

**JOB ORDER CONTRACT  
BETWEEN  
CITY OF BUCKEYE  
AND  
M. R. TANNER DEVELOPMENT AND CONSTRUCTION, LLC**

**CONTRACT NO. 2025081**

This JOB ORDER CONTRACT FOR Category 1: Street Maintenance (the "Contract") is made and entered into, by and between the City of Buckeye, an Arizona municipal corporation (the "City") and M. R. Tanner Development and Construction, LLC, an Arizona limited liability company (the Contractor ). This Contract is for Street Maintenance, and issued as required by award of individual Job Orders (the "Project").

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**RECITALS**

- A. The City issued a Request for Qualifications entitled Job Order Contracting General for Category 1: Street Maintenance (th “RFQ”) incorporated herein by reference, seeking proposals from vendors interested in providing Street Maintenance.
- B. The Contractor submitted a statement of qualifications (the “SOQ”), attached hereto as Exhibit A, in response to the RFQ, attached hereto as Exhibit B, and both Exhibits are incorporated herein by reference, and the City desires to enter into an Agreement with the Contractor for indefinite quantity and indefinite delivery for various projects related to Street Maintenance for the City. The Projects may include Design Services, preconstruction services, permitting regulatory requirements and as -built/close-out documents (collectively the “Services”).

**AGREEMENT**

NOW, THEREFORE, in consideration of the mutual promises, covenants and agreements stated herein, and for other good and valuable consideration, the sufficiency of which is hereby acknowledged, the City and the Contractor agree as follows:

**ARTICLE 1  
CONTRACT TERM**

- 1. This Contract has a base period of one (1) year and four (4) option periods of one (1) year each that may be exercised in the sole discretion of the City. Any exercise of any option to renew this Contract beyond the base period will only be effective upon written notice The time period during which this Contract is in effect is the “

2. The Contract Time for each Job Order shall start with the Notice to Proceed ( NTP ) and end with Final Acceptance, as set forth below. The NTP will not be issued until prior approval and acceptance by the City of the Job Order.
3. The Contract Time is identified in the Job Order as the Contract Duration in terms of calendar days. Contractor agrees that it will commence performance of the Work after receiving an official NTP letter and complete the Project through both Substantial Completion (if applicable) and Final Completion within the Contract Time.
4. Time is of the essence of this Contract, and each Job Order issued hereunder, for each Project, and for each phase and/or designed milestone thereof.
5. Failure on the part of Contractor to adhere to the approved Project Schedule will be deemed a material breach and sufficient grounds for termination of a specific Job Order and/or this Contract by the City. The City will assess liquidated damages as described in each Job Order for each calendar day of delay beyond the Final Completion date.

## **ARTICLE 2 OVERVIEW OF JOB ORDER CONTRACTING UNDER THIS CONTRACT**

1. This Contract establishes an indefinite delivery, indefinite quantity, Job Order Contract for such Services within the scope of this Contract as the City may request from time to time by issuance of an individual Job Order for each Project. Unless otherwise specified in a specific Job Order, Job Orders generally will not include Design Services and that where Design Services are necessary, the City will provide them under separate contract. There will be a separate Job Order for each Project that will describe the Work to be provided by Contractor for that Project. There may be multiple projects and therefore multiple Job Orders under this Contract.
2. The amount to be paid by the City for the Project under each Job Order is the Contract Price for that Job Order. The Job Order price will include a total amount for each Job Order priced for the Work described for that Job Order. The Contract Price for any Job Order will be established as a Firm Fixed Price, subject to the following:
  - (a) Estimated values for individual projects are estimated at \$100,000.00 to \$1,000,000.00. Most projects will be completed within the same fiscal year they are initiated in or within three hundred sixty-five (365) days from the Notice to Proceed. Projects may extend into the next fiscal year and beyond, but in no instance will any one project under this Contract exceed \$2,000,000.00. The total Job Orders for a single contractor issued during a single fiscal year will not exceed \$6,000,000.00.
  - (b) There is no limit on the number of Job Orders that the City may issue to the Contractor during the term of this Contract. Likewise, there is no requirement that the City issue any Job Orders to the Contractor during the Term of this Contract.

3. This Contract is non-exclusive. The City shall have the right to engage other contractors to perform the Services or to self-perform the Services.
4. No Contract in relation to any specific Work is in effect until a Job Order has been fully executed by the City and Contractor.
5. During the Term of this Contract, the City will issue an individual Job Order request for proposal to the Contractors under the JOC Street Maintenance category for each Project or negotiate directly with a contractor. Each Job Order will have specific instructions concerning that Job Order. The Contractor will follow these specific instructions when preparing a response in the form of a Job Order Proposal.
6. The general steps for development of a Job Order are:
  - (a) When the City identifies a need for performance of a Project under a Job Order; the City will issue an RFP to the Contractor and also advise the Contractor of the nature of the Work to be done. This is done either by a delivery order request for proposal or through direct negotiations utilizing the rankings from the RFQ evaluation process as specified in the RFQ. At the same time, the City will advise the Contractor if Design Services are required and how those services will be provided. Within seven (7) working days of receipt of this notification, the Contractor will:
    - (i) Visit the proposed Project Site with City designated representatives; and
    - (ii) Arrange with the City to further define the scope of the Project.
7. Upon award of a Job Order, a signed copy of the Job Order will be mailed or electronically forwarded to the Contractor. Failure by the Contractor to pick up or receive the mailed or

electronic orders shall not relieve the Contractor from the obligation to complete the Work under the Job Order in accordance with the terms of this Contract or the terms of each Job Order.

8. The City may provide a verbal NTP for the Work in advance of issuing the formal NTP letter (which will be followed up with a written NTP). Normally, NTP will be issued under separate cover from the Job Order. The Contract duration starts with the date on the NTP letter.

### **ARTICLE 3 DEFINITIONS**

“Addenda” means written or graphic instruments issued prior to the submittal of the Proposal(s), which clarify, correct or change the Proposal(s) requirements.

“Agreement” or “Contract” means the executed agreement between the City and Contractor, including any amendments to the executed Agreement.

“Certificate for Payment” means the City form issued by the City to certify amount due and payable by the City to the Contractor.

“Certificate of Final Completion” means the City form issued by the City to the Contractor stating the Work required under the Contract has been completed.

“Certificate of Substantial Completion” means the City form issued by the City to the Contractor certifying that the Work under the Contract is considered sufficiently complete so that the City can occupy and use the Project or a portion thereof for its intended purposes.

“Change Order” means a written instrument issued after execution of a Job Order or this Contract signed by the City and the Contractor, stating their agreement upon all of the following: the scope of the change in the Work; the amount of the adjustment to the Contract Price; and the extent of the adjustment to the Contract Time(s). A Change Order is an amendment to the Agreement.

“City” means the City of Buckeye, a municipal corporation, with whom Contractor has entered into this Contract and for whom the Services is to be provided pursuant to said Contract.

“City’s Project Criteria” means information developed by or for the City to describe the City’s program requirements and objectives for the Project, including use, space, price, time, site and expandability requirements, as well as submittal requirements and other requirements governing Contractor’s performance of the Work. The City’s Project Criteria may include conceptual documents, design criteria, performance requirements and other Project-specific technical materials and requirements.

“City’s Representative” means the person designated within this Contract.

“Commissioning” means the process for achieving, validating and documenting the performance of the Project including any works and its systems to meet the design needs and requirements of the City.

“Construction Documents” means the plans, specifications and drawings prepared by the Contractor or a Consultant.

“Construction Drawings” means the detailed drawings approved as part of the approved Construction Documents.

“Construction Work” means the construction component of the Project.

“Contract Documents” means the following items in descending order of precedence: (i) all written modifications, amendments and Change Orders to this Contract; (ii) this Contract, including all exhibits and attachments, executed by the City and Contractor to include each Job Order; (iii) written supplementary conditions; (iv) Construction Documents prepared and approved; (v) Contractor’s approved Variations of the City’s Project Criteria, as contained in Exhibit A; (vi) City’s Project Criteria; (vii) Contractor’s Proposal(s), except for accepted Variations of the City’s Project Criteria, submitted in response to City’s Project Criteria.

“Contract Price” means the amount or amounts set forth in each awarded Job Order subject to adjustment in accordance with this Contract.

“Contract Time” means the Days set forth in each awarded Job Order subject to adjustment in accordance with this Contract.

“Job Order” means a specific written agreement between the City and the Contractor for Work to be performed under this Contract for an individual, mutually agreed upon scope of work, schedule and price.

“Day(s)” means calendar days unless otherwise specifically noted in the Contract Documents.

“Deliverables” means the work products prepared by the Contractor in performing the scope of work described in each Job Order.

“Design Services” means all professional services to be performed or procured by the Contractor or by the City to provide required Project design under this Contract and any subsequent amendments.

“Job Order Contractor” means the firm, corporation, or other approved legal entity with whom the City has entered into this Contract to provide services as detailed in this Contract. The term Contractor may be used to identify the Job Order Contractor.

“Differing Site Conditions” means concealed or latent physical conditions or subsurface conditions at the Site that, (i) materially differ from the conditions indicated in the Scope of Work issued with each Job Order or (ii) are of an unusual nature, differing materially from the conditions ordinarily encountered and generally recognized as inherent in the Work.

