

Vendor Name: VULCAN MATERIALS COMPANY



**CITY OF GLENDALE
PROCUREMENT DIVISION
INVITATION FOR BIDS**

SOLICITATION NUMBER: IFB 16-46

DESCRIPTION: ROAD MATERIALS

OFFER DUE DATE AND TIME: FEBRUARY 24, 2017 AT 2:00 P.M. LOCAL TIME

Offers for the materials or services specified shall be received by the City of Glendale, Materials Management at the specified due date, time and location. Offers received by the correct time and date will be opened and the name of each bidder and the amount of the bid will be publicly read.

SUBMITTAL LOCATION: City of Glendale
Materials Management
5850 West Glendale Avenue, Suite 317
Glendale, Arizona 85301

Offers must be in the actual possession of Materials Management on or prior to the time and date, and at the location indicated above. Materials Management is located on the 3rd floor of the Glendale Municipal Office Complex (City Hall) behind the Engineering Department. Offers are accepted from the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday, unless otherwise indicated for a holiday. All offers will be time stamped at the Engineering Department's front counter. Late offers will not be considered.

Offers must be submitted in a sealed envelope with the Solicitation Number and the Offeror's name and address clearly indicated on the envelope. See Section 2.0 for additional instructions for preparing an offer.

OFFERORS ARE STRONGLY ENCOURAGED TO CAREFULLY READ THE ENTIRE SOLICITATION.

For questions regarding this solicitation contact:

Elmer Garcia, CPPB

Contract Analyst

Egarcia1@glendaleaz.com



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1.0 SPECIFICATIONS

1.1 INTRODUCTION


- 1.1.1 The City of Glendale, Arizona ("City") intends to establish a term contract with qualified firm(s) to provide road materials, including but not limited to, asphalt, asphalt millings, aggregates and sand.
- 1.1.2 Asphalt and aggregate materials are used in resurfacing, repairing and maintaining City streets, alleys, walkways, parking lots, etc.
- 1.1.3 The resultant contract may be used as needed by various City departments and divisions including, but not limited to, Field Operations, Transportation, Facilities, Engineering, Water Services, Community Housing, Parks, Recreation and Neighborhood Services.

1.2 GENERAL SPECIFICATIONS

- 1.2.1 The specifications and item descriptions represent items that meet the City's needs.
- 1.2.2 The City may purchase additional quantities at any time within the contract period at the awarded contract price as per the terms and conditions of the resultant contract.
- 1.2.3 Quantities listed in this contract are the City's best estimate only and do not obligate the City to order more than the City's actual requirements and subject to availability of appropriated funds.

1.3 TECHNICAL SPECIFICATIONS

- 1.3.1 All products and services supplied by the Contractor shall comply with current Maricopa Association of Government (M.A.G.) Uniform Standard Specifications and applicable Federal, State, Local, ANSI, and OSHA laws, rules, and regulations.
- 1.3.2 The Contractor shall provide the following required mixes when requested by the City. All materials supplied by the Contractor shall follow the most recent version of M.A.G specifications (see EXHIBIT A).
 - 1.3.2.1 Hot mix asphalt, 3/8" fine dense grade
 - 1.3.2.2 Hot mix asphalt, 1/2" fine dense grade
 - 1.3.2.3 Hot mix asphalt, 3/4" fine dense grade

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1.3.2.4 Hot mix asphalt, Sand Seal

1.3.2.5 Cold mix patch asphalt

1.3.2.6 ABC Backfill (crushed aggregate)

1.3.2.6 Sand (washed)

1.3.2.7 Asphalt millings

1.3.3 Delivery Requirements

1.3.3.1 When requested by the City, Contractor shall deliver asphalt and other road materials to the City during the City's regular work days which is Monday through Friday, excluding holidays, between the hours of 6:00 A.M. through 5:00 P.M.

1.3.3.2 When delivery is required, the City shall notify the Contractor of the time and location at the time of the order. All deliveries shall be within the Glendale City limits. Materials shall be unloaded in City-approved locations only.

1.3.3.3 City of Glendale stockpile delivery location(s):

City of Glendale
6210 W. Myrtle Ave.
Glendale, AZ 85301


City of Glendale
6299 W. Frier Dr.
Glendale, AZ 85301

The City may establish additional stockpile locations in various locations throughout the City when the need arises.

1.3.3.4 Contractor shall not schedule any overtime or weekend deliveries without express authorization from the City's contract administrator or his designee.

1.3.4 Will Call Requirements

1.3.4.1 When needed by the City, asphalt and other road materials shall be available for pick-up by City crews during the City's regular work days which are Monday

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through Friday, excluding holidays, between the hours of 6:00 A.M. through 5:00 P.M.

1.3.5 Weekend and Off-Hours Requirements - Optional

- 1.3.5.1 When requested by the City, the Contractor shall provide or allow the City to pick-up road materials after normal business hours (evenings and nights) or on weekends upon 24 hours' notice by the City.

1.3.6 Sample Testing

- 1.3.6.1 Asphalt and other road materials shall conform to the requirements set forth in M.A.G Uniform Standards Specifications. Should the City have questions on a batch of faulty mix, the Contractor shall perform a sample test at no additional cost to the City. Test results shall be provided to the City in a reasonable time frame.

1.3.7 Recycling Requirements


- 1.3.7.1 When requested by the City, Contractor shall accept the City's unused asphalt materials for recycling at no additional cost to the City.

1.3.8 Contract Pricing

- 1.3.8.1 Pricing for asphalt and other road materials shall include, but not limited to, all equipment, materials, unloading costs, labor, tools, supplies, licenses, fees, insurance, warranty, profit and any other associated direct or indirect costs. Sales tax shall be shown as a separate item in the Contractor's invoice.
- 1.3.8.2 Contractor's delivery and standby time shall be based on contract pricing only. No additional cost, fees or surcharges shall be allowed by the City.
- 1.3.8.3 Price differential per ton as specified on the Price Sheet may be added for City purchases of road materials during weekends or overtime hours.

1.3.9 Sub-Contractor Requirements

- 1.3.9.1 Contractor may use sub-contractors to perform the requirements of this contract. Sub-contractors used under the scope of this contract shall meet and comply with all requirements, terms and conditions set forth herein. All sub-contracted services shall be warranted by and will be the responsibility of the Contractor.

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2.0 SPECIAL INSTRUCTIONS TO OFFERORS

- 2.1 RETURN OF OFFER** One (1) original copy of the proposal response and one (1) flash drive containing all original documents shall be submitted. The original copy of the proposal should be clearly labeled "Original" and shall be single-sided.

