

# **Asphalt Content Acceptance Schedule (TEX-210-F, PartII)**

Deviation from the Job Mix Formula		Percent Contract U	nit Price Reduction
Daily Average	Overall Average	Local Streets* All Others	
± 0.5	± 0.4	0	0
±0.51 to ±0.60	±0. 41 to ±0.50	15	25
+0.61 to +0.70	+0.51 to +0.60	25**	100; Remove and Replace
-0.61 to -0.70	-0.51 to -0.60	100: Remove and Replace	100; Remove and Replace
Over ±0.70	Over ±0.60	100: Remove and Replace	100; Remove and Replace

<sup>\*</sup>A local or residential street that serves as access to residence or other abutting property.
\*\*If the street has an ADT of 500, or less, with 1%, or less, of truck traffic, plus a 2 year

**Density Acceptance Schedule (TEX-207-F/TEX-227-F)** 

warranty; otherwise, Remove and Replace

*Percent Density		Percent Contract Unit Price Reduction	
Daily	Overall	1-1/2" (38 mm) Thickness or Less than 1-1/2" (3	
Average	Average	Greater	Thickness
Above 96.5	Above 96	100; Remove and Replace	100; Remove and Replace
90.5 to 96.5	91 to 96	0	0
90.5 to 87.6	90.9 to 88.1	0.625 per 0.10% deficiency	0.50 per 0.10% deficiency
		in density	in density
Less than 87.6	Less than 88.1	100: Remove and Replace	100; Remove and Replace
*Core bulk density divided by max. theoretical density			

# **Thickness Acceptance Schedule**

Variance Percent of Thickness	Percent Contract Unit Price Reduction
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Daily Average	Overall Average	
0 – 15.0	0 - 10	0
15.1 – 20.0	10.1 - 16	20
20.1 – 30.0	16.1 - 25	50
Over 30.0	Over 25	100; Remove and Replace or mill/overlay 1" (25 mm) minimum

The Density Acceptance Schedule For Irregularly Shaped Areas; Hike And Bike Trails And Utility Trenches (see following table) will apply to utility trenches of widths less than 4 feet (1.2 meter) and to irregular shaped areas and hike and bike trails in which an appropriate rolling pattern cannot be established making it difficult to achieve compaction.

Density Acceptance Schedule For Irregularly Shaped Areas; Hike And Bike Trails and Utility Trenches (TEX-207-F/TEX-227-F)

*Percent Density	Percent Contract Unit Price Reduction		
Daily Average	1-1/2" (38 mm) Thickness or	Less than 1-1/2" (38 mm)	
	Greater	Thickness	
Above 96.5	100; Remove and Replace	100; Remove and Replace	
96.5 to 89.0	0	0	
89.0 to 86.1	0.625 per 0.10% deficiency	0.50 per 0.10% deficiency	
	in density	in density	
Less than 86.1	100: Remove and Replace	100; Remove and Replace	
*Core bulk density divided by maximum theoretical density			

The Density Acceptance Schedule will apply to utility trenches 4 feet (1.2 meter) or wider.

Core thicknesses greater than Drawing requirements shall be factored into the average thickness calculation as the Drawing required thickness. If total thickness of lift(s) proves to be less than required, the Contractor may remove and replace the overlay deficient areas as agreed to by the Engineer or designated representative. Overlays to correct thickness deficiencies shall be not less than one (1) inch (25-mm) thick. Overlays shall require milling of the asphalt in order to prevent a "featheredge" of the overlaying pavement.

The extent of the area to be overlaid or removed and replaced shall be determined by additional cores with thicknesses greater than or equal to the required thickness. All additional coring that is necessary to determine the area shall be paid for by the Contractor.

#### 340S.13 Measurement

Work performed and material placed shall be measured under one of the following methods. When Drawing quantity measurement is specified, adjustment of quantity may be made as follows. If the quantity measured as outlined vary from those shown on the Drawings by more than 5%, either party to the Contract may request in writing and adjustment of the quantity by each separate bid item. The party to the Contract which requests the adjustment shall present to the other party one copy of measurements and calculations showing the revised quantity in question. This revised quantity, when approved by the Engineer or designated representative, shall constitute the final quantity for which payment will be made. However, no adjustment will be made for any quantity, which exceeds the Drawing required thickness.

A. Method A: Asphaltic concrete pavement shall be measured by the ton (2,000 pounds) of the type actually used in completed and accepted Work in accordance with the Drawings and specifications.

The measurement shall be made on approved truck scales that meet the requirements of the National Institute of Standards and Technology Handbooks 44 and 112 except that the required accuracy shall be 0.4 percent of the load being weighed. The Contractor shall furnish a report of calibration from a scale mechanic licensed by the Texas Department of Agriculture certifying that the scales meet this requirement.

- B. Method B: Asphaltic concrete pavement shall be measured by the square yard of specified total thickness of the type of paving mixture actually used in completed and accepted Work in accordance with Drawings and specifications. Multiple lifts of the same type shall be considered as one for square yard measurement purposes.
- C. Method C: Asphaltic concrete pavement shall be measured by the lineal foot of specified total thickness of the type of paving mixture actually used in completed and accepted Work in accordance with Drawings and specifications. Multiple lifts of the same type shall be considered as one for linear foot measurement purposes.

### 340S.14 Payment

Work performed and materials furnished as prescribed by this item and measured as provided under "Measurement" will be paid for at the unit bid prices or pay adjusted unit price for Hot Mix Asphaltic Concrete Pavement, of the types and thicknesses specified. The unit bid prices shall include full compensation for furnishing all labor, equipment, time, materials and incidentals necessary to complete the Work.

Removal of existing hot mix asphalt concrete transition areas prior to overlay, tack coat, saw cutting and temporary pavement markings will not be measured or paid for directly but shall be included in the unit price bid for Standard Specification Item No. 340S, "Hot Mix Asphaltic Concrete Pavement".