“Final Acceptance” means the completion of the Project as prescribed in Article 10.

“Float” means the number of Days by which an activity can be delayed without lengthening the Critical Path and extending the Substantial Completion date.

“Legal Requirements” means all applicable federal, state and local laws, codes, ordinances, rules, regulations, orders and decrees of any government or quasi-government entity having jurisdiction over the Project or Site, the practices involved in the Project or Site, or any Work.

“Liquidated Damages” means a specified amount due by the Contractor when in breach of the Contract. The amount is determined based off of the Contract Price and predetermined amounts from the Maricopa Association of Governments (MAG) Uniform Standard Specifications and Details for Public Works Construction.

“Materials” means goods, items, or supplies utilized in the completion of the Work.

“Notice to Proceed” or “NTP” means the directive issued by the City, authorizing the Contractor to start Work or a portion of the work.

“Payment Application” means the City form used by the Contractor to request payment for Work performed.

“Product Data” means illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

“Project” means the Work to be completed in the execution of any awarded Job Order and as amended and as prescribed as any Scope of Work in identified in each awarded Job Order. Project means the Work associated with each awarded Job Order issued under this Contract.

“Project Schedule” means a schedule as prescribed in this Contract or subsequent Job Orders.

“Project Record Documents” means the documents created pursuant to Article 12.

“Samples” means physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

“Schedule of Construction” means the timeline submitted by the Contractor for the completion of the Work.

“Schedule of Values (SOV)”, means the Document specified in the construction phase, which divides the Contract Price into pay items, such that the sum of all pay items equals the awarded Job Order Price for the Work, or for any portion of the Work having a separate specified Contract Price.

“Shop Drawings” mean drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

“Scheduled Substantial Completion Date” means the calendar date equal to the Notice to Proceed date established plus the number of Days established in each Job Order.

“Site” means the land or locations on which the Project is located, as more particularly described in the Job Order.

“Subcontractor” or “Sub consultant means any person or entity retained by Contractor as an independent contractor to perform a portion of the Work and shall include material, men and suppliers.

“Substantial Completion” means the date on which the Work, or an agreed upon portion of the Work, is sufficiently complete so that the City can occupy and use the Project or a portion thereof for its intended purposes.

“Technical Consultant” means an agent of the City who furnishes project management assistance (if applicable to a Job Order).

“Variations of the City’s Project Criteria” means agreed changes to the City’s Project Criteria by both Parties.

“Work” means as defined in Article 5, Paragraph 2.

#### **ARTICLE 4 DESIGN PHASE AND DESIGN SERVICES**

1. Costs for Preconstruction services will be included Contractor’s firm fixed price cost proposal.
2. Normally the City will obtain Design Services from a consultant or prepare design documents using City Staff. However, Contractor may also be required to provide incidental Design Services for all or a portion of the Work to be constructed under a specific Job Order. If consulting services for design and the preparation of Plans and Specifications are required; they will be paid for as a separate line item in the Contractor’s price proposal.

**ARTICLE 5  
CONSTRUCTION SERVICES**

1. Contractor shall perform all Work necessary to construct the Project in accordance with all applicable Legal Requirements, this Contract and the specifications outlined in each Job Order, and render the Project and all its components operational and functionally and legally usable for their intended purpose.
2. The term "Work" shall mean whatever is done by or required of Contractor to perform and complete its duties relating to the construction of each Job Order under the Contract, including, without limitation, the following:
  - A. Construction of the whole and all parts of the Project in full and strict conformity with each Job Order;
  - B. The provision and furnishing, and prompt payment therefore, of all labor, supervision, services, materials, supplies, equipment, fixtures, appliances, facilities, tools, transportation, storage, power, fuel, heat, light, cooling, other utilities and things required for the construction of each Job Order;
  - C. The procurement and furnishing of all necessary permits and other permits required for the construction of each Job Order;
  - D. The creation and submission to the City of detailed as-built drawings depicting all as-built construction;
  - E. The furnishing of any required surety bonds and insurance as may be required by each Job Order;
  - F. The furnishing of all equipment and product warranties, manuals, test results and user guides required by each Job Order or otherwise reasonably available to Contractor;
  - G. The furnishing of all other services and things required or reasonably inferable from the Contract Documents, including the provisions of Article 6 below.

**ARTICLE 6  
TIME FOR CONSTRUCTION: THE CONTRACT TIME**

1. After the City has awarded each Job Order, the City shall issue a NTP directing Contractor to proceed with the Work on the date indicated in the notice (the "Commencement Date"). Work shall commence within ten (10) days of the Commencement Date.

2. Contractor shall commence the Work within ten (10) days of the Commencement Date, and the Work shall be carried out regularly and without interruption. Contractor shall substantially complete the Work no later than the date established in each Job Order or such other date as may be issued by a Change Order (the "Scheduled Completion Date"). The number of calendar days between the effective date of the Contract and the Scheduled Completion Date is the "Contract Time". Contractor shall achieve Final Completion of the Work no later than thirty (30) calendar days after achieving Substantial Completion.
3. Contractor understands that if Substantial Completion for entire project is not attained by the Scheduled Substantial Completion date, the City will suffer damages which are difficult to determine and accurately specify. Contractor agrees that if Substantial Completion is not attained by the Scheduled Substantial Completion Date, Contractor shall pay the City the amount established in each Job Order as liquidated damages for each day that Substantial completion extends beyond the Scheduled Substantial Completion Date.
4. All limitations of time set forth in each Job Order are material and time is of the essence of each Job Order.

**ARTICLE 7**  
**ADDITIONAL DUTIES AND RESPONSIBILITIES OF CONTRACTOR**

1. The intent of this Contract is to require complete, correct and timely execution of all Job Orders awarded for the Construction Work. Any and all Construction Work that may be required reasonably implied or reasonably inferred by each Job Order as necessary to produce the intended result shall be provided by Contractor for the Construction Price as provided in each awarded Job Order.
2. All Work performed by Contractor shall be in strict compliance with each Job Order. "Substantial Compliance" is not strict compliance. Any Construction Work not in strict compliance with each Job Order is defective.
3. The Construction Work shall be strictly supervised and directed using Contractors best and highest skill and effort. Contractor shall bear full responsibility for any and all acts or omissions of those engaged in the Construction Work on behalf of the Contractor.
4. Contractor warrants and guarantees to the City that all labor furnished to perform the Construction Work under each Job Order will be competent to perform the tasks undertaken and is the best quality obtainable, that the product of such labor will yield only superior results in strict compliance with the requirements of each Job Order, that materials and equipment furnished will be of high quality and new unless otherwise permitted by the Job Order, and that the Construction Work will be of high quality, free

from faults and defects and in strict conformance with the requirements found in each Job Order. Any and all Construction Work not strictly conforming to these requirements shall be considered defective and shall constitute a breach of Contractor's warranty.

5. Special or specific guarantees and warranties which are required by each Job Order to run for a fixed period of time shall commence running on the date of Substantial Completion of all Construction Work. In general, Contractor warrants all work, including labor and materials, for a period of two (2) years from the date of Substantial Completion, unless otherwise specified in the Job Order.
6. Contractor, within fifteen (15) days after the Commencement Date, shall submit to the Manager of Construction and Contracting for his information, and shall comply with, Contractor's Schedule of Construction for each Job Order awarded. The Schedule of Construction shall reflect the performance of all Construction Work on weekdays and non-holidays. The Schedule of Construction shall be a detailed critical path (CPM) schedule in a form acceptable to the City. The Schedule of Construction shall be revised at least monthly and shall be revised to reflect conditions encountered from time to time and shall be related to the entire Project awarded as a Job Order. Each such revision shall be furnished to the City. Strict compliance with the requirements of this Paragraph shall be a condition precedent for payment to Contractor, and failure to strictly comply with this requirement shall constitute a material breach of the Contract. No claim for an increase in the Construction Price shall be allowed as a result of Contractor basing the Construction Price upon an early completion schedule, or as a result of delays and costs attributable to completion later than the planned early completion date.
7. Contractor shall continuously maintain at the Site, for the benefit of the City, an updated copy of the awarded Job Order, including one record copy of the Job Order Documents marked to record on a current basis changes, selections and modifications made during construction. Additionally, Contractor shall maintain at the Site, for the benefit of the City, a copy of all Shop Drawings, Product Data, Samples, and other Submittals, if any, that are specified in the awarded Job Order. Upon Final Completion of the Construction Work, or upon the City's request, all of the documents described in this Paragraph shall be finalized and delivered to the City and shall become the property of the City.
8. Contractor shall review, study, and approve, or take other necessary action upon all Shop Drawings, Product Data, Samples, and other Submittals to ensure that each Job Order will be constructed in a timely fashion in strict compliance with the requirements of the Contract and Job Order. No deviation from, substitution for or other modification from the Documents shall be allowed by Contractor in a shop drawing or submittal without written approval, in the form of a Change Order from the City, and signed by the parties hereto. Contractor shall engage in prompt and adequate review of Shop Drawing and other Submittals to maintain the Construction Schedule; Contractor also warrants it will

use its best independent professional judgment in its review to determine compliance with the Contract Documents.