The Offeror shall complete all sections of the IFB in the format and spaces provided. If additional space is needed than what is given, enter "See attachment for detail."

- 2.2 PREPARATION OF OFFER PACKAGE** The following items shall be completed and returned. Failure to include these items may result in an offer being rejected. Offer packages shall be submitted in the following order:


- 2.2.1 NOTICE**
- 2.2.2 TABLE OF CONTENTS**
- 2.2.3 SPECIFICATIONS (Section 1.0)**
- 2.2.4 SPECIAL INSTRUCTIONS TO OFFERORS (Section 2.0)**
- 2.2.5 SPECIAL TERMS AND CONDITIONS (Section 3.0)**
- 2.2.6 OFFER SHEET-3 SIGNED COPIES (Section 4.0)**
- 2.2.7 PRICE SHEET (Section 5.0)**
- 2.2.8 SOLICITATION ADDENDUM, (if applicable)**
- 2.2.9 ADDITIONAL SUBMITTAL REQUIREMENTS (3 References)**

2.3 ALTERNATE OFFERS/EXCEPTIONS

Offers submitted as alternates must be submitted as an attachment referencing the specific paragraph numbers(s) and adequately defining the alternate submitted. Detailed product brochures and/or technical literature, suitable for evaluation, must be submitted with the Alternate Offer.


Offerors are expected to conform to the IFB terms and conditions and requirements. Offerors may list their exceptions to the solicitation by referencing the specific section and paragraph, subsection number or other identifier. For each exception, Offerors should quote the statement(s) to which they are taking an exception for reference during bid evaluation. The City has no obligation to accept any exception. Exceptions to City statutory requirements shall not be considered. Exceptions considered material, excessive or affecting vital terms, conditions or specifications may reduce the Offeror's prospect for award and/or render their offer non-responsive.

Offeror's Standard Terms and Conditions submitted with their bid will not be accepted by the City in lieu of the City's Terms and Conditions for contracts. Offerors submitting their own Standard Terms and Conditions with their bid will require negotiation.


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If no exceptions are taken, City will expect and require complete compliance with the specifications and all conditions of purchase.

- 2.4 **ADDITIONAL SUBMISSION REQUIREMENT** The Offeror shall provide three (3) references from companies for whom Offeror has provided similar products/services in the last five years. Include company name, address, contact person, phone number, email address, a description of the products/services provided.
- 2.5 **BRAND NAME OR EQUAL** Specification which uses a brand name, manufacturer's name or product number is used for the purpose of designating the standard of quality, performance, and characteristics needed to meet City requirements and is not intended to limit or restrict competition. Products substantially equivalent to those designated may be considered for award.
- 2.6 **EVALUATION LITERATURE** Offers submitted for products considered by the seller to be equal to or better than the brand names or manufacturer's catalog references specified herein, may be submitted with technical literature and/or detailed product brochures with written statements if the literature or brochure is not specific as to the specification for the City's use to evaluate the product(s) offered. Offers submitted without this product information may be considered as non-responsive and rejected.
- 2.7 **ESTIMATED QUANTITIES** Quantities listed in this solicitation are the City's best estimate only. The City may order some, all, more, or none of the individual quantities. The City's actual requirements during the period of this agreement shall be determined by the actual needs and availability of appropriated funds.
- 2.8 **EVALUATION CRITERIA** Invitation for Bids are awarded to the lowest responsible and responsive bidder whose bid conforms in material respects to the requirements and criteria set forth in the Invitation for Bids.
- 2.9 **TYPE OF AWARD** The City reserves the right to make multiple awards or to award by group of line items, or to make an aggregate award, whichever is deemed most advantageous to the City. The actual use of the resultant contract will be at the sole discretion of the City. The fact that the City may make multiple awards should be taken into consideration by each potential contractor.
- 2.10 **ADDITIONAL INFORMATION** The City reserves the right to secure additional information from any Offeror as it deems necessary to establish the competence and financial stability of any Offeror submitting a bid.
- 2.11 **PRIOR EXPERIENCE** Experiences with the City and entities that evaluation committee members represent and that are not specifically mentioned in the solicitation response may be taken into consideration when evaluating Bids.

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- 2.12 WITHDRAWAL OF BID** At any time prior to the specified solicitation due date and time, an Offeror may formally withdraw the bid by a written letter or electronic mail from the Offeror or a designated representative. Telephonic or oral withdrawals shall not be considered.
- 2.13 PROPRIETARY INFORMATION** Offerors shall clearly mark any proprietary information contained in its bid with the words "Proprietary Information." Offeror shall not mark any Solicitation Form as proprietary. Pricing data shall not be considered proprietary. Marking all, or nearly all, of a bid as proprietary may result in rejection of the bid.
- Offerors acknowledge that the City is required by law to make certain records available for public inspection. In the event that the City receives a request for disclosure of proprietary information by any person, court, agency or administrative body, or otherwise has a reasonable belief that it is obligated to disclose the proprietary information to any such person or authority, the City will provide Offeror with prompt written notice so that Offeror may seek a protective order or other appropriate remedy. The Offeror, by submission of materials marked Proprietary Information, acknowledges and agrees that the City will have no obligation to advocate for non-disclosure in any forum or any liability to the Offeror in the event that the City must legally disclose the Proprietary Information.
- 2.14 NOTICE OF INTENT TO AWARD AND PROTEST PERIOD** Information about the recommended award for this solicitation will be posted on the Internet. The information will be available for review on the City's Materials Management Internet home page www.glendaleaz.com/purchasing immediately after the City has completed its evaluation process of the offers received. If you have any questions, or would like further information about an intended award, contact the contract analyst immediately. Any protest must be submitted to the Materials Manager no later than seven (7) calendar days from the date of posting on the Internet.
- 2.15 CONFLICT OF INTEREST** The Offeror shall disclose any and all possible conflicts of interest if any senior or managing personnel of the Contractor have a potentially conflicting business or personal relationship with any City employees that have or may have a role in the selection or management of the services or goods being solicited. Providing such disclosure will not necessarily disqualify a Contractor from providing a proposal or bid. Failure to disclose a potential conflict of interest may result in rejection of the proposal or bid or termination of a resultant contract.
- 2.16 NO CONTACT, NO INFLUENCE DURING IFB PROCESS** The City is conducting a competitive bidding process for the contract, free from improper influence or lobbying. There shall be no contact concerning this solicitation from Offerors submitting an offer with any member of the City Council, Evaluation Committee Members, or anyone connected with the process for or on behalf of the City. Contact includes direct or


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indirect contact by the Offeror, its employees, attorneys, lobbyists, surrogates, etc. in an attempt to influence the bidding process.