Payment for Work meeting these specifications will be made under one of the following:

Pay Item No. 340S-A:	Hot Mix Asphaltic Concrete Pavement, Type	_, Per Ton.
Pay Item No. 340S-B:	Hot Mix Asphaltic Concrete Pavement,inche	s, Type Per Square Yard.
Pay Item No. 340S-C:	Hot Mix Asphaltic Concrete Pavement,Inche	s, Type Per Lineal Foot.
Pay Item No. 340S-PQ:	Hot Mix Asphaltic Concrete Pavement,Inche	s, Type er Drawing Quantity.
Pay Item No. 340S-L:	Hot Mix Asphaltic Concrete Pavement,in., TyLevel-up Course.	/pe, Lump Sum.
Pay Item No. 340S -M:	Crack Sealing Mobilization,	Lump Sum.
Pay Item No. 340S -S:	Crack Sealing,	per Lineal Foot.

### End

# **SPECIFIC CROSS REFERENCE MATERIALS**

Special Specification Item 340S "Hot Mix Asphaltic Concrete Pavement"

# City of Austin Standard Specifications

<u>Designation</u>	<u>Description</u>
Item No. 230S	Rolling (Flat Wheel)
Item No. 232S	Rolling (Pneumatic Tire)
Item No. 301S	Asphalts, Oils and Emulsions
Item No. 307S	Tack Coat
Item No. 313S	Cleaning and/or Sealing Joints and Cracks (Asphaltic Concrete)

# Texas Department of Transportation: Manual of Testing Procedures

<u>Designation</u>	<u>Description</u>
Tex-106E	Method of Calculating the Plasticity Index of Soils
Tex-107E	Determination of Bar Linear Shrinkage of Soils
Tex-200-F	Sieve Analysis of Fine and Coarse Aggregates
Tex-203-F	Sand Equivalent Test
Tex-204-F	Design of Bituminous Mixtures
Tex-207-F	Determination of Density of Compacted Bituminous Mixtures
Tex-208-F	Test for Stabilometer Value of Bituminous Mixtures
Tex-210-F	Determination of Asphalt Content of Bituminous Mixtures by
	Extraction
Tex-212-F, Part II	Determination of Moisture Content of Bituminous Mixtures (by oven drying)
Tex-217-F	Determination of Deleterious Material and Decantation Test For Coarse Aggregates
Tex-227-F	Theoretical Maximum Specific Gravity of Bituminous Mixtures
Tex-410-A	Abrasion of Coarse Aggregate Using the Los Angeles Machine
Tex-460-A	Determination of Crushed Face Particle

# <u>Texas Department of Transportation: Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges</u>

<u>Designation</u> <u>Description</u>

Item 340 Hot Mix Asphalt Concrete Pavement

# **RELATED** CROSS REFERENCE MATERIALS

Special Specification Item 340S "Hot Mix Asphaltic Concrete Pavement"

#### City of Austin Standard Specifications

<u>Designation</u>	<u>Description</u>
Item No. 206S	Asphalt Stabilized Base
Item No. 210S	Flexible Base
Item No. 306S	Prime Coat
Item No. 310S	Emulsified Asphalt Treatment
Item No. 311S	Emulsified Asphalt Repaving

Item No. 320S Two Course Surface Treatment

# Texas Department of Transportation: Manual of Testing Procedures

Designation	Description
Tex-215-F	Determination of Asphalt Content of Rock Asphalt By Hot Solvent Method
Tex-224-F	Determination of Flakiness
Tex-400-A	Method of Sampling Stone, Gravel, Sand and Mineral Aggregates
Tex-411-A	Soundness of Aggregate by Use of Sodium Sulfate or magnesium Sulfate
Tex-438-A	Accelerated Polish Test for Aggregate

### Special Provision to Item 340S (03/19/12 Version)

#### Dense-Graded Hot-Mix Asphalt (QC/QA)

For this contract, Item No. 340S, "Hot Mix Asphaltic Concrete Pavement" of the Standard Specifications, is hereby amended with respect to the clauses cited below, and no other clauses or requirements of this Item are waived or changed hereby.

Article 340S.3. Materials, Section A. Aggregate first three paragraphs are voided and replaced by the following:

**A.** Aggregate. Furnish aggregates from sources that conform to the requirements shown in Table 1 and as specified in this Section. Aggregate requirements in this Section, including those shown in Table 1, may be modified or eliminated when shown on the plans. Additional aggregate requirements may be specified when shown on the plans. Provide aggregate stockpiles that meet the definition in this Section for either a coarse aggregate or fine aggregate. Aggregate from reclaimed asphalt pavement (RAP) is not required to meet Table 1 requirements unless otherwise shown on the plans. Supply mechanically crushed gravel or stone aggregates that meet the definitions in Tex-100-E. The Engineer will designate the plant or the quarry as the sampling location. Samples must be from materials produced for the project. The Contactor must provide data for the supplier's testing values for the Los Angeles abrasion and magnesium sulfate soundness. Contractor shall perform all other aggregate quality tests listed in Table 1. Document all test results on the mixture design report. The Engineer may perform tests on independent or split samples to verify Contractor test results. Stockpile aggregates for each source and type separately. Determine aggregate gradations for mixture design and production testing based on the washed sieve analysis given in Tex-200-F, Part II. Do not add material to an approved stockpile from sources that do not meet the stated aggregate quality requirements unless otherwise approved.

Article 340S.3. Materials, Section A. Aggregate, Section 2. RAP is voided and replaced by the following:

**2) RAP.** RAP is salvaged, milled, pulverized, broken, or crushed asphalt pavement. Crush or break RAP so that 100% of the particles pass the 2-in. sieve.

Use of Contractor-owned RAP including hot-mix asphalt (HMA) plant waste is permitted, unless otherwise shown on the plans. Perform any necessary tests to ensure Contractor or Department-owned RAP is appropriate for use. When shown on the plans, the contractor will retain ownership of RAP generated on the project.

Fractionated RAP is defined as having two or more RAP stockpiles, whereas the RAP is divided into coarse and fine fractions. The coarse RAP stockpile will contain only material retained by processing over a 3/8 in. screen or 1/2 in. screen, unless otherwise approved. The fine RAP stockpile will contain only material passing the 3/8 in. screen or 1/2 in. screen, unless otherwise approved. The Engineer may allow the Contractor to use an alternate to the 3/8 in. screen or 1/2 in. screen to fractionate the RAP. The maximum percentages of fractionated RAP may be comprised of coarse or fine fractionated RAP or the combination of both coarse and fine fractionated RAP. Utilize a separate cold feed bin for each stockpile of fractionated RAP used.