9. The City shall also, in its discretion, have the right to review and approve Submittals. In the event that the City exercises the foregoing right to review, Contractor shall not perform any portion of the Construction Work unless and until the City approves in writing such Submittal. Any such approval shall not be evidence that Construction Work installed pursuant to the City's approval conforms to the requirements of the Contract nor shall such approvals relieve Contractor of any of its responsibilities or warranties under the Contract. If the City elects to review Submittals, Contractor shall maintain a Submittal log which shall include, at a minimum, the date of each Submittal, the date of any resubmittal, the date of any approval or rejection, and the reason for any approval or rejection. Contractor shall have the duty to carefully review, inspect and examine any and all Submittals before submission of same to the City. Shop Drawings and other Submittals from Contractor do not constitute a part of this Contract.
10. Contractor shall procure from all Subcontractors and Suppliers and shall transmit to the City, all warranties required by the Contract. Contractor shall review all such warranties and shall certify to the City that the warranties are in strict compliance with the requirements of the Contract.
11. Contractor shall prepare or procure and shall transmit to the City all documentation required by this Contract regarding the operation and recommended maintenance programs relating to the various elements of the Construction Work.
12. If required in the Job Order, Contractor shall prepare and provide to the City a complete set of all as-built drawings which shall be complete and, except as specifically noted, shall reflect performance of the Construction Work in strict compliance with the requirements of this Contract.
13. Contractor shall assume all labor responsibility for all personnel assigned to or contracted for the performance of the Construction Work and agrees to strictly comply with all its obligations as employer with respect to said personnel under all applicable labor laws.
14. Contractor shall be responsible for procuring all tests and inspections required by sound professional practices and by governmental authorities having jurisdiction over the Project. Contractor shall submit certified results of such tests to the City. If the laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any Construction Work to be specifically inspected, tested, or approved, Contractor shall assume full responsibility therefore, pay all costs in connection therewith and furnish to the City the required certificates of inspection, testing or approval.

15. Contractor shall, during the course of the Construction Work, comply with any regulations or guidelines prescribed by the City. Contractor warrants that it will comply with all public laws, ordinances, rules and regulations applicable to the services to be performed under the Contract, including without limitation, those relating to the terms and conditions of the employment of any person by Contractor in connection with the Construction Work to be performed under the Contract.
16. Contractor shall perform the Construction Work in accordance with all construction codes, laws, ordinances or regulations applicable to the design and execution of the Construction Work. Any fine or penalty which may be imposed as consequence of any violation of this provision shall be paid by Contractor, and Contractor, to the fullest extent permitted by the law, shall fully defend, indemnify and hold the City harmless for, from and against all loss, damage, and expense, including attorney's fees, resulting from any such violation or alleged violation of codes, laws, ordinances, or regulations, regardless of a concurrent contribution by the City, through negligence or other wrongful act, to such loss, damage, or expense, except that such indemnity shall not apply if the violation is solely and directly caused by a negligent or willful act or omission of the City, its officers, agents, or employees.
17. All construction and building permits, licenses and authorizations necessary for the construction of the Project shall be secured and paid for by Contractor. Contractor shall notify the City when it has received said permits, licenses, and authorizations, and upon receipt shall supply the City with copies of same. The originals of permits, licenses and authorizations shall be delivered to the City upon completion of the Construction Work, and receipt of these documents by the City shall be a condition precedent to final payment. Contractor shall also give and maintain any and all notices required by applicable laws pertaining to the construction of the Construction Work.
18. While on the City's property, all Contractor's employees and Subcontractors shall confine themselves to areas designated by the City and will be subject to the City's badge and pass requirements, if any, in effect at the Site of the Construction Work.
19. Contractor shall take all reasonable steps and legally required measures at the site to comply with applicable safety regulations and standards and to adequately protect the Construction Work, stored materials, and temporary structures located on the premises, and to prevent unauthorized persons from entering upon the site. Contractor shall at all times safeguard the City's property and employees from injury or loss in connection with the performance of the Contract. Contractor shall at all times safeguard and protect its own partially or completely finished Construction Work and that of the adjacent property and all adjacent construction Work from damage. Contractor shall protect the City's equipment, apparatus, machinery, and other property and all adjacent construction Work with boarding and other safeguards so as to keep the premises free

from dampness, dirt, dust, or other damage and shall remove all such temporary protection upon completion of the Construction Work.

20. Unless otherwise instructed by the City, Contractor shall repair and return to original condition all buildings, streets, curbs, sidewalks, utilities or other facilities affected by Contractor's performance of the Construction Work.
21. Contractor shall keep the site reasonably clean during performance of the Construction Work. Upon Final Completion of the Construction Work, Contractor shall thoroughly clean the site and the Project and remove all waste, debris, trash and excess materials or equipment, together with Contractor's property therefrom.
22. At all times relevant to the Contract, Contractor shall provide access to the Construction Work to the City and its designees without formality or other procedure.
23. The City's decisions in matters relating to aesthetic standards and effect shall be final.
24. In performing both Design Services and Construction Work under this Contract, the relationship between the City and Contractor is that of independent contractor, and the execution of this Contract does not change the independent status of Contractor. Contractor shall exercise independent judgment in performing its duties under this Contract and is solely responsible for setting working hours, scheduling or prioritizing the Contract work flow and determining how all Contract work is to be performed. No term or provision of this Contract or act of Contractor in the performance of this Contract shall be construed as making Contractor the agent, servant or employee of the City, or making Contractor or any of its employees eligible for the fringe benefits, such as retirement, insurance and worker's compensation, which the City provides its employees.

## **ARTICLE 8 CONTRACT PRICE**

1. The City shall pay, and Contractor shall accept, as full and complete payment for all Work associated with each Job Order the amount approved and awarded to the Contractor as a Job Order. Each Job Order will be a separate contract under this Contract. The general terms and conditions will be established by this Contract and special contract provisions will be established within each Job Order.
2. Job Order Construction Price, unless changed by Change Order, represents the absolute limit of obligation or liability that the City may ever have insofar as the cost for full and final completion of the Work, and the total of all payments to Contractor or its Subcontractors are concerned. Should additional amounts be required to be expended, over and above a Job Order Construction Price, to achieve completion of the Construction Work, including Project construction, and payment to Contractor, in accordance with this

Contract and any Special Provisions included in each awarded Job Order, liability for and payment of such additional amounts shall be the sole responsibility of Contractor and its Contract Surety herein, and the City shall never be liable for same.

3. In addition to the Construction Work Contractor will perform, it will also provide all the usual and necessary traditional construction management services incident to construction projects of the nature and scope of this Project, for which the Contract Price described in this Contract is paid. Such construction management services are not intended in any manner to diminish the overall responsibility of Contractor for the full and final completion of the Construction Work within the time and cost constraints specified in this Contract.
4. The City agrees to pay Contractor for the Cost of the Construction Work as defined in each Job Order, subject to submission by Contractor of all backup substantiation as may be reasonably required by the City. In no event shall the sum of payments for the Cost of the Construction Work and any other Contractor compensation exceed the Construction Price, as adjusted by Change Order. The term "Cost of the Construction Work" shall be defined in each Job Order and be established as a Firm-Fixed Price Contract.

#### **ARTICLE 9 PAYMENT OF THE CONTRACT PRICE**

1. Payments of the Contract Price will be made monthly as Work progresses. Payment Applications, covering labor, material, equipment, supplies, and other items completed, delivered or suitably stored on site during a period ending on the last calendar day of each month, shall be submitted to the City by the Contractor on the current edition of AIA Documents G702 and G703, within five (5) days after end of the period. Payment Applications shall be notarized shall be supported by such data substantiating the Contractor's right to payment as the City may require, and reflect retainage, if any, as is provided. All payments shall be subject to any offset or retainage provisions of the Contract.
2. Each payment made to the Contractor shall be on account of the total amount payable to the Contractor, and title to all Work covered by a paid partial payment shall thereupon pass to the City. Nothing in this section shall be construed as relieving the Contractor from the sole responsibility for care and protection of materials and Work upon which payments have been made, for restoration of any damaged Work, or as a waiver of the right of the City to require fulfillment of all terms of Contract Documents.
3. The City, within seven (7) days after receipt of the Payment Application, will either issue a Certificate for Payment for such amount as is properly due or issue written notice of the reasons for withholding such a certificate.

4. The issuance of a Certificate for Payment will constitute a representation by the City, observations at the site and the data comprising the Payment Application, that the Work is in accordance with the Contract Documents (subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to the results of any subsequent tests required by or performed under the Contract Documents, to minor deviations from the Contract Documents correctable prior to completion, and to any specific qualifications stated in his certificate); and that the Contractor is entitled to payment in the amount certified.
  