From the time the IFB is issued until the expiration of the protest period or the resolution of any protest, whichever is later (the "Black-Out Period"), Offerors, directly or indirectly through others, are restricted from attempting to influence in any manner the decision making process through, including but not limited to, the use of paid media; contacting or lobbying the City Council or City Manager or any other City employee (other than Material Management employees); the use of any media for the purpose of influencing the outcome; or in any other way that could be construed to influence any part of the decision-making process about this IFB. This provision shall not prohibit an Offeror from petitioning an elected official or engaging in any other protected first amendment activity after the protest period has run or any protest has been resolved, whichever is later.


Violation of this provision will cause the proposal or offer of the Offeror to be found in violation and to be rejected.

- 2.17 INQUIRIES** Any question related to the Invitation for Bid shall be directed to the Contract Officer whose name appears above. A Contractor shall not contact or ask questions of the department for whom the requirement is being procured. The Contract Officer may require any and all questions be submitted in writing. Contractors are encouraged to submit written questions via electronic mail at least five days prior to the proposal due date. Any correspondence related to a solicitation should refer to the appropriate IFB page and paragraph number. An envelope containing questions should be identified as such; otherwise it may not be opened until after the official proposal due date and time. Oral interpretations or clarifications will be without legal effect. Only questions answered by a formal written amendment to the IFB will be binding.

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3.0 SPECIAL TERMS AND CONDITIONS

- 3.1 **INCORPORATION BY REFERENCE** All responses shall incorporate by reference the Specifications, terms and conditions, general instructions and conditions and any attachments. The Standard Terms and Conditions applicable to this solicitation are posted on the Internet. They are available for review and download at the City's Materials Management Internet home page, www.glendaleaz.com/purchasing. Offerors are advised to review all provisions of the General Instructions and Conditions for this solicitation.
- 3.2 **PRICE** All prices quoted shall be firm and fixed for the specified contract period. No fuel surcharges will be accepted by the City. The City shall not be invoiced at prices higher than those stated in this contract.
- 3.3 **PRICE ADJUSTMENTS** Price adjustments shall be addressed a minimum of sixty (60) days prior to the contract renewal date, shall be in writing and include supportive justification for the proposed increase. The rate increase shall only be considered at time of contract extension. The City will review the request and shall determine if the increase shall be granted or if an alternate option is in the best interest of the City. The price increase adjustment, if approved, will be effective and executed via a contract amendment.
- 3.4 **FOB POINT** Prices quoted shall be FOB destination to: The City of Glendale.
- 3.5 **TERM OF AGREEMENT** The initial term of the contract shall be one (1) year upon approval by the City Council.
- 3.6 **OPTION TO EXTEND** The City may, at its option and with the approval of the Contractor, extend the term of this agreement for four (4) additional years in one (1) year increments based on satisfactory Contractor performance. Contractor shall be notified in writing by the City Materials Manager of the City's intention to extend the contract period at least 60 calendar days prior to the expiration of the original contract period. Price adjustments will only be reviewed during contract renewal.
- 3.7 **QUALITY** Contractor expressly warrants that all goods or services furnished under this contract shall be and free from defects in material or workmanship.
- 3.8 **WARRANTIES** Contractor warrants that all materials, service, or construction delivered under this contract shall conform to the specifications of this contract. Any defects of design, workmanship, or materials that would result in non-compliance with the contract specifications, shall be fully corrected by the Contractor (including labor and materials) without additional cost to the City.

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- 3.9 ADDITIONS/DELETIONS OF PRODUCTS OR SERVICE** The City reserves the right to add additional products to this contract when deemed necessary by the City. If this occurs, the Contractor will be requested to submit a negotiable quotation for the additions. Upon approval and authorization by the Materials Manager such additions will be added to and become a part of the contract through properly executed forms.
- 3.10 NON-EXCLUSIVE CONTRACT:** The resultant contract is non-exclusive and is for the sole convenience of the City. The City reserves the right to obtain similar goods and services from alternative sources if needed.
- 3.11 INSURANCE** Contractor shall procure and maintain, until all of their obligations, including any warranty periods under this Contract, are satisfied, insurance against claims for injury to persons or damage to property that may arise from or in connection with the purchase and or use of the commodity.

The *insurance requirements* herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract. The City of Glendale in no way warrants that the minimum limits contained herein are sufficient to protect the Vendor from liabilities that might arise out of the purchase and use of the commodities sold under this Contract by the Vendor, his agents, representatives, employees or subcontractors and Vendor is free to purchase such additional insurance as may be determined necessary.


A.MINIMUM SCOPE AND LIMITS OF INSURANCE: Contractor shall provide coverage at least as broad and with limits of liability not less than those stated below.

1.Commercial General Liability – Occurrence Form

Policy shall include bodily injury, property damage, personal and advertising injury and broad form contractual liability.

• General Aggregate	\$2,000,000
• Products – Completed Operations Aggregate	\$1,000,000
• Personal and Advertising Injury	\$1,000,000
• Damage to Rented Premises	\$ 50,000
• Each Occurrence	\$1,000,000

- a. The policy shall be endorsed (**Blanket Endorsements are not acceptable**) to include the following additional insured language: *“The City of Glendale, and its departments, boards, commissions, officers, officials, agents, and employees” shall be named as additional insureds with respect to liability arising out of the activities performed by or on behalf of the Contractor.*” Such additional insured shall be covered to the

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full limits of liability purchased by the Contractor, even if those limits of liability are in excess of those required by this Contract.

- b. Policy shall contain a waiver of subrogation endorsement (Blanket Endorsements are not acceptable) in favor of the "City of Glendale, and its departments, boards, commissions, officers, officials, agents, and employees" for losses arising from work performed by or on behalf of the Contractor.

2. Business Automobile Liability

Bodily Injury and Property Damage for any owned, hired, and/or non-owned vehicles used in the performance of this Contract.