Determine asphalt content and gradation of RAP stockpiles for mixture design purposes in accordance with Tex-236-F. Perform other tests on RAP when shown on the plans. Do not exceed the maximum allowable percentages of RAP shown in Table 1A. Asphalt binder from RAP and Recycled Asphalt Shingles (RAS) is designated as recycled asphalt binder. When RAP or RAS is used, calculate and ensure that the ratio of the recycled asphalt binder to total binder does not exceed the percentages shown in Table 1A. The allowable percentages shown in Table 1A may be decreased or increased when shown on the plans. Do not use Department or Contractor owned RAP contaminated with dirt or other objectionable materials. Do not use Department or Contractor owned RAP if the decantation value exceeds 5% and the plasticity index is greater than 8. Test the stockpiled RAP for decantation in accordance with Tex-406-A, Part I. Determine the plasticity index in accordance with Tex-106-E if the decantation value exceeds 5%. The decantation and plasticity index requirements do not apply to RAP samples with asphalt removed by extraction.

Do not intermingle Contractor-owned RAP stockpiles with Department-owned RAP stockpiles. Remove unused Contractor-owned RAP material from the project site upon completion of the project. Return unused Department-owned RAP to the designated stockpile location.

Table 1A

Maximum Allowable Amounts of Recycled Binder, RAP & RAS

Mixture Description &	Maximum Ratio of Recycled	Maximum Allowable % (Percentage by Weight of Total Mixture)			
Location			Fractionated RAP <sup>3</sup>	RAS⁴	
Surface Mixes <sup>5</sup>	35	10	20	5	
Non-Surface Mixes <sup>6</sup> < 8 in. From Final Riding Surface	40	15	30	5	
Non-Surface Mixes <sup>6</sup> > 8 in. From Final Riding Surface	45	20	40	5	

- 1. Combined recycled binder from RAP and RAS.
- 2. Do not use in combination with RAS or fractionated RAP.
- 3. May not be used in addition to unfractionated RAP; however, up to 5% of fractionated RAP may be replaced with RAS.
- 4. May be used separately or as a replacement for no more than 5% of the allowable fractionated RAP.
- 5. "Surface" mixes are defined as mixtures that will be the final lift or riding surface of the pavement structure.
- 6. "Non-Surface" mixes are defined as mixtures that will be an intermediate or base layer in the pavement structure.

#### Article 340S.3. Materials, Section A. Aggregate is supplemented by the following:

**4) RAS.** Use of post-manufactured RAS or post-consumer RAS is permitted unless otherwise shown on the plans.

RAS are defined as processed asphalt shingle material from manufacturing of asphalt roofing shingles or from reroofing residential structures. "Post-manufactured RAS" are processed manufacturer's shingle scrap by-product. "Post-consumer RAS," or "tear-offs," are processed shingle scrap removed from residential structures. Comply with all regulatory requirements stipulated for RAS by the Texas Commission on Environmental Quality (TCEQ). RAS may be used separately or in conjunction with RAP.

Process the RAS by ambient grinding or granulating such that 100% of the particles pass the 1/2 in. sieve and 90% pass the 3/8 in. sieve when tested in accordance with Tex-200-F, Part I. Perform a sieve analysis on processed RAS material prior to extraction of the asphalt.

Add sand meeting the requirements of Table 1 and Table 2 or fine RAP to RAS stockpiles if needed to keep the processed material workable. When RAS is pre-blended with sand or fine RAP, show the materials as two separate bins on the mixture design job mix formula (JMF) even though the combined materials are added using a single cold feed bin.

Determine asphalt content and gradation of the RAS material for mixture design purposes in accordance with Tex-236-F. Do not exceed the maximum allowable percentages of RAS shown in Table 1A. Asphalt binder from RAS and RAP is designated as recycled asphalt binder. When RAS or RAP is used, calculate and ensure that the ratio of the recycled asphalt binder to total binder does not exceed the percentages shown in Table 1A. The allowable percentages shown in Table 1A may be decreased or increased when shown on the plans.

Certify compliance of the RAS with DMS-11000, "Evaluating and Using Nonhazardous Recyclable Materials (NRM) Guidelines." If the RAS has not come into contact with any hazardous materials, treat it as an established NRM. Unless otherwise directed, use only RAS from sources on the TXDOT Construction Division's "Nonhazardous Recycled materials" approved list located at

http://www.dot.state.tx.us/txdot\_library/publications/producer\_list.htm.

Prior to use, remove all materials that are not part of the shingle, such as wood, paper, metal, and plastics. Do not use RAS if deleterious materials as measured by Tex 217-F, Part I, are more than 1.5% of the stockpiled RAS.

Page 2

Article 340S.3. Materials, Section A. Mineral Filler.

#### Article 340S.3. Materials, Section B. Asphalt Binder is supplemented by the following:

- **B. Asphalt Material.** Furnish the type and grade of performance-graded (PG) asphalt specified on the plans. Unless otherwise shown on the plans, the contractor may use a substitute PG binder listed in Table 3A in lieu of the PG binder originally specified, if the substitute PG binder and mixture made with the substitute PG binder meet the following:
  - the substitute binder meets the specification requirements for the substitute binder grade in accordance with Section 300.2.J, "Performance-Graded Binders;"
  - the substitute binder has an un-aged dynamic shear value less than or equal to 2.00 kPa and an RTFO aged dynamic shear value less than or equal to 5.00 kPa at the PG test temperature; and
  - the mixture has less than 10.0 mm of rutting on the Hamburg Wheel test (Tex-242-F) after the number of passes required for the originally specified binder. Use of substitute PG binders may only be allowed at the discretion of the Engineer if the Hamburg Wheel test results are between 10.0 mm and 12.5 mm.

#### **Allowable Substitute PG Binders**

Description of Course Function	PG Binder Originally Specified	Allowable Substitute PG Binders
Final Surfaces	PG 76-22S	PG 70-22 or PG 64-22
All Other Layers	PG 64-22	PG 58-22

#### **Article 340S.3. Materials, Section C. Additives** is supplemented by the following:

**Warm Mix Asphalt (WMA).** Warm Mix Asphalt (WMA) is defined as HMA that is produced within a target temperature discharge range 215° F and 275° F using approved WMA additives or processes. A list of the approved WMA additives and processes is located at http://www.dot.state.tx.us/txdot\_library/publications/producer\_list.htm

WMA is allowed for use at the Contractor's option unless otherwise shown on the plans. The use of WMA is required when shown on plans. When WMA is required by the plans, asphalt mixture must be produced within the temperature range of 215° F and 275° F. Department approved WMA additives or processes may be used to facilitate mixing and compaction of HMA produced at target discharge temperatures greater than 275° F; however, such mixtures will not be defined as WMA.