5. Payment may be withheld in whole or in part to protect the City on account of:
  - a. Unsatisfactory job progress as determined by the City.
  - b. Defective Work or materials not remedied.
  - c. Disputed Work or materials.
  - d. Claims or other encumbrances filed or reasonable evidence indicating probable filing of claims or other encumbrances by Subcontractors or Suppliers, or others.
  - e. Failure of the Contractor to make payment to Subcontractors or Suppliers within seven (7) days after receipt of each progress payment.
  - f. A reasonable doubt as determined by the City that the Work can be completed for the unpaid balance of the Contract Price or within the Contract Time.
  - g. The Contractor's failure to perform any of its contractual obligations under the Contractor Documents, or any other Contract with the City.
  - h. Deficiencies or claims asserted by the City against Contractor arising from any other project. Within fourteen (14) days following the receipt of the Certificate for Payment, the City shall pay to the Contractor 90% of the value of the Work in place and materials suitably stored at the Site. The remaining 10% shall be retained by the City until the Contract is 50% completed at which time the retainage shall be reduced to 5%; provided that: (a) the Contractor is making satisfactory progress on the Contract; and (b) in the City's sole judgment, there is no specific cause or claim requiring a greater amount than 5% to be retained. Thereafter, the City shall pay the Contractor 95% of the value of the Work, unless and until it determines satisfactory progress is not being made, at which time the 10% retainage may be reinstated. Such 10% reinstatement would be 10% of the total contract value of Work in place and materials stored. The City's sole judgment concerning the satisfactory progress of the Work shall be final.
  
6. Within sixty (60) days after the issuance of the Certificate of Final Completion by the City and receipt of all other documents required by the Contract, all retained amounts shall be paid to Contractor as part of Final Payment:

- a. The Final Payment shall not become due until the Contractor delivers to the City full and final unconditional releases from subcontractors and major suppliers acknowledging payment in full. Any claim filed thereafter shall be the responsibility of the Contractor.
- b. If any claim remains unsatisfied after all payments are made, the Contractor shall immediately upon demand refund to the City all monies that the latter may be compelled to pay in discharging such claim including all costs, interest and attorneys' fees.

## **ARTICLE 10 SUBSTANTIAL AND FINAL COMPLETION**

1. "Substantial Completion" means that stage in the progression of the Construction Work, as approved by the City in writing, when the Project is sufficiently complete in accordance with the Contract that the City can enjoy beneficial use or occupancy of the entire Project and can utilize it for all of its intended purposes. A condition precedent to Substantial Completion is the receipt by the City of all necessary authorizations for the use of the Project required by any governmental or regulatory authority. The City reserves the right to use any part, phase or system of the Project when such part, phase or system is substantially completed, but such partial use of the Project shall not result in the Project being deemed substantially complete, and such partial use shall not be evidence of Substantial Completion.
2. When Contractor believes that the Construction Work is substantially complete, Contractor shall notify the City in writing and shall submit to the City a list of items remaining to be completed or corrected. The City, the City's designee, (or an independent consultant hired by the City) will perform an inspection. If the Construction Work is substantially complete, in the sole opinion of the City, the City will prepare a Certificate of Substantial Completion which shall establish the date of Substantial Completion. The Certificate of Substantial Completion shall state the responsibilities of the City and Contractor for Project security, maintenance, damage to the Construction Work, and insurance, and shall fix the date, not more than 30 days after the established date of Substantial Completion, within which Contractor shall complete any items of incomplete or defective Construction Work. The Certificate of Substantial Completion shall be submitted to Contractor for its written acceptance of the responsibilities assigned to it in such certificate.
3. Within thirty (30) days following (a) Substantial Completion of the Construction Work, and (b) the parties' execution of the Certificate of Substantial Completion the City will remit payment of all sums due Contractor, including such amount of retainage based upon the value of remaining performance, less the reasonable costs for completing all incomplete Construction Work and/or any Design Services, correcting and bringing into strict conformance all defective and nonconforming Construction Work, and

handling all outstanding or threatened claims. Such payment less reasonable costs shall be determined by the City in its sole and absolute discretion.

4. "Final Completion" means the completion of all Work required by, and in strict compliance with, this Contract, the Job Order, including Contractor's provision to the City of all documents and deliverables required to be provided by the Contract.
5. When Contractor believes that all of the Construction Work is finally complete, and Contractor is ready for a final inspection, Contractor shall so notify the City in writing. The City (or an independent consultant hired by the City) will then make final inspection of the Construction Work and, if the Construction Work is complete in strict accordance with the Contract, and the Contract has been fully performed, then the City will issue a Certificate for Final Payment, providing for payment of the remainder of the Contract Price, less any amount withheld pursuant to the Contract.
6. The City shall make final payment of all remaining sums due to Contractor within thirty (30) days after Final Completion as reflected by the City's Certificate for Final Payment, provided that all documents and deliverables required to be delivered to the City under this Contract have been delivered as required, and provided that all other conditions precedent to payment have been satisfied.
7. Prior to being entitled to receive final payment, and as a condition precedent thereto, Contractor shall furnish the City, in the form and manner required by the City, the following:
  - (a) a signed and notarized statement of final payment and release, in particular certifying that all Subcontractors and Suppliers have been paid all sums lawfully due to them, and releasing the City from all claims that Contractor had or might have asserted during the performance of this Contract;
  - (b) if required by the City, separate releases of lien or lien waivers from each Subcontractor, lower tier subcontractor, laborer, Supplier or other person or entity who has, or might assert a claim against the City or the City's property;
  - (c) consent of surety to final payment;
  - (d) a complete set of the as-built drawings to include AutoCAD disks and the record set of Contract Documents; and
  - (e) All product warranties, operating manuals, instruction manuals and other record documents, drawings and things customarily required of a Contractor, or expressly required herein, as a part of or prior to Project closeout.

8. Acceptance by Contractor of final payment shall constitute a waiver and release of all claims against the City by Contractor except for those claims previously made in writing against the City by Contractor, pending at the time of final payment and specifically identified on Contractor's pay request for final payment as unsettled at the time it submits its pay request.

**ARTICLE 11**  
**CITY'S DUTIES, OBLIGATIONS, AND RESPONSIBILITIES**

In addition to payment, the City shall undertake to perform the following:

1. The City shall provide Contractor with information regarding the City's requirements for the Project including any desired or required design or construction schedule.
2. The City shall review any documents submitted by Contractor requiring the City's decision, and shall render any required decisions pertaining thereto.
3. In the event the City has actual knowledge of (a) any material fault or defect in the Construction Work, (b) nonconformance with the Contract, or (c) errors, omissions or inconsistencies in the Design Documents, the City shall give prompt written notice thereof to Contractor.
4. The City shall provide Contractor access to the Site and to the Construction Work, and shall provide Contractor with such information, existing and reasonably available, necessary to Contractor's performance of the Contract as Contractor may request.
5. The City shall cooperate with Contractor in securing any necessary licenses, permits, approvals or other necessary authorizations for the design, construction and certification of the Project.
6. The City shall perform the duties set forth in this Article 11 in a reasonably timely manner so as to permit the orderly and timely progress of Contractor's Design Services and of the Construction Work.
7. The City's review, inspection, or approval of any Construction Work, Design Documents, Submittals, or pay requests by Contractor shall be solely for the purpose of determining whether such Construction Work and such documents are generally consistent with the City's construction program and requirements. No review, inspection, or approval by the City of the Construction Work or documents shall relieve Contractor of its responsibility for the performance of its obligations under the Contract or the accuracy, adequacy, fitness, suitability, or coordination of its Design Services or the Construction Work. Approval by any governmental or other regulatory agency or other governing body of any Construction Work, Design Documents, or

Contract Documents shall not relieve Contractor of responsibility for the strict performance of its obligations under the Contract. Payment by the City pursuant to the Contract shall not constitute a waiver of any of the City's rights under the Contract or at law, and Contractor expressly accepts the risk that defects in its performance, if any, may not be discovered until after payment, including final payment, is made by the City.

8. The City's agreement not to exercise, or its delay or failure to exercise, any right under the Contract or to require strict compliance with any obligation of Contractor under the Contract shall not be a waiver of the right to exercise such right or to insist on such compliance at any other time or on any other occasion.
9. The City shall furnish to Contractor, prior to the execution of each Job Order, any and all written and tangible material knowingly in its possession concerning conditions below ground at the site of the Project. Such written and tangible material is furnished to Contractor only in order to make complete disclosure of such material and for no other purpose. By furnishing such material, the City does not represent, warrant, or guarantee its accuracy or completeness either in whole or in part, and shall have no liability therefore. If Contractor requests in writing, the City shall also furnish surveys, legal limitations, and utility locations (if known), and a legal description of the Project site.
10. The City shall obtain all easements required for construction, and shall pay for necessary assessments and charges required for use and occupancy of the Construction Work. Contractor shall render such assistance as the City may request in obtaining such easements, certificates of occupancy, and the like.
11. In the event Contractor fails or refuses to perform the Construction Work in strict accordance with the Contract, or is otherwise in breach of this Contract in any way, the City may, at its option, instruct Contractor to cease and desist from performing further Construction Work, or any part thereof. Upon receipt of such instruction from the City in writing, Contractor shall immediately cease and desist as instructed by the City and shall not proceed further until the cause for the City's instructions has been corrected, no longer exists, or the City instructs that the Construction Work may resume.
12. In the event the City issues such instructions to stop Construction Work, and in the further event that Contractor fails and refuses within seven (7) days of receipt of same to provide adequate assurance to the City that the cause of such instructions will be eliminated or corrected, then the City shall have the right to carry out the Construction Work with its own forces, or with the forces of other contractors, and Contractor shall be fully responsible for the costs incurred in correcting any defective or deficient Construction Work. The rights set forth in Article 11, Paragraph 11 and

this Article 11, Paragraph 12 are in addition to, and without prejudice to, any other rights or remedies the City may have against Contractor, including the rights to terminate or withhold payment as provided herein.