- Combined Single Limit (CSL) \$1,000,000
 - a. The policy shall be endorsed (Blanket Endorsements are not acceptable) to include the following additional insured language: *"The City of Glendale, and its departments, boards, commissions, officers, officials, agents, and employees shall be named as additional insureds with respect to liability arising out of the activities performed by or on behalf of the Contractor, involving automobiles owned, leased, hired or borrowed by the Contractor."* Such additional insured shall be covered to the full limits of liability purchased by the Contractor, even if those limits of liability are in excess of those required by this Contract.
 - b. Policy shall contain a waiver of subrogation endorsement (Blanket Endorsements are not acceptable) in favor of the "City of Glendale, and its departments, boards, commissions, officers, officials, agents, and employees" for losses arising from work performed by or on behalf of the Contractor.
 - c. Policy shall contain a severability of interest provision.

3. Worker's Compensation and Employers' Liability

- Workers' Compensation Statutory
- Employers' Liability

Each Accident	\$1,000,000
Disease – Each Employee	\$1,000,000
Disease – Policy Limit	\$1,000,000

 - a. Policy shall contain a waiver of subrogation endorsement (Blanket Endorsements are not acceptable) in favor of the "City of Glendale, and its departments, boards, commissions, officers, officials, agents, and employees" for losses arising from work performed by or on behalf of the Contractor.

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b. This requirement shall not apply to: Separately, EACH contractor or subcontractor exempt under A.R.S. § 23-901, AND when such contractor or subcontractor executes the appropriate waiver (Sole Proprietor/Independent Contractor) form.

B. ADDITIONAL INSURANCE REQUIREMENTS: The policies are to contain, or be endorsed (**Blanket Endorsements are not acceptable**) to contain, the following provisions:

1. The Contractor's policies shall stipulate that the insurance afforded the Contractor shall be primary insurance and that any insurance and/or self-insurance carried by the City of Glendale shall be excess and not contributory insurance.
2. Coverage provided by the Contractor shall not be limited to the liability assumed under the indemnification provisions of this Contract.


C. NOTICE OF CANCELLATION: With the exception of (10) day notice of cancellation for non-payment of premium, any changes material to compliance with this contract in the insurance policies above shall require (30) days written notice to the City of Glendale. Such notice shall be sent directly to the Department.

D. ACCEPTABILITY OF INSURERS: Contractors insurance shall be placed with companies licensed in the State of Arizona or hold approved non-admitted status on the Arizona Department of Insurance List of Qualified Unauthorized Insurers. Insurers shall have an "A.M. Best" rating of not less than A- VII. The City of Glendale in no way warrants that the above-required minimum insurer rating is sufficient to protect the Contractor from potential insurer insolvency.

E. VERIFICATION OF COVERAGE: Contractor shall furnish the City of Glendale with certificates of insurance (ACORD form or equivalent approved by the State of Arizona) as required by this Contract. The certificates for each insurance policy are to be signed by an authorized representative.

All certificates and endorsements (**Blanket Endorsements are not acceptable**) are to be received and approved by the City of Glendale Department before work commences. Each insurance policy required by this Contract must be in effect at or prior to commencement of work under this Contract and remain in effect for the duration of the project. Failure to maintain the insurance policies as required by this Contract, or to provide evidence of renewal, is a material breach of contract.

All certificates required by this Contract shall be sent directly to City of Glendale, Materials Management Division, 5850 W. Glendale Ave., Ste 317, Glendale, AZ 85301. The City of Glendale project/contract number and project description are to be noted on the certificate of insurance. The City of Glendale reserves the right to require complete, certified copies of all insurance policies required by this Contract at

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any time.

F. **APPROVAL:** Any modification or variation from the *insurance requirements* in this Contract shall be made by the contracting agency in consultation with the Risk Management. Such action will not require a formal Contract amendment, but may be made by administrative action.

G. **EXCEPTIONS:** In the event the Contractor or sub-contractor(s) is/are a public entity, then the Insurance Requirements shall not apply. Such public entity shall provide a Certificate of Self-Insurance.

- 3.12 **COOPERATIVE USE OF CONTRACT** This agreement may be extended for use by other governmental agencies and political subdivisions of the State, including all members of SAVE (Strategic Alliance for Volume Expenditures). Any such usage by other entities must be in accord with the ordinances, charter, rules and regulations of the respective entity and the approval of the Contractor and City. For a list of SAVE members, click on the following link:

<http://www.maricopa.gov/procurement/PubDocuments/SAVE-members.pdf>

- 3.13 **PERMITS AND LICENSES** The Contractor shall be responsible for determining and securing, at his/her expense, any and all licenses and permits that are required by any statute, ordinance, rule or regulation of any regulatory body having jurisdiction in any manner connected with providing products and services. Such fees shall be included in and are part of the total offer cost. During the term of the contract, the Contractor shall notify the City in writing, within two (2) working days, of any suspension, revocation or renewal.
- 3.14 **RESPONSIBILITY FOR CORRECTION** It is agreed that the Contractor shall be fully responsible for making any correction, replacement, or modification necessary for specification or legal compliance. In the event of any call back, Contractor agrees to give the City its priority. Contractor agrees that if the product or service offered does not comply with the foregoing, the City has the right to cancel the purchase at any time with full refund within 30 calendar days after notice of non-compliance. Contractor further agrees to be fully responsible for any consequential damages suffered by the City as a result of specification or legal non-compliance.
- 3.15 **NON-DISCRIMINATION** By submitting this Bid, Contractor agrees not to discriminate against any employee or applicant for employment on the basis of race, color, religion, sex, national origin, age, marital status, sexual orientation, gender identity or expression, genetic characteristics, familial status, U.S. military veteran status or any disability. Contractor will require any Sub-contractor to be bound to the same requirements as stated within this section. Contractor, and on behalf of any subcontractors, warrants compliance with this section.



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ROAD MATERIALS

CITY OF GLENDALE
Procurement Division
5850 West Glendale
Avenue, Suite 317
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3.16 CONTRACT CANCELLATION The City reserves the right to cancel the whole or any part of the contract due to failure of the Contractor to carry out any term, promise, or condition of the contract. The City will issue a written ten (10) day notice of default to the Contractor for acting or failing to act as in any of the following:


- 3.16.1 The Contractor provides personnel that do not meet the requirements of the contract.
- 3.16.2 The Contractor fails to perform adequately the services required in the contract.
- 3.16.3 The Contractor attempts to impose on the City, personnel, which are of an unacceptable quality.
- 3.16.4 The Contractor fails to furnish or finish the required product and/or service within the time stipulated in the contract.
- 3.16.5 The Contractor fails to make progress in the performance of the requirements of the contract and/or gives the City a positive indication that the Contractor will not or cannot perform to the requirements of the contract.