#### Article 340S.4. Paying Mixtures, Section D. Stability and Density is supplemented by the following:

Use an approved laboratory to perform the Hamburg Wheel test and provide results with the mixture design.

#### **Laboratory Mixture Design Properties**

Mixture Propert	у		Test Method	Requirem ent	
Target Laborator	y-Molded Dei	nsity, %	Tex-207-F	96.0	
Tensile Strength (dry), psi (molded to 93% ±1% density)			Tex-226-F	85–200 <sup>1</sup>	
Boil Test <sup>2</sup>			Tex-530-C	_	
Hamburg Wheel Test Requirements					
High- Temperature	Test Method	Minimum # of Passes @ 0.5" Rut Depth,			
Binder Grade		Tested @122	2°F		
PG 64 or lower	Tex-242-F	10,000			
PG 70		15,000			
PG 76 or higher		20,000			

<sup>1.</sup> May exceed 200 psi when approved and may be waived when approved.

Mixture Property		Requirem ent
Target Laboratory-Molded Density, %	Tex-207-F	96.0

<sup>2.</sup> Used to establish baseline for comparison to production results. May be waived when approved.

**Article 340S.4. Paving Mixtures, Section D. Job-Mix Formula Field Adjustments.** The second paragraph is voided and replaced by the following:

If it is determined by the City of Austin that adjustments to the JMF are necessary to achieve the specified requirements, the Engineer or designated representative may allow adjustments of the JMF within the following limits without a laboratory redesign of the mixture. The following table shows the Operational Tolerances that will be allowed. When the proposed adjustments exceed these limits, and the Engineer or designated representative determines that the impact of these changes may adversely affect pavement performance, a new laboratory mixture design will be required.

# **Operational Tolerances**

Description	Test Method	Allowable Difference from Current JMF Target	Allowable Difference between Contractor and Engineer <sup>1</sup>	
Individual % retained for #8 sieve and larger	Tex- 200-F	±5.0 <sup>2</sup>	±5.0	
Individual % retained for sieves smaller than #8 and larger than #200	or Tex-	±3.0 <sup>2</sup>	±3.0	
% passing the #200 sieve	236-F	±2.0 <sup>2</sup>	±1.6	
Asphalt content, %	Tex- 236-F	±0.3 <sup>3</sup>	±0.3	
Laboratory-molded density, %	Tex-	±1.0	±0.5	
In-Place air voids, %	207-F	N/A	±1.0	
Laboratory-molded bulk specific gravity		N/A	±0.020	
VMA, % min		Note 4	N/A	
Theoretical maximum specific (Rice) gravity	Tex- 227-F	N/A	± 0.020	

- 1. Contractor may request referee testing only when values exceed these tolerances.
- 2. When within these tolerances, mixture production gradations may fall outside the master grading limits; however, the % passing the #200 will be considered out of tolerance when outside the master grading limits.
- 3. Tolerance between JMF1 and JMF2 may exceed ±0.3%.
- 4. Test and verify that Table 6 requirements are met.

#### **Article 340S.7.Mixture Temperature** is supplemented by the following:

When WMA is specified on the plans, produce the mixture and monitor the temperature of the material in the truck before shipping to ensure that it does not exceed 275°F or is less than 215°F. When WMA is specified, the Department will not pay for or allow placement of any WMA produced at more than 275°F or less than 215°F, unless otherwise directed.

#### Article 340S.10. Construction Methods. The first paragraph is supplemented by the following:

On or before the first day of paving, it is mandatory to schedule and participate in a pre-paving meeting with the Engineer unless otherwise shown on the plans.

**Article 340S.10. Construction Methods, Section A. General.** is supplemented by adding the following between the eighth and ninth paragraphs:

In lieu of complying with the requirements in Minimum Temperature, the Contractor may pave any time the roadway is dry and the roadway surface temperature is at least 32°F by using a Pave-IR system (paver mounted infrared bar) and demonstrating to the Engineer that no more than 25°F of thermal segregation exists. When used, operate the Pave-IR system in accordance with Tex-244-F and provide the Engineer with the output results on a daily basis unless otherwise directed.

**Article 340S.10. Construction Methods, Section D. HMA Placement** add the following at the end of the section and before Section E Compaction:

- a. Thermal Profile. Use an infrared thermometer or thermal camera to obtain a thermal profile on each sub lot in accordance with Tex-244-F. The Engineer may allow the Contractor to reduce the testing frequency based on a satisfactory test history. The Engineer may also obtain as many thermal profiles as deemed necessary. Thermal profiles are not applicable in miscellaneous paving areas subject to hand work such as driveways, crossovers, turnouts, gores, tapers, and other similar areas.
  - (1) Moderate Thermal Segregation. Any areas that have a maximum temperature differential greater than 25°F but not exceeding 50°F are deemed as having moderate thermal segregation. Take immediate corrective action to eliminate the moderate thermal segregation. Evaluate areas with moderate thermal segregation by performing a density profile in accordance with Section 340.11 Sampling and Testing, Segregation (Density Profile).
  - (2) Severe Thermal Segregation. Any areas that have a maximum temperature differential greater than 50°F are deemed as having severe thermal segregation. When the Pave-IR system is not used, no production or placement bonus will be paid for any sub lot that contains severe thermal segregation. Unless otherwise directed, suspend operations and take immediate corrective action to eliminate severe thermal segregation. Resume operations when the Engineer determines that subsequent production will meet the requirements of this Item. Evaluate areas with severe thermal segregation by performing a density profile in accordance with Section 340.11 Sampling and Testing, Segregation (Density Profile). Unless otherwise directed, remove and replace the material in any areas that have both severe thermal segregation and a failing result for Segregation (Density Profile). The sub lot in question may receive a production and placement bonus if applicable when the defective material is successfully removed and replaced.
  - (3) Use of the Pave-IR System. In lieu of obtaining thermal profiles on each sub lot using an infrared thermometer or thermal camera, the Contractor may use the Pave IR system (paver mounted infrared bar) to obtain a continuous thermal profile in accordance with Tex-244-F. When using the Pave-IR system, review the output results on a daily basis and, unless otherwise directed, provide the output results to the Engineer for review. Modify the paving process as necessary to eliminate any (moderate or severe) thermal segregation identified by the Pave-IR system. The Engineer may suspend paving operations if the Contractor cannot successfully modify the paving process to eliminate thermal segregation. Density profiles in accordance with Section 340.11 Sampling and Testing, Segregation (Density Profile), are not required and are not applicable when using the Pave-IR system.