**ARTICLE 12**  
**JOB ORDER (PROJECT) DOCUMENTATION**

1. Contractor shall maintain and protect all records relating in any manner whatsoever to the Project (the "Project Records") for no less than four (4) years after Final Completion of the Project, and for any longer period of time as may be required by law or good management practice.
2. All Project Records which are in the possession of Contractor or Contractors Subcontractors shall be made available to the City for inspection and copying upon the City's request at any time. Additionally, such records shall be made available upon request by the City to any state, federal or other regulatory authorities and any such authority may review, inspect and copy such records. The Project Records include, without limitation, all drawings, plans, specifications, Submittals, correspondence, logs, minutes, memoranda, photographs, audio or video recordings, or other writings or things which document the Project, its design, or its construction. Said records include those documents reflecting the cost of design and construction to Contractor.

**ARTICLE 13**  
**PERSONNEL, SUBCONTRACTORS AND SUPPLIERS**

1. A "Subcontractor" means an entity which has a direct contract with Contractor to perform a portion of the Construction Work or the Design Services. For purposes of the Contract, Subcontractors shall also include those furnishing any equipment and materials for the Project.
2. A "Supplier" means an entity providing only equipment or materials for the performance of the Construction Work.
3. Upon execution of this Contract, and at such later times as may be applicable, Contractor shall furnish the City, in writing, the names of persons or entities proposed by Contractor to act as Subcontractors on the Project. Contractor shall provide such information regarding such proposed Subcontractors as the City deems necessary. The City shall promptly reply to Contractor, in writing, stating any objections the City may have to such proposed Subcontractors ("disapproved Subcontractor"). With respect to this Contract and the subject matter hereto, Contractor shall not engage the services of or otherwise enter into a contract with a disapproved Subcontractor. Notwithstanding the foregoing, any consent or failure to reject a subcontractor by the City shall in no way relieve Contractor of any of its duties or warranties under this Contract.

4. All subcontracts and purchase orders with Subcontractors shall afford Contractor rights against the Subcontractor which correspond to those rights afforded to the City against Contractor under this Contract, including those rights of Contract suspension, termination, and stop Construction Work orders as set forth in this Contract. It is expressly agreed that no relationship of agency, employment, contract, obligation or otherwise shall be created between the City and any Subcontractor of Contractor, and a provision to this effect shall be incorporated into all agreements between Contractor and its Subcontractors.
5. Should Contractor subcontract all or any part of the Construction Work, such subcontracting of the Construction Work shall not relieve Contractor from any liability or obligation under the Contract or under any applicable policy, law or regulation, and Contractor shall be responsible for all and any acts, defaults, omissions or negligence of subcontractors, suppliers, and contractors.
6. In accordance with Article 7, Paragraph 4 above, Contractor shall employ and assign only qualified and competent personnel to perform any service or task concerning the Project. Contractor shall designate one such person as the Project Contractor. Absent written instruction from Contractor to the contrary, the Project Contractor shall be deemed to be Contractor's authorized representative and shall be authorized to receive and accept any and all communications from the City. Key design and supervisory personnel assigned by Contractor to each Job Order will be provided at the time the contractor submits the RFP pricing package. The contractor shall conform to all requirements established in each Job Order RFP issued by the City.
7. If, at any time during the course of the Project, the City reasonably determines that the performance of any Subcontractor or any member of Contractor's staff construction working on the Project is unsatisfactory, the City's Representative may require Contractor to remove such Subcontractor or staff member from the Project immediately and replace the staff member at no cost or penalty to the City for delays or inefficiencies the change may cause.

#### **ARTICLE 14 CHANGES AND EXTENSIONS OF TIME**

1. Changes in the Design Services (if required) or the Construction Work under this Contract, consisting of additions, deletions, revisions or any combination thereof, may be ordered unilaterally by the City without invalidating the Contract. Such changes shall be communicated by Change Order as applicable. Contractor shall proceed diligently with any changes, and same shall be accomplished in strict accordance with the terms and conditions as set forth in this Contract/Job Order.

2. All change orders, changes requested by Contractor, or extensions of Contract Time occurring during construction of the Project related to actual Construction Work shall be governed by the applicable provisions of this Contract/Job Order. All requests for additional compensation due to a change in the scope, and all requests for an extension of time to the Schedule, shall include sufficient backup documentation to reasonably understand the request and the amount of time or compensation requested and determines the merits of the request.
3. Upon the occurrence of a change order for Construction Work which increases the Cost of the Construction Work, the Construction Price will thereafter include such Cost of the Construction Work and Services attributable to such change to the extent allowed.
4. In the event the parties are unable to agree on the terms of a Change Order or Supplemental Agreement, then Contractor shall continue to diligently perform the Work, including any change directed by the City by Change Order or Supplemental Agreement, and shall keep thorough records of the cost of performance of such Change Order or Supplemental Agreement.
5. Contractor recognizes and accepts a fiduciary relationship of trust and confidence hereby established between Contractor and the City and agrees that it shall at all times in good faith use its best efforts to advance the City's interests and agrees to perform the Work in the highest professional manner.

**ARTICLE 15**  
**CLAIMS BY CONTRACTOR**

1. Claims by Contractor against the City are subject to the terms and conditions of this Article 15, and strict compliance herewith shall be a condition precedent to any liability of the City therefore.
2. All claims for additional compensation or additional time, regardless of their nature, when they occur, or whether they occur during the design or construction phase, shall be governed by the City of Buckeye Procurement Code.
3. Contractor shall provide, and continue to provide, to the City all such documentation, including cost and time records, as and when the City may request so that the City may evaluate Contractor's claim.
4. Contractor shall continue its performance under this Contract regardless of the existence of any claims submitted by Contractor against the City.

5. In the event Contractor seeks to make a claim for an increase in the Construction Price, as a condition precedent to any liability of the City for any claim, Contractor shall strictly comply with the requirements of Paragraph 2 above and such notice shall be given by Contractor before proceeding to execute any alleged additional or changed Construction Work. Failure of the condition precedent to occur shall constitute a waiver by Contractor of any claim.
6. In connection with any claim by Contractor against the City for compensation in excess of the Construction Price, any liability of the City shall be strictly limited to the Cost of the Construction Work and Design Services if required as defined and allowed in this Contract and subsequent Job Orders and shall in no event include, indirect, consequential, impact or other costs, expenses or damages of Contractor or its Subcontractors. The City shall not be liable to Contractor for claims of third parties, including Subcontractors, for acts, omissions, events, or conditions for which the City would not be liable to Contractor under the terms of the Contract. As a condition precedent to the City's liability to Contractor for any loss or damage resulting from claims of third parties, including Subcontractors, such third parties must have complied with all conditions contained in their agreements with Contractor and such claims must have been submitted to the City by Contractor in strict compliance with all the requirements of this Article. The City shall not be liable to Contractor for claims of third parties including Subcontractors, unless and until the liability of Contractor has been established in a court of competent jurisdiction.
7. The resolution of any claim under this Article shall be reflected by a Change Order or Supplemental Agreement executed by the City and Contractor.

**ARTICLE 16**  
**UNCOVERING AND CORRECTING CONSTRUCTION WORK**

1. If any of the Construction Work is covered, concealed or obscured contrary to the written request of the City, or contrary to any provision of the Contract, said Construction Work shall, if required by the City, be uncovered for inspection and shall be properly replaced at Contractor's expense without change in the Contract Time.
2. If any of the Construction Work is covered, concealed or obscured in a manner not inconsistent with Paragraph 1 above, it shall, if required by the City, be uncovered for inspection. If such Construction Work conforms strictly to the Contract, the cost of uncovering and proper replacement shall be charged to the City. If such Construction Work does not strictly conform to the Contract, Contractor shall pay the cost of uncovering and proper replacement.
3. Contractor shall immediately proceed to correct Construction Work rejected by the City as defective or failing to conform to the Contract. Contractor shall pay all costs

and expenses associated with correcting such rejected Construction Work, including any additional testing and inspections made necessary thereby.

4. In addition to its warranty obligations set forth elsewhere herein, Contractor shall be specifically obligated to correct at its cost and expense any and all defective or nonconforming Construction Work for a period of twelve (12) months following Final Completion upon written direction from the City. This obligation shall survive final payment by the City and termination of the Contract.
5. Nothing contained in Paragraph 4 shall establish any period of limitation with respect to other obligations which Contractor has under the Contract. Establishment of the one-year time period in Paragraph 4 above relates only to the duty to Contractor to specifically correct the Construction Work.
6. The City may, but shall in no event be required to, choose to accept defective or nonconforming Construction Work. In such event, the Contract Price shall be reduced by the reasonable costs of removing and correcting the defective or nonconforming Construction Work. The City shall be entitled to a reduction in the Construction Price regardless of whether the City has, in fact, removed and corrected such defective Construction Work. If the unpaid balance of the Construction Price, if any, is insufficient to compensate the City for the acceptance of defective or nonconforming Construction Work, Contractor shall, upon written demand from the City, pay the City such additional compensation for accepting defective or nonconforming Construction Work.