If the Contractor does not correct the above problem(s) within ten (10) days after receiving the notice of default, the City may resort to any single or combination of the following remedies:

- a. Cancel the contract;
- b. Reserve all rights or claims to damage for breach of any covenants of the contract;
- c. Perform any test or analysis on materials for compliance with the specifications of the contract. If the results of any test or analysis find a material non-compliant with the specifications, the actual expense of testing shall be borne by the Contractor;
- d. In case of default, the City reserves the right to purchase materials or to complete the required work in accordance with the City Procurement Code. The City may recover any actual excess costs from the contractor by:
 - 1. Deduction from an unpaid balance;
 - 2. Any combination of the above or any other remedies as provided by law.

3.17 EMERGENCY BUSINESS SERVICES During a natural disaster, or homeland security event, there may be a need for the City to access your business for products or services twenty-four (24) hours a day, seven (7) days a week, three hundred sixty-five (365) days a year. The need could be for a pick up or a delivery.

For this purpose, a primary and secondary emergency contact name and phone number are required from the successful contractor(s). It is critical to the City that the contractor's emergency contact information remains current. The procurement staff member,

	<p align="center">Solicitation Number: IFB 16-46</p> <p align="center">ROAD MATERIALS</p>	<p>CITY OF GLENDALE Procurement Division 5850 West Glendale Avenue, Suite 317 Glendale, Arizona 85301</p>
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identified on page 1, is to be contacted by E-mail with any change to a contact name or phone number.

All products or services provided to meet an emergency phone request are to be supplied as per the contract prices, terms and conditions. The Contractor may provide the fee (pricing) for an after-hours emergency opening of the business separate from the Price Sheet (Section 5.0). In general, the order will be placed using a City Procurement Card. The billing is to include the emergency opening fee, if applicable.

- 3.18 PUBLIC RECORD** Contractor acknowledges that the City is a public agency and must comply with all Public Records laws. All proposals submitted in response to the Solicitation shall become the property of the City and, subsequent to award recommendation, become a matter of public record available for review pursuant to Arizona Public Records Law.

If a Contractor believes that a specific section of its Proposal response is confidential, that should be withheld from the public record, Contractor shall isolate the pages and mark each page confidential in a specific and clearly labeled section of its Proposal response. The Contractor shall include a written statement as to the basis for considering the marked pages confidential including the specific harm or prejudice if disclosed. The City Materials Management Division will review the material and make a determination as to the confidentiality of any of the information and/or material contained within the Submittal. In the event of a public records request for documents Contractor deems confidential, the City will notify Contractor of the request and if Contractor claims such documents are confidential, it shall be the Contractor's sole responsibility, including sole cost, to take appropriate action, including legal action, to protect such documents.



Solicitation Number: IFB 16-46

ROAD MATERIALS

CITY OF GLENDALE
Procurement Division
5850 West Glendale
Avenue, Suite 317
Glendale, Arizona 85301

4.0

**CONDITIONAL ACCEPTANCE
INVITATION FOR BID NO. IFB # 16-46
TITLE: ROAD MATERIALS**

1. Subject to City Council approval, this notification constitutes a conditional acceptance of your bid to provide the materials listed on the Price Sheet. All terms and conditions of the IFB shall apply.
2. The term of the proposed Agreement shall be a two (2) year initial period with the option of the City and with the approval of the Contractor to extend the proposed agreement for three (3) additional years in one (1) year increments based on satisfactory contract performance.
3. A Department administrator will oversee the proposed Agreement for the City. The City's contract administrator is _____.
4. This Conditional Acceptance does not constitute a commitment to purchase on the part of the City of Glendale.
5. You are required to sign three (3) copies of this form and return with this Bid. Failure to furnish signed copies of this document to the City of Glendale may be considered a default, and your refusal to contract with the City. The City is entitled to any remedies or rights as may be granted by law.

OFFER

The Undersigned hereby offers and agrees to furnish the material or service in compliance with all terms, conditions, specifications and amendments in the Solicitation and any written exceptions in the bid.

Contractor Name: VULCAN MATERIALS

Contractor Signature: [Signature]

Company Address: 2526 E. UNIVERSITY
PHOENIX, AZ. 85034 ON.

Printed Name and Title: C. DOMINICK MATHIAS/District Sales M612

Telephone No. 602 809 2940

Company Federal I.D.: 95-0645790

Arizona Sales Tax No. 21051456

Email Address: SOUTHWAYP@VULCMAIL.COM

ACCEPTANCE OF OFFER

The Offer is conditionally accepted. The Contractor is now bound to sell the materials or services specified in the IFB, including all terms and conditions, specifications, addenda, etc. Contractor is cautioned not to provide any material or service under this proposed Agreement until City Council has approved the expenditure and Contractor receives a Purchase Order.

City of Glendale City Manager or Designee Signature:

ATTEST:

Printed Name and Title:

Julie Bower, City Clerk


(SEAL)

Kevin R. Phelps, City Manager

APPROVED AS TO FORM:

Date: _____

Michael D. Bailey, City Attorney

	<p align="center">Solicitation Number: IFB 16-46</p> <p align="center">ROAD MATERIALS</p>	<p>CITY OF GLENDALE Materials Management 5850 West Glendale Avenue, Suite 317 Glendale, Arizona 85301</p>
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5.0

PRICE SHEET

All prices offered to the City shall be firm and fixed for the specified contract period. Contractor's pricing shall include but not limited to, all equipment, materials, unloading costs, labor, tools, supplies, licenses, fees, insurance, warranty, profit and any other associated direct or indirect costs.

SALES TAXES SHALL NOT BE INCLUDED IN THE UNIT PRICE FOR THE PURPOSE OF DETERMINING THE LOWEST COST. However, after contract award, the Contractor shall charge sales tax as a separate item in their invoices.