#### Article 340S.11. Sampling and Testing is supplemented by the following:

Segregation (Density Profile): Test for segregation using density profiles in accordance with Tex-207-F, Part V. Provide the Engineer with the results of the density profiles as they are completed. Density profiles are not required and are not applicable when using the Pave-IR system. Areas defined in Section 340.11.A.4, "Limited Areas," are not subject to density profile testing. Density profiles are not applicable in miscellaneous paving areas subject to hand work such as driveways, crossovers, turnouts, gores, tapers, and other similar areas.

The density profile is considered failing if it exceeds the tolerances in Segregation (Density Profile) Acceptance Criteria. No production or placement bonus will be paid for any sub lot that contains a failing density profile. When the Pave-IR system is not used, the Engineer may measure the density profile at any time, at any location, and as often as deemed necessary to verify conformance. The Engineer's density profile results will be used when available. The Engineer may require the Contractor to remove and replace the area in question if the area fails the density profile and has surface irregularities. The subarea in question may receive a production and placement bonus if applicable when the defective material is successfully removed and replaced.

Segregation (Density Profile) Acceptance Criteria

<u>, , , , , , , , , , , , , , , , , , , </u>				
	Maximum Allowable	Maximum Allowable		
Mixture Type	Density Range	Density Range		
	(Highest to Lowest)	(Average to Lowest)		
All	6.0 pcf	3.0 pcf		

**END** 

# CITY OF AUSTIN PURCHASING OFFICE BID SHEET FOR

# HOT MIX ASPHALT CONCRETE - TYPE B, C, C-SBS POLYMER, & D to include H.M.A.C. with RAP/RAS AND WARM MIXES

This is for an Alternate Vendor, if you have been awarded the contract for the Primary Vendor for IFB BKH0148-P you will not be eligible as the Alternate Vendor under this contract.

**BID NO. BKH0148-A** 

RQM NO. 6200 12032200269

BUYER: Brenda Helgren (512) 974-9141 email: brenda.helgren@austintexas.gov

Copies of Bid: Vendor must submit two copies of its signed bid - one original and one copy

Special Instructions: Be advised that exceptions taken to any portion of the solicitations may jeopardize acceptance of the bid.

# \*\*\*\*\*\*\*\* THE QUANTITIES REQUESTED ARE ESTIMATED YEARLY QUANTITIES \*\*\*\*\*\*\*

		ESTIMATED YEARLY			
ITEM NO.	ITEM DESCRIPTION	QUANTITIES	UNIT	UNIT PRICE	EXTENDED PRICE
1	SP 340 HMAC Type B F.O.B. Contractor's Plant	6,000	TON	\$	\$
2	HMAC Type C F.O.B. Contractor's Plant	1,500	TON	\$	\$
3	SP 340 HMAC Type C F.O.B. Contractor's Plant	1,500	TON	\$	\$
4	WMA (Warm Mix) Type C F.O.B. Contractor's Plant	1,500	TON	\$	\$
5	SP 340 HMAC Type C SBS Polymer Modified F.O.B. Contractor's Plant	3,750	TON	\$	\$
6	WMA (Warm Mix) Type C SBS Polymer Modified F.O.B. Contractor's Plant	3,750	TON	\$	\$
7	HMAC Type D F.O.B. Contractor's Plant	13,000	TON	\$	\$
8	SP 340 HMAC Type D F.O.B. Contractor's Plant	13,000	TON	\$	\$
9	WMA (Warm Mix) Type D F.O.B. Contractor's Plant	5,000	TON	\$	\$
10	SP 340 HMAC Type D SBS Polymer Modified F.O.B. Contractor's Plant	32,500	TON	\$	\$
11	WMA (Warm Mix) Type D SBS Polymer Modified F.O.B. Contractor's Plant	32,500	TON	\$	\$
12	HMAC Type D-THIN Special Specification F.O.B. Contractor's Plant	5,000	TON	\$	\$

	TOTAL BID	\$
For information purpose only: Bidder to specify if applicable: Additional start-up cost/fee and/or additional hourly fee		
a. Hourly rate for after 4:30 pm MonSat.		\$
b. Start-up cost for after 4:30 pm MonSat.		\$
c. Hourly rate for 7:30 am - 4:30 pm Sundays		\$
d. Start-up cost for 7:30 am - 4:30 pm Sundays		\$
Notes:		
The City will award an alternant vendor bidding lowest and most responsive for all line items.  The City will also issue a second solicitation BKH0148-P. The successful vendor for the primary solicitation. If the primary vendor is unable to meet requirements when called, the City will be conducted to the conduction of the primary vendor is unable to meet requirements.		
Company Name		
Plant Location/Address:		
Signature of Authorized Representative:		
Printed Name:		
Email Address:		

# CITY OF AUSTIN PURCHASING OFFICE REFERENCE SHEET

# Please Complete and Return This Form with the Offer

Solicitation Number: Bl	H0148P	
Offeror's Name		Date
	ith the Offer, the following information, for ices have been provided that are similar t	. N. 1900, and Tare Tare 1 in 180, 191, 191, 191, 191, 191, 191, 191, 19
To add additional reference	to this form, click the Add Reference Button.	. =====> Add Reference
Company's Name		
Name of Contact	Contact Title	
Present Address		
City	State	Zip Code
Telephone Number	FAX Number	re l

# City of Austin, Texas EQUAL EMPLOYMENT/FAIR HOUSING OFFICE NON-DISCRIMINATION CERTIFICATION

SOLICITATION NO BKH0148P

City of Austin, Texas Human Rights Commission

To: City of Austin, Texas, ("OWNER")

I hereby certify that our firm conforms to the Code of the City of Austin, Section 5-4-2 as reiterated below:

Chapter 5-4. Discrimination in Employment by City Contractors.