## **ARTICLE 17 SUSPENSION AND TERMINATION**

1. The City may for any reason whatsoever suspend performance under the Contract. The City shall give written notice of such suspension to Contractor specifying when such suspension is to become effective.
2. From and upon the effective date of any Suspension ordered by the City, Contractor shall incur no further expense or obligations in connection with this Contract and Contractor shall cease its performance. Contractor shall also, at the City's direction, either suspend or assign to the City any of its open or outstanding subcontracts or purchase orders.
3. In the event the City directs a suspension of performance under this Article 17, through no fault of Contractor, and provided Contractor submits a proper claim as provided in this Contract, the City shall pay Contractor as full compensation for such suspension Contractor's reasonable costs, actually incurred and paid, of:

- (a) Demobilization and remobilization, including such costs paid to Subcontractors
  - (b) Preserving and protecting Construction Work in place;
  - (c) Storage of materials or equipment purchased for the Project, including Insurance.
  - (d) Performing in a later, or during a longer, time frame than that contemplated by this contract.
- 4. If the City lifts the suspension it shall do so in writing and Contractor shall promptly resume performance of the Contract unless, prior to receiving the notice to resume, Contractor has exercised its right of termination as provided herein.
- 5. The City reserves the right, for any reason whatsoever (including, but not limited to, the City's failure to appropriate funding for this Contract), or without reason, terminate performance under the Contract by Contractor for convenience. The City shall give thirty (30) calendar days advance written notice of termination for convenience to Contractor. Contractor shall incur no further obligations in connection with the Contract and Contractor shall stop Work when such termination becomes effective. Contractor shall also, at the City's direction, either terminate or assign to the City outstanding orders and subcontracts. Contractor shall settle the liabilities and claims arising out of any terminated subcontracts and orders. The City may direct Contractor to assign Contractor's right, title and interest under terminated orders or subcontracts to the City or its designee. Contractor shall transfer title and deliver to the City such completed or partially completed Design Documents (if any), Construction Work and materials, equipment, parts, fixtures, information and Contract rights as Contractor has.
- 6. When terminated for convenience, Contractor shall be compensated as follows:
  - (a) Contractor shall submit a termination claim to the City specifying the amounts believed to be due because of the termination for convenience together with costs, pricing or other data required by the City. If Contractor fails to file a termination claim within three (3) months from the effective date of termination, the City shall pay Contractor an amount derived in accordance with Subparagraph (c) below;
  - (b) The City and Contractor may agree to the compensation, if any, due to Contractor under this paragraph;
  - (c) Absent agreement to the amount due to Contractor, the City shall pay Contractor, as full compensation for termination for convenience, the following amounts:
    - (i) the Cost of the Construction Work and Services, as defined and allowed by to the extent incurred or paid prior to receipt by Contractor of the notice of termination;
    - (ii) such portion of Work which is completed and unpaid as of the date of receipt by Contractor of the notice of termination; and

- (iii) Reasonable costs of settling and paying claims arising out of the termination of subcontracts or orders hereinabove. These costs shall not include amounts paid in accordance with other provisions of this Contract. In no event shall Contractor be entitled to recover lost profits or other incidental or consequential damages from the City on account of a termination for convenience, or an erroneous termination for cause as described below.
  
- 7. If Contractor does not perform the Construction Work, or any part thereof, in a timely manner, supply adequate labor, supervisory personnel or proper equipment or materials, or if it fails to timely discharge its obligations for labor, equipment and materials, or proceeds to disobey applicable laws, ordinances, rules, regulations or orders of any public authority having jurisdiction, or otherwise commits a violation of a material provision of the Contract, then the City may by written notice to Contractor, without prejudice to any other right or remedy against Contractor or others, terminate the performance of Contractor and take possession of the Project site and of all materials and equipment at the site and may finish the Construction Work by whatever methods it may deem expedient. In such cases, Contractor shall not be entitled to receive any further payment until the Construction Work is finished.
  
- 8. In the event the employment of Contractor is terminated by the City for cause and it is subsequently determined by a court or other tribunal of competent jurisdiction that such termination was without cause, such termination shall thereupon be deemed a Termination for Convenience under this Paragraph and the provisions of this Paragraph regarding compensation shall apply.

**ARTICLE 18  
INDEMNITY**

1. To the fullest extent permitted by law, Contractor agrees to defend, indemnify and hold the City, its elected officials, officers, agents and employees, harmless for, from and against any and all claims, lawsuits, judgments, costs and expenses for personal injury (including death), property damage or other harm for which recovery of damages is sought, suffered by any person or persons, that may arise out of or be occasioned by Contractor's breach of any of the terms or provisions of this Contract, or by any negligent, grossly negligent or strictly liable act or omission of Contractor, its officers, agents, or employees, in the performance of this Contract; except that the indemnity provided for in this paragraph shall not apply to any liability resulting from the sole negligence or fault of the City, its elected officials, officers, agents, employees or separate contractors. The provisions of this paragraph are solely for the benefit of the parties hereto and are not intended to create or grant any rights, contractual or otherwise, to any other person or entity.

**ARTICLE 19  
INSURANCE AND BONDS**

See *Exhibit C*.

**ARTICLE 20  
CANCELLATION UNDER A.R.S. § 38-511**

1. This Contract may be cancelled pursuant to the terms of Arizona Revised Statutes Section 38-511 as amended.

**ARTICLE 21  
GIFT TO PUBLIC SERVANT**

1. The City may terminate this Contract immediately if Contractor has offered, conferred, or agreed to confer any benefit upon a City of Buckeye employee or official that the City of Buckeye employee or official is prohibited by law from accepting.
2. For purposes of this section, "benefit" means anything reasonably regarded as pecuniary gain or pecuniary advantage, including benefit to any other person in whose welfare the beneficiary has a direct or substantial interest, but does not include a contribution or expenditure made and reported in accordance with law.
3. Notwithstanding any other legal remedies, the City may require Contractor to remove any employee of Contractor from the Project who has violated the restrictions of this section or any similar state or federal law, and obtain reimbursement for any expenditures made to Contractor as a result of the improper offer, agreement to confer, or conferring of a benefit to a City employee or official.

**ARTICLE 22  
NONDISCRIMINATION**

1. As a condition of this Contract, Contractor covenants that Contractor will take all necessary actions to insure that, in connection with any work under this Contract, Contractor, his associates and subcontractors, will not discriminate in the treatment or employment of any individual or groups of individuals on the grounds of race, color, religion, national origin, age, sex, or handicap unrelated to job performance, either directly, indirectly or through contractual or other arrangements. Contractor shall also comply with all applicable requirements of the Americans with Disabilities Act, 42 U.S.C.A. §§12101-12213, as amended. In this regard, Contractor shall keep, retain and safeguard all records relating to this Contract or work performed hereunder for a minimum period of three (3) years from final Contract completion, with full access allowed to authorized representatives of the City, upon request, for purposes of evaluating compliance with this and other provisions of the Contract.

2. Subject to existing law, and regulations, illegal or undocumented persons will not be employed by the Contractor for any work or services to be performed pursuant to this contract. The Contractor will ensure that this provision is expressly incorporated into any and all subcontracts or subordinate agreements issued in support of this contract. Contractor shall notify the City upon the selection and agreement with any subcontractor, and shall notify the City prior to any subcontractor being on site doing work. Contractor agrees to comply with the provisions of section 274A(a)(1)(A) and 274A(a)(2) of the Immigration and Nationality Act ("INA" (8 U.S.C.1324a(a)(1)(A), 1324a(a)(2)) (the "INA employment provisions"), and any amendments thereto, prohibiting the unlawful employment of illegal or undocumented persons. Under the terms of this agreement, the Contractor shall not knowingly hire or employ for any work performed pursuant to this contract any workers or employees not lawfully authorized to work in the United States under the provisions of the INA or any other applicable federal or state laws. Violation of the provisions of this Article 22 shall be deemed a material breach of this Contract.

**ARTICLE 23  
MISCELLANEOUS PROVISIONS**

1. This Contract shall be governed by the laws and court decisions of the State of Arizona. This Contract is performed in Maricopa County, Arizona, and exclusive venue for the enforcement of rights or legal obligations under this Contract shall be in Maricopa County, Arizona.
2. This Contract shall be binding upon and inure to the benefit of the parties to this Contract and their respective successors and, except as otherwise provided in this Contract, their assigns.
3. Contractor shall not assign this Contract, or any part of this Contract, without prior written consent of the City.
4. All notices, communications, and reports required or permitted under this Contract shall be personally delivered or mailed to the respective parties by depositing same in the United States mail, postage prepaid, at the addresses shown below, unless and until either party is otherwise notified in writing by the other party, at the following addresses. Mailed notices shall be deemed communicated as of five days after mailing.