ASPHALT

Item No.	Description	Unit of Measure	Estimated Annual Quantity (A)	Unit Price (B)	Extended Price (A X B)
5.1	Hot Mix Asphalt, 3/8" Fine Dense Grade	Ton	500	\$ <u>72.00</u>	\$ <u>36,000.00</u>
5.2	Hot Mix Asphalt, 1/2" Fine Dense Grade	Ton	800	\$ <u>63.50</u>	\$ <u>50,800.00</u>
5.3	Hot Mix Asphalt, 3/4" Fine Dense Grade	Ton	400	\$ <u>63.00</u>	\$ <u>25,200.00</u>
5.4	Hot Mix Asphalt, Sand Seal	Ton	150	\$ <u>72.00</u>	\$ <u>10,800.00</u>
5.5	Cold Mix Patch Asphalt	Ton	1200	\$ <u>90.00</u>	\$ <u>108,000.00</u>
5.6	Asphalt Delivery Price to the City of Glendale Per Ton (Minimum of 24 tons on delivery)	Ton	800	\$ <u>7.00</u>	\$ <u>5,600.00</u>
Sub- Total (Item No. 5.1 through 5.6)					\$ <u>236,400.00</u>



Solicitation Number: IFB 16-46

ROAD MATERIALS

CITY OF GLENDALE
Procurement Division
5850 West Glendale
Avenue, Suite 317
Glendale, Arizona 85301

BASE MATERIAL

Item No.	Description	Unit of Measure	Estimated Annual Quantity (A)	Unit Price (B)	Extended Price (A X B)
5.7	ABC Backfill	Ton	13,500	\$ <u>5.25</u>	\$ <u>70,875.</u> ⁶⁰
5.8	Sand (Washed)	Ton	600	\$ <u>10.00</u>	\$ <u>6,000.</u> ⁴⁰
5.9	Asphalt Millings (GSA)	Ton	40	\$ <u>N/A</u>	\$ <u>N/A</u>
5.10	Base Material Delivery Price to the City of Glendale per Ton (Minimum of 24 tons on delivery)	Ton	600	\$ <u>5.25</u>	\$ <u>3150.</u> ⁴⁶
Sub- Total (Item No. 5.7 through 5.10)					\$ <u>80,025</u> ⁶⁰

Grand Total (Item No. 5.1 through 5.10)	\$ <u>316,425.</u> ⁶⁰
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OTHER OPTIONAL ITEMS

The Contractor shall provide pricing for the following items. The City may use these items on an "as needed" basis. These items are not included in the bid evaluation process. The City reserves the right to accept or reject these items when deemed to be in the best interest of the City. Upon acceptance by the City, these items shall become part of the contract.

Item No.	Description	Unit of Measure	Estimated Annual Quantity (A)	Unit Price (B)	Extended Price (A X B)
5.11	Contractor Standby Time (Flat Hourly Charge)	Hour	1	\$ <u>85.</u> ⁶⁰	\$ <u>85.</u> ⁶⁰
5.12	Price Differential Per Ton added to the regular price of Asphalt and Base Materials for City purchases during weekends or overtime hours.	Ton	1 ^(*)	\$ <u>5.</u> ⁶⁰	\$ <u>5.</u> ⁶⁰

^(*) SEE ATTACHED FOR OPENING FEES

5.13 **DELIVERY** Contractor shall deliver the road materials as per Specifications.

Comply:

Yes ☒ No ☐ ^(*) PLUS ATTACHED OPENING FEE.

5.14 **TAX AMOUNT** Bidders should not include transaction use tax or federal tax in their unit price. The City is exempt from the payment of federal excise tax and will add use tax



**Dispatch / Order Desk
602-254-0081**

Plant Locations


**Gomez
2835 West Broadway road
Phoenix, AZ 85041
Tax Rate 6.3 %**

**West 43rd
4830 S 43rd Avenue
Phoenix, AZ 85041
Tax Rate 6.3 %**

**West Broadway
7845 West Broadway Road
Phoenix, AZ 85043
Tax Rate 6.3 %**

**Sun City
14521 North 115th Avenue
Elmirage, AZ 85335
Tax Rate 9.3 %**

**Plant Opening Fees
Saturday \$1000.00
Sunday \$2000.00
Weekday Nights \$1000.00
Weekend Nights \$2000.00**

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as applicable. For the purpose of determining the lowest cost, the City will not take tax into consideration.

Tax % SEE ATTACHED PER PLANT

5.15 PROCUREMENT CARD ORDERING CAPABILITY Please check appropriate box.

- ☒ Yes, I will accept payment under this contract with the Procurement Card.
VISA OR MASTER CARD.
- ☐ No, I will not accept payment under this contract with the Procurement Card.

Company Name: _____

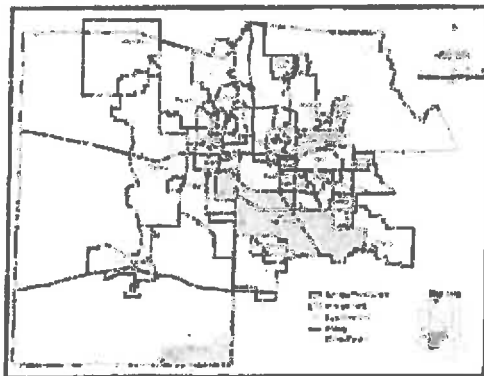
EXHIBIT A



2016 Revision to the
2015 Edition



Uniform Standard Specifications and Details for Public Works Construction



Sponsored and Distributed by the



January 2016

SECTION 701

AGGREGATE

701.1 GENERAL:

Coarse and fine aggregates are defined in accordance with ASTM D2487. Material property requirements for specific uses are provided in applicable MAG sections.

Apparent specific gravity shall be at least 2.50, when tested in accordance with ASTM C127.

701.2 COARSE AGGREGATE:

Rock and gravel shall be clean, hard, sound, durable, uniform in quality, and free of any detrimental quantity of soft, friable, thin elongated, or laminated pieces, disintegrated material, organic matter, oil, alkali, or other deleterious substance. Aggregate sources shall include, but not be limited to alluvial deposits, terrace aggregates, quarry stone, or other suitable sources including recycled products that meet all material test requirements as approved by the Engineer. Aggregate classification shall be made by size as noted herein.

701.2.1 Boulders: Particles of rock that will not pass a 12-inch square opening.

701.2.2 Cobbles: Particles of rock that will pass a 12-inch square opening, but are retained on a 3-inch square opening.

701.2.3 Coarse Gravel: Particles of rock that will pass a 3-inch U.S. standard sieve, but are retained on a 3/4-inch U.S. standard sieve.

701.2.4 Fine Gravel: Particles of rock that will pass a 3/4-inch U.S. standard sieve, but are retained on a No. 4 U.S. standard sieve.

701.3 FINE AGGREGATE (SAND):

Fine aggregate (sand) shall be fine granular material produced by the crushing of rock or gravel or naturally produced by disintegration of rock and shall be sufficiently free of organic material, mica, loam, clay, and other deleterious substances to be thoroughly suitable for the purpose for which it is intended. Fine aggregates particles shall pass a No. 4 U.S. standard sieve, but are retained on a No. 200 U.S. standard sieve.