Sec. 4-2 Discriminatory Employment Practices Prohibited. As an Equal Employment Opportunity (EEO) employer, the Contractor will conduct its personnel activities in accordance with established federal, state and local EEO laws and regulations and agrees:

- (B) (1) Not to engage in any discriminatory employment practice defined in this chapter.
  - (2) To take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without discrimination being practiced against them as defined in this chapter. Such affirmative action shall include, but not be limited to: all aspects of employment, including hiring, placement, upgrading, transfer, demotion, recruitment, recruitment advertising; selection for training and apprenticeship, rates of pay or other form of compensation, and layoff or termination.
  - (3) To post in conspicuous places, available to employees and applicants for employment, notices to be provided by OWNER setting forth the provisions of this chapter.
  - (4) To state in all solicitations or advertisements for employees placed by or on behalf of the Contractor, that all qualified applicants will receive consideration for employment without regard to race, creed, color, religion, national origin, sexual orientation, gender identity, disability, veteran status, sex or age.
  - (5) To obtain a written statement from any labor union or labor organization furnishing labor or service to Contractors in which said union or organization has agreed not to engage in any discriminatory employment practices as defined in this chapter and to take affirmative action to implement policies and provisions of this chapter.
  - (6) To cooperate fully with OWNER's Human Rights Commission in connection with any investigation or conciliation effort of said Human Rights Commission to ensure that the purpose of the provisions against discriminatory employment practices are being carried out.
  - (7) To require compliance with provisions of this chapter by all subcontractors having fifteen or more employees who hold any subcontract providing for the expenditure of \$2,000 or more in connection with any contract with OWNER subject to the terms of this chapter.

For the purposes of this Offer and any resulting Contract, Contractor adopts the provisions of the City's Minimum Standard Nondiscrimination Policy set forth below.

# City of Austin Minimum Standard Non-Discrimination in Employment Policy:

As an Equal Employment Opportunity (EEO) employer, the Contractor will conduct its personnel activities in accordance with established federal, state and local EEO laws and regulations.

The Contractor will not discriminate against any applicant or employee based on race, creed, color, national origin, sex, age, religion, veteran status, gender identity, disability, or sexual orientation. This policy covers all aspects of employment, including hiring, placement, upgrading, transfer, demotion, recruitment, recruitment advertising, selection for training and apprenticeship, rates of pay or other forms of compensation, and layoff or termination.

Further, employees who experience discrimination, sexual harassment, or another form of harassment should immediately report it to their supervisor. If this is not a suitable avenue for addressing their complaint, employees are advised to contact another member of management or their human resources representative. No employee shall be discriminated against, harassed, intimidated, nor suffer any reprisal as a result of reporting a violation of this policy. Furthermore, any employee, supervisor, or manager who becomes aware of any such discrimination or harassment should immediately report it to executive management or the human resources office to ensure that such conduct does not continue.

Contractor agrees that to the extent of any inconsistency, omission, or conflict with its current non-discrimination employment policy, the Contractor has expressly adopted the provisions of the City's Minimum Non-Discrimination Policy contained in Section 5-4-2 of the City Code and set forth above, as the Contractor's Non-Discrimination Policy or as an amendment to such Policy and such provisions are intended to not only supplement the Contractor's policy, but will also supersede the Contractor's policy to the extent of any conflict.

UPON CONTRACT AWARD, THE CONTRACTOR SHALL PROVIDE A COPY TO THE CITY OF THE CONTRACTOR'S NON-DISCRIMINATION POLICY ON COMPANY LETTERHEAD, WHICH CONFORMS IN FORM, SCOPE, AND CONTENT TO THE CITY'S MINIMUM NON-DISCRIMINATION POLICY, AS SET FORTH HEREIN, OR THIS NON-DISCRIMINATION POLICY, WHICH HAS BEEN ADOPTED BY THE CONTRACTOR FOR ALL PURPOSES (THE FORM OF WHICH HAS BEEN APPROVED BY THE CITY'S EQUAL EMPLOYMENT/FAIR HOUSING OFFICE), WILL BE CONSIDERED THE CONTRACTOR'S NON-DISCRIMINATION POLICY WITHOUT THE REQUIREMENT OF A SEPARATE SUBMITTAL.

#### Sanctions:

Our firm understands that non-compliance with Chapter 5-4 may result in sanctions, including termination of the contract and suspension or debarment from participation in future City contracts until deemed compliant with the requirements of Chapter 5-4.

#### Term:

The Contractor agrees that this Section 0800 Non-Discrimination Certificate or the Contractor's separate conforming policy, which the Contractor has executed and filed with the Owner, will remain in force and effect for one year from the date of filing. The Contractor further agrees that, in consideration of the receipt of continued Contract payments, the Contractor's Non-Discrimination Policy will automatically renew from year-to-year for the term of the underlying Contract.

Dated this	day of	, 20	
		CONTRACTOR	
		Authorized Signature	
		Title	

# City of Austin, Texas NON-SUSPENSION OR DEBARMENT CERTIFICATION

SOLICITATION NO.	BKH0148P	
245151111111111111111111111111111111111	DICTIO 140F	

The City of Austin is prohibited from contracting with or making prime or sub-awards to parties that are suspended or debarred or whose principals are suspended or debarred from Federal, State, or City of Austin Contracts. Covered transactions include procurement contracts for goods or services equal to or in excess of \$25,000.00 and all non-procurement transactions. This certification is required for all Vendors on all City of Austin Contracts to be awarded and all contract extensions with values equal to or in excess of \$25,000.00 or more and all non-procurement transactions.

The Offeror hereby certifies that its firm and its principals are not currently suspended or debarred from bidding on any Federal, State, or City of Austin Contracts.

Contractor's Name:	
Signature of Officer or Authorized Representative:	Date:
Printed Name:	
Title:	

# CITY OF AUSTIN NON-COLLUSION, NON-CONFLICT OF INTEREST, AND ANTI-LOBBYING AFFIDAVIT

SOLICITATION NO. BKH0148P

FOR

HOT MIX ASPHALT CONCRETE – TYPE B, C, C-SBS POLYMER, & D to include H.M.A.C. with RAP/RAS AND WARM MIXES

#### State of Texas

#### County of Travis

The undersigned "Affiant" is a duly authorized representative of the Offeror for the purpose of making this Affidavit, and, after being first duly sworn, has deposed and stated and hereby deposes and states, to the best of his or her personal knowledge and belief as follows:

The term "Offeror", as used herein, includes the individual or business entity submitting the Offer and for the purpose of this Affidavit includes the directors, officers, partners, managers, members, principals, owners, agents, representatives, employees, other parties in interest of the Offeror, and anyone or any entity acting for or on behalf of the Offeror, including a subcontractor in connection with this Offer.