If intended for the City, to:

William Kauppi  
Chief Financial Officer, Finance  
City of Buckeye  
530 E. Monroe Ave.  
Buckeye, Arizona 85326  
Phone: 623.349.6225

If intended for Contractor, to: M. R. Tanner Development and Construction, LLC  
Josh Skinner, JOC Account Manager  
1327 W. San Pedro Street  
Gilbert, Arizona 85233  
Phone: 480.633.8500  
Email: [jskinner@mrtanner.com](mailto:jskinner@mrtanner.com)

5. No information relative to the existence or the details of the Design Services or the Construction Work shall be released by Contractor, either before or after completion of the Project, for publication, advertising or any commercial purposes without the City's prior written consent.
6. In the event that any portion or any portions of this Contract are held to be unenforceable by a court of competent jurisdiction, then the remainder of this Contract shall be enforced as though such portions had not been included, unless to do so would cause this Contract to fail of its essential purposes.
7. This Contract, with all Exhibits and incorporated or referenced attachments, and any Job Order, together with Contractor's and Surety's performance and payment bonds for the Project, constitute the entire and exclusive agreement between the City and Contractor with reference to the Project. This Contract supersedes any and all prior documents, discussions, communications, representations, understandings, negotiations or agreements by and between the parties.
8. If the City Council does not appropriate funds to continue this Contract or any Job Order into a subsequent fiscal year, and pay for charges hereunder or under any current Job Order for a Project that extends into a new fiscal year, the City may terminate this Contract at the end of the current fiscal period, or at the time that funds are no longer available to meet the City's obligations hereunder. The City agrees to give written notice of termination to the Contractor at least thirty (30) days prior to any termination for a lack of funds and will pay to the Contractor all approved charges incurred prior to Contractor's receipt of such notice, subject to the availability of funds therefore. payment
9. Cooperative Purchasing- Specific eligible political subdivisions and nonprofit educational or health institutions ("Eligible Procurement Unit(s)") are permitted to utilize procurement agreements developed by the City, at their discretion and with the agreement of the awarded Consultant. Consultant may, at its sole discretion, accept orders from Eligible Procurement Unit(s) for the purchase of the Materials and/or Services at the prices and under the terms and conditions of this Agreement, in such quantities and configurations as may be agreed upon between the parties. All  
cooperative procurements under this Agreement shall be transacted solely between the requesting Eligible Procurement Unit and Consultant. Payment for such purchases will be

the sole responsibility of the Eligible Procurement Unit. The exercise of any rights, responsibilities or remedies by the Eligible Procurement Unit shall be the exclusive obligation of such unit. The City assumes no responsibility for payment, performance or any liability or obligation associated with any cooperative procurement under this Agreement. The City shall not be responsible for any disputes arising out of transactions made by others.

**ARTICLE 24  
E-VERIFY**

- 1 E-Verify Requirements. To the extent applicable under Ariz. Rev. Stat. §41-4401, Contractor and its subconsultants warrant compliance with all federal immigration laws and regulations that relate to their employees and compliance with the E-verify requirements under Ariz. Rev. Stat. §23-214(A). The Contractor or its subcontractor's failure to comply with such warranty shall be deemed a material breach of this Agreement and may result in the termination of this Agreement by the City.
  
- 2 The Contractor and its subcontractors warrant to keep the papers and records open for random inspection during normal business hours by the City. The Contractor and its subcontractors shall cooperate with the City's random inspections including granting the City's entry rights onto its property to perform the random inspections and waiving their respective rights to keep such papers and records confidential.

**ARTICLE 25  
ISRAEL**

1. To the extent required by applicable law, pursuant to Arizona Revised Statute § 35-393.01, Contractor certifies that it is not currently engaged in, and agrees for the duration of the Contract to not engage in, a boycott of Israel, or any entity that does business in Israel or any territories controlled by Israel.

[SIGNATURE PAGE TO FOLLOW]

THEREFORE, the City of Buckeye by its Mayor and City Clerk have hereunto subscribed their names this

\_\_\_\_\_.

CITY:

THE CITY OF BUCKEYE,  
an Arizona municipal corporation

\_\_\_\_\_  
Dan Cotterman, City Manager

CONTRACTOR:

M. R. TANNER DEVELOPMENT AND  
CONSTRUCTION, LLC, an Arizona  
limited liability company

*Chad Montoya*

\_\_\_\_\_  
Chad Montoya, Vice President

ATTEST:

Lucinda Aja, City Clerk

\_\_\_\_\_  
RECOMMENDED:

*William Kauppi*  
William Kauppi, Chief Financial Officer

\_\_\_\_\_  
APPROVED AS TO FORM:

K. Scott McCoy, City Attorney

**EXHIBIT A  
TO  
JOB ORDER CONTRACT FOR  
STREET MAINTENANCE  
BETWEEN  
CITY OF BUCKEYE  
AND  
M. R. TANNER DEVELOPMENT AND CONSTRUCTION, LLC**

**[CONTRACTOR S STATEMENT OF QUALIFICATIONS (SOQ)]** ,  
SEE FOLLOWING PAGES



REQUEST FOR QUALIFICATIONS (RFQ: 2024193)  
JOB ORDER CONTRACTING (JOC) GENERAL:

# **CATEGORY 1: Street Maintenance** Pave, Patch & Mill Projects / Sealing Applications Projects



June 17, 2024

### JOC Selection Checklist

**\*Please include the checklist below with each SOQ packet to indicate the category your firm is wishing to be considered for.**

JOC Categories		
RFQ No.	Description	Category
2024193.1	Street Maintenance – Pave, Patch & Mill Projects / Sealing Application Projects	<input checked="" type="checkbox"/>
2024193.2	General Construction Services	<input type="checkbox"/>
2024193.3	Road Construction Services	<input type="checkbox"/>
2024193.4	Steel Building/Structure Construction Services	<input type="checkbox"/>

City of Buckeye  
530 East Monroe Avenue  
Buckeye, AZ 85326  
Attn: Travis Stewart

RE: Request for Statement of Qualifications | RFQ #: 2024193  
Job Order Contract for Street Maintenance - Pave, Patch & Mill Projects / Sealing Applications Projects



Dear Travis Stewart and Selection Committee,

As an experienced turn-key roadway construction company with 31 years of expertise, M. R. Tanner Construction LLC (M. R. Tanner) is confident in our ability to deliver exceptional results and contribute to the success of your project. M. R. Tanner has done extensive research on this pursuit to qualify that it align with our strengths, resources, and core competencies to ensure the project is a fit for the City of Buckeye (City), M. R. Tanner, and the stakeholders. This approach of mindfully selecting projects guarantees success for all stakeholders. The City needs a dependable and capable partner and M. R. Tanner has the experience and self performance capabilities to achieve the City's goals.

**Maximizing Local Familiarity:** M. R. Tanner has recent experience working on JOC projects in Buckeye, offering a significant advantage across all facets of the contract by automatically leveraging our strong relationship with the City, improving emergency response times, enhancing communication channels, and ultimately strengthening the partnership. **Our team has worked in Buckeye for the last 4 years** allowing our team to understand the local partnerships and provide the necessary resources for this project.

**Expert Team:** M. R. Tanner takes pride in our long-standing reputation for providing high-quality concrete and paving services. With our extensive experience, we have successfully completed numerous projects similar in scope. Our dedicated team of skilled professionals possesses the knowledge and technical expertise required to deliver outstanding results within specified time frames.

**Relevant, Successful Experience: Self-performing 75% of the work,** our company is proud to have proven success with many municipalities on multiple projects. M. R. Tanner's highly developed concrete division specializes in a comprehensive range of services including asphalt paving, pavement maintenance, concrete placement and repairs, string, and grading. Our concrete division is one of the premier concrete curb and gutter choices in the Valley.

Our team is available and ready to begin as the City's General Contractor. **Our attention to detail, professionalism, and commitment to excellence have earned us repeat business and positive testimonials from satisfied clients.** M. R. Tanner is organized to respond immediately.

Thank you for considering M. R. Tanner as a potential partner for the City of Buckeye Street Maintenance Projects. We are confident that our expertise, experience, and dedication make us an ideal choice. Please contact me directly at (480) 633-8500 or jskinner@mrtanner.com to discuss any questions. Thank you for your time and consideration.

Josh Skinner

**Availability:**

Vice President  
(480) 633-8500  
1327 W. San Pedro St., Gilbert, AZ 85233

Concrete Poured

Crackseal

Average Self-Performance

Pavement Restoration

Tons of Asphalt Placed

Seal Coat

Concrete Flatwork



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June 4, 2024  
M. R. Tanner Construction  
1327 W. San Pedro St.  
Gilbert, AZ 85233

Re: Bonding Status and Capacity Information for City of Buckeye

The City of Buckeye has requested the bonding and financial information from you as follows:

1. Financial Capacity/Bonding/Insurance: Your current standing/general information with Merchants National Bonding, Inc. is good. There have been no claims to date.
2. Total Bonding Capacity: There is a preauthorized single limit of \$5M, and single bond limits above need carrier authorization. Aggregate limit is N/A.
3. Current Backlog/Project List – Please see attached.
4. Insurance Provider Rating – Merchants National Bonding, Inc. - A.M. Best rating of A- IX

Please let us know if you have any questions or if we can provide anything further.