701.4 RECLAIMED CONCRETE MATERIAL (RCM)

Reclaimed concrete material (RCM) is defined as an aggregate material that is derived from the crushing, processing and classification of Portland cement concrete construction materials recovered, salvaged, or recycled from roadways, sidewalks, buildings, bridges, and other sources.

In accordance with Section 7 of AASHTO M319, RCM shall not contain more than five percent by mass of brick or concrete block and shall be substantially free of wood, metal, plaster, and gypsum board. RCM shall be free of all materials that fall under the category of solid waste or hazardous materials as defined by the state or local jurisdiction. With the approval of the Engineer, these respective quantities may be adjusted if the performance of the RCM is not adversely impacted. RCM may be used alone or uniformly blended with other approved aggregate materials to obtain the applicable performance criteria. RCM shall not be used in Portland Cement Concrete without the prior approval of the Engineer.

701.5 RECLAIMED ASPHALT PAVEMENT (RAP):

Reclaimed asphalt pavement (RAP) is defined as all recovered, salvaged or recycled asphalt road waste, large particles or milled material that has been size-reduced, crushed and or screened appropriately, making it reusable. This material shall be of a consistent and relatively clean manner as to not adversely affect the final material usage. RAP may be used alone or uniformly blended with other approved aggregate materials to obtain the applicable performance criteria. RAP shall not be used in Portland Cement Concrete without the prior approval of the Engineer.

SECTION 701

701.6 SAMPLING:

Sampling of aggregates shall be performed in accordance with ASTM D75.

- End of Section -

SECTION 702

BASE MATERIALS

702.1 GENERAL:

Base materials shall be as defined in Section 701, consisting of appropriately sized coarse and fine aggregates, Reclaimed Concrete Material (RCM) or Reclaimed Asphalt Pavement (RAP), other inert materials, and/or aggregates that have been treated for plasticity index mitigation, as approved by the Engineer. These materials, whether virgin or reclaimed or a uniform blend of both, shall conform to the end result quality requirements of this section.

When base material without further qualification is specified, the Contractor shall supply materials that meet the gradation and other quality requirements for Aggregate Base Course as defined in Table 702-1. When a particular classification of base material is specified, the Contractor may substitute materials meeting the gradation and other quality requirements for Aggregate Base Course for Select material, when approved by the Engineer.

The Contractor shall provide the Engineer laboratory testing documentation on the source of the base material showing compliance to Table 702-1 at least 10 business days prior to placement except where the base materials are being obtained from a currently approved source from a list maintained by the appropriate Agency or as determined by the Engineer. Included in the documentation shall be the percentage of RCM or RAP, if applicable.

RCM meeting the requirements of Section 701.4 can be utilized in base material at a maximum quantity of 50% and may be used in roadway applications or where otherwise specified by project plans or special provisions.

RAP meeting the requirements of Section 701.5 can be utilized in base material up to 100% and may be used in roadway applications or where otherwise specified by Project plans or special provisions.

702.1.1 Aggregate Base Course is primarily used in roadway applications or where otherwise specified by project plans or special provisions.

702.1.2 Select Material is primarily used, as a sub base in roadways, fill and embankment applications or where otherwise specified by project special provisions.

702.2 PHYSICAL PROPERTIES:

702.2.1 Base material shall meet the physical properties listed in Table 702-1.

SECTION 702

Table 702-1			
Sieve Analysis			
Test Methods AASHTO T-27, T-11			
Sieve Size	Accumulative Percentage Passing Sieve, by Weight		
	Select Material		Aggregate Base Course
	Type A	Type B	
3 in.	100	--	--
1-1/2 in.	--	100	100
1 in.	--	--	90 - 100
No. 4	30 - 75	30 - 70	38 - 65
No. 8	20 - 60	20 - 60	25 - 60
No. 30	10 - 40	10 - 40	10 - 40
No. 200	0 - 12	0 - 12	3 - 12
Plasticity Index			
Test Methods AASHTO T-89 Method A, T-90, T146 Method A			
Maximum allowable value	5	5	5
Fractured Face, One Face			
Test Method ARIZ 212, Percent by Weight of the Material Retained on a #4 Sieve			
Minimum required value	50	50	50
Resistance to Degradation and Abrasion by the Los Angeles Abrasion Machine			
Test Method AASHTO T-96, Percent Loss by Weight			
Maximum allowable value at 100 revolutions	10	10	10
Maximum allowable value at 500 revolutions	40	40	40

702.2.2: When tested for acceptance, Base material that does not meet Table 702-1 properties for gradation or PI may be approved at the Engineer's discretion if the R-Value is at least 70, when determined by test method AASHTO T-190 (see Table 310-1).

- End of Section -

SECTION 711

PAVING ASPHALT

711.1 GENERAL:

The asphalt shall be produced from crude asphalt petroleum or a mixture of refined liquid asphalt and refined solid asphalt. It shall be free from admixture with any residues obtained by the artificial distillation of coal, coal tar, or paraffin oil and shall be homogeneous and free from water.

Polymer modified asphalt cement shall be produced from crude asphalt petroleum and a polymer or blend of polymers mixed to produce a homogeneous material free from water.

Asphalt shall not be heated during the process of its manufacture, storage, or during construction so as to cause injury as evidence by the formation of carbonized particles.

711.2 TESTING REQUIREMENTS:

Paving asphalt shall be classified by the Performance Grading System and shall conform to the requirements set forth in Table 711-1 and AASHTO M-320 with the PAV temperature changes noted in the table. On all Grades Flash Point Temperature AASHTO T48: Minimum 230 °C and Mass Loss, Maximum 1.00 percent.

TABLE 711-1				
PERFORMANCE GRADING SYSTEM				
	PG 58-22	PG 64-16	PG 70-10	PG 76-16
Original Asphalt				
Viscosity, AASHTO T-316 (Note 1) Max. 3 Pa-s, Test Temp, °C	135	135	135	135
Dynamic Shear AASHTO T-315 (Note 2) G*/Sin δ, Min., 1.0 kPa Test Temp. @ 10 rad/s, °C	58	64	70	76
Tests Using Rolling Thin Film Oven Residue (AASHTO T-246)				
Mass Loss, Maximum %	1.0	1.0	1.0	1.0
Dynamic Shear AASHTO T-315 G*/Sin δ, Min., 2.20 kPa Test Temp. @ 10 rad/s, °C	58	64	70	76
Tests Using Pressure Aging Vessel Residue (AASHTO R-28)				
PAV Aging Temperature, °C (AASHTO R-28)	100	100	110	110
Dynamic Shear AASHTO T-315 G*/Sin δ, Max., 5000 kPa Test Temp. @ 10 rad/s, °C	22	28	34	34
Creep Stiffness, AASHTO T-313 (Note 3) S, Maximum, 300.0 Mpa m-value, Minimum, 0.300 Test Temp. @ 60s, °C	-12	-6	0	-6
Direct Tension, AASHTO T-314 (Note 3) Failure Strain, Minimum 1.0% Test Temp. @ 1.0 mm/min, °C	-12	-6	0	-6

NOTES:

(1) This requirement may be waived at the discretion of the specifying agency if the supplier warrants that the asphalt binder can be adequately pumped and mixed at temperatures that meet all applicable safety standards.