- 1. Anti-Collusion Statement. The Offeror has not in any way directly or indirectly:
  - a. colluded, conspired, or agreed with any other person, firm, corporation, Offeror or potential
     Offeror to the amount of this Offer or the terms or conditions of this Offer.
  - b. paid or agreed to pay any other person, firm, corporation Offeror or potential Offeror any money or anything of value in return for assistance in procuring or attempting to procure a contract or in return for establishing the prices in the attached Offer or the Offer of any other Offeror.
- 2. Preparation of Solicitation and Contract Documents. The Offeror has not received any compensation or a promise of compensation for participating in the preparation or development of the underlying Solicitation or Contract documents. In addition, the Offeror has not otherwise participated in the preparation or development of the underlying Solicitation or Contract documents, except to the extent of any comments or questions and responses in the solicitation process, which are available to all Offerors, so as to have an unfair advantage over other Offerors, provided that the Offeror may have provided relevant product or process information to a consultant in the normal course of its business.
- 3. Participation in Decision Making Process. The Offeror has not participated in the evaluation of Offers or other decision making process for this Solicitation, and, if Offeror is awarded a Contract hereunder, no individual, agent, representative, consultant, subcontractor, or subconsultant associated with Offeror, who may have been involved in the evaluation or other decision making process for this Solicitation, will have any direct or indirect financial interest in the Contract, provided that the Offeror may have provided relevant product or process information to a consultant in the normal course of its business.
- 4. Present Knowledge. Offeror is not presently aware of any potential or actual conflicts of interest regarding this Solicitation, which either enabled Offeror to obtain an advantage over other Offerors or would prevent Offeror from advancing the best interests of the City in the course of the performance of the Contract.
- 5. City Code. As provided in Sections 2-7-61 through 2-7-65 of the City Code, no individual with a substantial interest in Offeror is a City official or employee or is related to any City official or employee within the first or second degree of consanguinity or affinity.
- 6. Chapter 176 Conflict of Interest Disclosure. In accordance with Chapter 176 of the Texas Local Government Code, the Offeror:
  - a. does not have an employment or other business relationship with any local government officer of the City or a family member of that officer that results in the officer or family member receiving taxable income;

# CITY OF AUSTIN NON-COLLUSION, NON-CONFLICT OF INTEREST, AND ANTI-LOBBYING AFFIDAVIT

- b. has not given a local government officer of the City one or more gifts, other than gifts of food, lodging, transportation, or entertainment accepted as a guest, that have an aggregate value of more than \$250 in the twelve month period preceding the date the officer becomes aware of the execution of the Contract or that OWNER is considering doing business with the Offeror.
- c. as required by Chapter 176 of the Texas Local Government Code, Offeror must file a Conflict of Interest Questionnaire with the Office of the City Clerk no later than 5:00 P.M. on the seventh (7) business day after the commencement of contract discussions or negotiations with the City or the submission of an Offer, or other writing related to a potential Contract with the City. The questionnaire is available on line at the following website for the City Clerk:

http://www.austintexas.gov/department/conflict-interest-guestionnaire

There are statutory penalties for failure to comply with Chapter 176.

provide a detailed pages to be annex	written explanation in	the space provided	e forgoing statements, the Of below or, as necessary, on s	separate
Offeror's Explanation:				
7N, between the d Offeror has not ma	late that the Solicitation ade and will not make	n was issued and the a representation to	Instructions, Section 0200, point date of full execution of the a City official or to a City empet as permitted by the Ordin	e Contract, ployee, other
Contractor's Name:				
Printed Name:				
Title:				
Signature of Officer or	Authorized Represent	tative:		
Subscribed and sworr	to before me this	day of	, 20	P
Notary Public		My Co	ommission Expires	

# City of Austin, Texas NONRESIDENT BIDDER PROVISIONS

0.00	Section 2		
SOL	ICIT/	NOITA	NO
JUL		ALION	NO

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A. Bidder must answer the following questions in accordance with Vernon's Texas Statutes and Codes Annotated Government Code 2252.002, as amended:

Is the Bidder that is making and submitting this Bid a "Resident Bidder" or a "Non-resident Bidder"?

- Texas Resident Bidder A Bidder whose principal place of business is in Texas and includes a Contractor whose ultimate parent company or majority owner has its principal place of business in Texas.
- C Non-resident Bidder

Bidder's Name:	
Signature of Officer or Authorized Representative:	Date:
Printed Name:	
Title:	~

# MINORITY- AND WOMEN-OWNED BUSINESS ENTERPRISE (MBE/WBE) PROCUREMENT PROGRAM **NO GOALS FORM**

NUMBER: BKH0148A	
	B, C, C-SBS POLYMER, & D to include H.M.A.C. with RAP/RASRM MIXES
for this solicitation, the Bidder/Prop	appropriate for this project. Even though no goals have oser is required to comply with the City's MBE/WBE tified.
or if supplies or materials are required inventory, the Bidder/Proposer shall BR) at (512) 974-7600 to obtain a list of lies or materials. The Bidder/Proposer Good Faith Efforts include but are no est in performing on the Contract; using	e Bidder/Proposer does not perform the service with its and the Bidder/Proposer does not have the supplies of contact the Small and Minority Business Resources MBE and WBE firms available to perform the service of must also make a Good Faith Effort to use available MBE thimited to contacting the listed MBE and WBE firms to MBE and WBE firms that have shown an interest, meeting the results of the contacts.
tors or sub-consultants or suppliers b	e used to perform portions of this Contract?
f no, please sign the No Goals Form	n and submit it with your Bid/Proposal in a sealed
erform Good Faith Efforts. Comple	ain further instructions and an availability list and an availability list and an availability list and and submit the No Goals Form and the No Goals al in a sealed envelope.
forts and the No Goals Utilization	ortion of the Contract, it is a requirement to complete Plan, listing any subcontractor, subconsultant, of Ianager or the Contract Manager.
Procurement Program if subcontract	en established, I must comply with the City's ing areas are identified. I agree that this No become a part of my Contract with the City of
me	
tle of Authorized Representative (Prin	t or Type)
	Date
	stin has determined that no goals are for this solicitation, the Bidder/Propogram, if areas of subcontracting are identification, if areas of subcontracting are identification of the contract and the form of supplies or materials are required inventory, the Bidder/Proposer shall BR) at (512) 974-7600 to obtain a list of lies or materials. The Bidder/Proposer of Good Faith Efforts include but are not est in performing on the Contract; using different are competitive in the market; and documents or suppliers but the form of the contract of the competitive in the market of the competitive in the comp

# MINORITY- AND WOMEN-OWNED BUSINESS ENTERPRISE (MBE/WBE) PROCUREMENT PROGRAM NO GOALS UTILIZATION PLAN

(Please duplicate as needed)

SOLICITATION NUMBER: BKH0148A

HOT MIX ASPHALT CONCRETE – TYPE B, C, C-SBS POLYMER, & D to include H.M.A.C. with PROJECT NAME:

Name of Contractor/Consultant			
Address			
City, State Zip			
Phone		Fax Numbe	r
Name of Contact Person			-
s company City certified?	Yes No MI	BE WBE MBE/WBE Jo.	int Venture 🗌
ertify that the information included in th			
nther understand and agree that the information of the information of the contract of the cont			t with the City of Austin.
Signature			Date
rovide a list of all proposed subcontractor food Faith Efforts documentation if no			rmance of this Contract. Attach
food Faith Efforts documentation if no	n MBE/WBE firms w	iii be usea.	
Sub-Contractor/Consultant			
City of Austin Certified	MBE WBE	Ethnic/Gender Code:	NON-CERTIFIED
Vendor ID Code		·	
Contact Person		Phone Nu:	mber:
Amount of Subcontract	\$		
ist commodity codes & description of ervices			
Sub-Contractor/Consultant			
City of Austin Certified	MBE WBE	Ethnic/Gender Code:	□NON-CERTIFIED
Vendor ID Code		,	
Contact Person		Phone Nur	mber:
Amount of Subcontract	\$		
ist commodity codes & description of ervices			
OR SMALL AND MINORITY BUSINESS R	ESOURCES DEPARTMEN	NT USE ONLY:	
aving reviewed this plan, I acknowledge that the	ne proposer (HAS) or (HAS	S NOT) complied with City Code Ch	apter 2-9A/B/C/D, as amended.
Having reviewed this plan, I acknowledge that the	ne proposer (HAS) or (HAS	NOT) complied with City Code Ch	apter 2-9A/B/C/D, as amended.

# CITY OF AUSTIN PURCHASING OFFICE "NO OFFER" REPLY FORM

SOLICITATION NUMBER: BKH0148A

COMMODITY CODE: 7/5211/

# Please Complete and Return This Form to the following address to Indicate a "No Offer" Reply

City of Austin
Purchasing Office
P.O. Box 1088
Austin, Texas 78767-8845

# (DO NOT RETURN ALONG WITH OFFER)

Please check the appropriate box to indicate why your firm is submitting a "no offer" response. Failure to respond to three (3) consecutive solicitations may result in your company being removed from the source list for this commodity or service. Completion of this form will assist us in maintaining an accurate, up-to-date source list.

DESCRIPTION: ASPHALTIC CONCRETE HOT MIX

COM	WODII I CODE. 1	432114	DESCRII I	ON.ASI TIZ	ALTIO CONC	/IXL1L, 110	T IVIIX	
	Unable to supply Service Group	item(s) specified.	Remove m	y company	from the so	urce list for	r the Commo	dity /
	Unable to supply service.	tem(s) specified.	. Retain m	y company	on the ven	dor list for	this commo	dity /
	Cannot meet the	Scope of Work / Sp	pecifications	<b>5.</b>				
	Cannot provide re	equired Insurance.						
	Cannot provide re	equired Bonding.						
	Job too small.							
	Job too large.							
	Do not wish to do	business with the	City. Remo	ve my com	pany from the	e City's Ver	ndor list.	
	Other reason (ple	ease state why you	will not sub	mit a bid):				
Contra	actor's Name:							
Street	Address							
City, S	State, Zip Code							
Autho	ture of Officer or rized esentative:				Date:			
Printe	d Name:							
Title								

TO:	Veronica Lara, Director Department of Small and Minority Business Resources					
FROM: DATE:	Brenda Helgren, Sr. Buyer, Purchasing Office March 23, 2012					
SUBJECT:	Approval to use Zero C	Goals for Solicitation No. BKH0148A				
	Project Name:  Commodity Code(s): Estimated Value:	Primary & Alternate Hot Mix Asphalt Concrete – Type B, C, C-SBS Polymer, & D To Include H.M.A.C. With RAP/RAS And Warm Mixes 7452114  \$8,000,000 per year				
The Purchasin	ng Office has determined	d that the following Goals are appropriate for this non-professional services purchase:				
X	No Goals (Goal of 0%)					
This determin	nation is based on the fol	lowing reasons:				
This solicitati	on will be bid by and aw	varded to a prime contractor. No subcontracting opportunities have been identified.				
		erning the Minority and Women Owned Business Enterprise Procurement Program, please completing and returning the below endorsement. If you have questions, pleasæall me at				
Appr	oval is hereby granted to	o use the above Goals.				
Appr	oval is hereby denied. I	Recommend the use of the following goals based on the below reasons:				
a. G	oals:% M	BE% WBE				
b. Si	ubgoals% A	frican American% Hispanic				
		ative/Asian American % WBE				
This determin	ation is based on the foll has subcontra	owing reasons, This strip Commodity for My asphalt. There are thing opportunities.				
And Veronica Lara	Director In bl	Date: 327/2012				

TO:	Veronica Lara, Director Department of Small and Minority Business Resources	
FROM: DATE:	Brenda Helgren, Sr. Buyer, Purchasing Office March 23, 2012	
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The Purchasin	ng Office has determined	d that the following Goals are appropriate for this non-professional services purchase:
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This determin	nation is based on the fol	lowing reasons:
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b. Si	ubgoals% A	frican American% Hispanic
		ative/Asian American % WBE
This determin	ation is based on the foll has subcontra	owing reasons, This strip Commodity for My asphalt. There are thing opportunities.
And Veronica Lara	Director In bl	Date: 327/2012