(2) For quality control of unmodified asphalt cement production, measurement of the viscosity of the original asphalt cement may be substituted for dynamic shear measurements of G*/sin (δ) at test temperatures when the asphalt is a

SECTION 711

Newtonian fluid. Any suitable standard means of viscosity measurement may be used, including capillary or rotational viscometer (AASHTO T-210 or AASHTO T-202).

(3) If the Creep Stiffness is below 300 MPa, the direct tension test is not required. If the Creep Stiffness is between 300 and 600 MPa, the direct tension failure strain requirement can be used in lieu of the Creep Stiffness requirement. Direct tension test is recommended for polymer modified asphalt binders. The m-value requirement must be satisfied in all cases.

Polymer modified paving asphalt shall be classified by the Performance Grading System and shall conform to the requirements set forth in Table 711-2 and AASHTO M320 with the PAV temperature changes noted in the table. On all Grades Flash Point Temperature AASHTO T48: Minimum 230 °C and Mass Loss, Maximum 1.00 percent. P is for Polymer and TR is for Tire Rubber.

TABLE 711-2				
PERFORMANCE GRADING SYSTEM				
	PG 64-28P	PG-76-22P	PG76-22TR Type 1 (Note 4)	PG76-22TR Type 2 (Note 4)
Viscosity, AASHTO T-316 (Note 1) Max. 3 Pa-s, Test Temp, °C	135	135	135	135
Dynamic Shear, AASHTO T-315 (Note 2) G*/sin δ, Min., 1.0 kPa Test Temp. @ 10 rad/s, °C	64	76	76	76
Elastic recovery, ASTM D6084 Procedure "B" @ 10°C	65	65	65	55
Phase Angle, Max	75	75	75	75
Separation test, Texas 540 % Max	4	4	4	4
Solubility in Trichloroethylene, ASTM D2042 or n-propyl bromide, ASTM D7553 % Minimum	—	—	97.5	—
Tests Using Rolling Thin Film Oven Residue (AASHTO T-240)				
Mass Loss, Maximum %	1.0	1.0	1.0	1.0
Dynamic Shear, AASHTO T-315 G*/sin δ, Min., 2.20 kPa Test Temp. @ 10 rad/s, °C	64	76	76	76
Tests Using Pressure Aging Vessel Residue (AASHTO R-48)				
PAV Aging Temperature, °C (AASHTO R-28)	100	110	110	110
Dynamic Shear, AASHTO T-315 G*/sin δ, Max., 5000 kPa Test Temp. @ 10 rad/s, °C	22	31	31	31
Mass Loss, AASHTO T-240 Weight % Max	1.0	1.0	1.0	1.0
Creep Stiffness, AASHTO T-313 S, Maximum, 300 Mpa m-value, Minimum, 0.300 Test Temp. @ 60s, °C	-18	-12	-12	-12
Direct Tension, AASHTO T-314 (Note 3) Failure Strain, Minimum 1.0% Test Temp. @ 1.0 mm/min, °C	-18	-12	-12	-12

SECTION 711

NOTES:

- (1) This requirement may be waived at the discretion of the specifying agency if the supplier warrants that the asphalt binder can be adequately pumped and mixed at temperatures that meet all applicable safety standards.
- (2) For quality control of unmodified asphalt cement production, measurement of the viscosity of the original asphalt cement may be substituted for dynamic shear measurements of $G^*/\sin \delta$, at test temperatures when the asphalt is a Newtonian fluid. Any suitable standard means of viscosity measurement may be used, including capillary or rotational viscometer (AASHTO T-210 or AASHTO T-202).
- (3) If the Creep Stiffness is below 300 MPa, the direct tension test is not required. If the Creep Stiffness is between 300 and 600 MPa, the direct tension failure strain requirement can be used in lieu of the Creep Stiffness requirement. Direct tension test is recommended for polymer modified asphalt binders. The m-value requirement must be satisfied in all cases.
- (4) "TR" binders shall have 9% to 11% reclaimed tire rubber and enough virgin polymer to meet all performance grade criteria specified. The blend percentages shall be listed on the Certificate of Compliance by the manufacturer. Type 1 shall meet solubility limits.

711.3 TEST REPORT AND CERTIFICATION:

At the time of delivery of each shipment of asphalt, the supplier supplying the material shall deliver to the purchaser 3 certified copies of the test report which shall indicate the name of the refinery and supplier, type and grade of asphalt delivered, date and point of delivery, quantity delivered, delivery ticket number, purchase order number, and results of the above specified tests. The test report shall be signed by an authorized representative of the supplier certifying that the product delivered conforms to the specifications for the type and grade indicated.

Until the certified test reports and samples of the material have been checked by the Engineer, that material will be only tentatively accepted by the Contracting Agency. Final acceptance will be dependent upon the determination of the Engineer that the material involved fulfills the requirements prescribed. The certified test reports and the testing required in connection with the reports shall be at no additional cost to the Contracting Agency.

711.4 TEMPERATURES:

Paving asphalt shall be heated in such a manner that steam or hot oils will not be introduced directly into the paving asphalt during heating.

711.5 CONVERSION OF QUANTITIES:

When pay quantities of paving asphalt are determined from volumetric measurements, the volumetric measurement at any temperature shall be reduced to the volume the material would occupy at 60 degrees F. In accordance with ASTM D1250. In converting volume to weight, the computations shall be based on Table 711-3.

TABLE 711-3		
ASPHALT CEMENT QUANTITY CONVERSION		
Grade of Material	Gals. Per Ton of 60 °F.	Lbs. Per Gal at 60 °F.
PG 58-22	236	8.47
PG 64-16	235	8.51
PG 70-10	235	8.51
PG 64-28P	236	8.47
PG 76-22P,TR	236	8.47
PG 76-16	233	8.58

- End of Section -