Thank you,

Devan Anderson  
Principal

4140 . Baseline Rd #201 Mesa, AZ 85206 • www.baicins.com • P 480-935-7000 • F 480-935-7009

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E

Report Selections:	Job: ALL	Estimator: ALL
	Division: ALL	Project Manager: ALL
	Superintendent: ALL	Job Status: Active

### M R TANNER CONSTRUCTION Job Listing Sorted by Job Number

Job # / Master Job Number	Division Number	Job Description / Contract #	Address	Phone / Site Phone	Superintendent / Fax Phone	Project Mgr. / Estimator	Job Status / Certified?
235-21		SCF TRAFFIC SIGNAL C1044	SUN VALLEY PKWY&DESERT OASIS, MARICOPA COUNTY, BUCKEYE, AZ			MONCHA	A N
235-22		SUNCIT B2 CNCRE R&R CRKSL MRTCJ23522	MORROW DR & 264TH AVE, MARICOPA COUNTY, BUCKEYE, AZ			MONCHA	A N
237-18		CHURCHFARM OVTN PC V PAVE PO # 1801	MERIDIAN RD & CHERRYWOOD DR, PINAL COUNTY, QUEEN CREEK, AZ			MONCHA	A N
266-06		SDELLA 2A,2B CMLBK CITRUS 6654035	CAMELBACK RD & CITRUS RD, MARICOPA COUNTY, GOODYEAR, AZ			MONCHA	A N
304-18		QUEEN CREEK DESIGN 2020-090A / PO#20230715/ JDA9	VARIOUS LOCATIONS, MARICOPA COUNTY, QUEEN CREEK, AZ			MONCHA	A N
332-10		TOFH ST MAINTENANCE 23-24 2020-065.4 AMEND 2 PW07454123	VARIOUS LOCATIONS, MARICOPA COUNTY, FOUNTAIN HILLS, AZ			MONCHA	A N
406-21		IRONWING PARCEL 34E PAVE 73-0868-21	PERRYVILLE & CAMELBACK, MARICOPA COUNTY, AZ			MONCHA	A N
408-28		WINDROSE PARCEL 31D PAVE 73-1000-22	PERRYVILLE RD & GLENDALE AVE, MARICOPA COUNTY, MARICOPA COUNTY, AZ			MONCHA	A N
408-29		WINDROSE PAR31 OFFSITE PV 73-1002-22	PERRYVILLE RD & GLENDALE AVE, MARICOPA COUNTY, MARICOPA COUNTY, AZ			MONCHA	A N
408-33		WINDROSE 35A 36A 37B WIRTY	BETHANY HOME RD & 189TH AVE, MARICOPA COUNTY, MARICOPA COUNTY, AZ			MONCHA	A N
423-03		MARBELLA PARCEL 5 PNCHLST 542983B CO 6	NORTHERN AVE & EL MIRAGE DR, MARICOPA COUNTY, MARICOPA COUNTY, AZ			MONCHA	A N
442-08		PARADISE VALLEY ST MAINT PO: 4471, 4472 CONTRACT NUMBER	VARIOUS LOCATIONS, MARICOPA COUNTY, PARADISE VALLEY, AZ			MONCHA	A N
452-23		ULTRA THIN BONDED WR CRSE 2240405	VARIOUS LOCATIONS, MARICOPA COUNTY, SURPRISE, AZ			MONCHA	A N
452-24		23-24 SURPRISE PATCHING 320081C/2240547	VARIOUS LOCATIONS, MARICOPA COUNTY, SURPRISE, AZ			MONCHA	A N

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**TAB A:**

**PROJECT**

**City of Phoenix JOC Mill and Overlay Pavement Maintenance Program**

1



The full reconstruction aspect for the City of Phoenix's contract included milling, asphalt paving, ADA ramps, curb and gutter, utility adjustments, loop detectors, neighborhood rehab and traffic control. Most notably, this specific contract work incorporated cutting-edge technologies leveraging multiple seal types to enhance durability and longevity. There were several utility conflicts on this project that required quick coordination and communication with several different stakeholders. This contract was a renewable contract that Phoenix has elected to renew each year possible. Many factors lead to the projects' success at M. R. Tanner, but we feel that our ability to work with an owner's needs is unparalleled among other contractors.

**Description:**

City of Chandler

**Award Date:** April 2019

**Construction Costs:** \$26,622,227

**Estimated Completion Date:** December 2023

**Key Personnel:** Josh Skinner, Chad Montoya, Josh Lansford, Ryan Hammer

**Subcontractors:**

- WSP Inc | Asphalt Milling
- Metro Traffic Control | Traffic Control
- Specialty Companies | Utility Adjustments

The City of Phoenix has elected to pickup additional renewal year.

**PROJECT SIMILARITIES**

- Multiple Sites Simultaneously
- Asphalt Milling
- Preparation of surfaces and cleaning
- Engineer Approved Mixes & Specifications
- Traffic Control
- Manhole/Utility Adjustments
- Asphalt Patch After Underground Utility Repairs
- Protections of Landscape & Adjacent Property
- Community Outreach



**2 | City of Chandler JOC Asphaltic Concrete Mill & Inlay, Maintenance & Repair Services**



This renewable annual contract project for the City of Chandler consisted of multiple job duties including asphalt paving, road reconditioning, ADA ramp installation, concrete flatwork installation, turn lanes, neighborhood rehabilitation, curb and gutter install, traffic control, utility adjustments and striping of over 300,000 SY. These roads included neighborhood, industrial, and major arterial roadways.

**Description:**  
City of Chandler

**Award Date:** April 2019

**Construction Costs:** \$29,704,312

**Estimated Completion Date:** December 2023

**Key Personnel:** Josh Skinner, Chad Montoya, Josh Lansford, Ryan Hammer

**Subcontractors:**

- Bryco Asphalt Milling | Asphalt Milling
- Metro Traffic Control | TrafficControl
- Franklin Striping | Striping
- Specialty Companies | Utility Adjustments

**The City of Chandler has elected to pickup additional renewal year.**

**PROJECT SIMILARITIES**

- Multiple Sites Simultaneously
- Asphalt Milling
- Preparation of surfaces and cleaning
- Engineer Approved Mixes & Specifications
- Traffic Control
- Manhole/Utility Adjustments
- Asphalt Patch After Underground Utility Repairs
- Asphalt Emulsion Seal Coat- PMM
- Equipment Required for Sealing Applications
- Asphalt Emulsion Seal Coat- Slurry Seal Type II
- Meet Compaction and MAG Standards for Asphalt Breaks
- Protections of Landscape & Adjacent Property
- Community Outreach



## 3 | Town of Paradise Valley, Asphalt Street Overlay JOC



**Description:** This project was a mill and overlay contract that included street maintenance activities. This was a time-sensitive, fast-paced project. M. R. Tanner's crew and staff, along with its subcontractors, were able to complete this project within one month of the start date. The coordination with many local businesses and residents on this project was critical to its success.

**Owner:** Town of Paradise Valley

**Award Date:** February 2018

**Construction Costs:** \$4,427,525

**Estimated Completion Date:** 2020

**Key Personnel:** Josh Skinner, Chad Montoya, Josh Lansford, Ryan Hammer

**Subcontractors:**

- WSP Inc | Asphalt Milling
- Metro Traffic Control | Traffic Control
- Franklin Striping | Striping
- Specialty Companies | Utility Adjustments



### PROJECT SIMILARITIES

- Multiple Sites Simultaneously
- Asphalt Milling
- Preparation of surfaces and cleaning
- Engineer Approved Mixes & Specifications
- Traffic Control
- Manhole/Utility Adjustments
- Asphalt Patch After Underground Utility Repairs
- Protections of Landscape & Adjacent Property
- Asphalt Emulsion Seal Coat - PMM
- Equipment Required for Sealing Applications
- Community Outreach

**4 | Town Of Fountain Hills Pavement Preservation JOC**



This project was awarded through a competitive qualification-based process. The work included (but not limited to) overlaying roads selected by the Town of Fountain Hills. This contract, like many others, involved a large amount of M. R. Tanner’s time dedicated to public outreach and coordination with the residents and Town staff. M. R. Tanner always makes every effort to communicate the plan with all parties involved.

**Description:**

Town of Fountain Hills

**Award Date:** October 2019

**Construction Costs:** \$29,704,312

**Estimated Completion Date:** June 2022

**Key Personnel:** Josh Skinner, Chad Montoya, Josh Lansford, Ryan Hammer

**Subcontractors:**

- Bryco Asphalt Milling | Asphalt Milling
- Metro Traffic Control | TrafficControl
- Franklin Striping | Striping
- Specialty Companies | Utility Adjustments



**PROJECT SIMILARITIES**

- Multiple Sites Simultaneously
- Asphalt Milling
- Preparation of surfaces and cleaning
- Engineer Approved Mixes & Specifications
- Traffic Control
- Manhole/Utility Adjustments
- Asphalt Patch After Underground Utility Repairs
- Asphalt Emulsion Seal Coat - PMM
- Equipment Required for Sealing Applications
- Quality Control Standards and Testing
- Protections of Landscape & Adjacent Property
- Community Outreach



**5 | CITY OF SURPRISE JOC FOR OVERLAY**



The scope of work included mill and overlay projects throughout the City of Surprise. Our crews utilized ultra-thin bonded wearing course, a high-performance surface treatment appropriate for addressing mild to moderate distress and surface deficiencies. Work required coordination with multiple agencies due to their proximity to the project site, including the City of El Mirage, MCDOT, and ADOT. Through extensive pre-construction meetings, our team coordinated traffic control plans with all major agencies and stakeholders. We attribute this project's success to pre-planning. Throughout the project, we focused on what was best for the project, partnering with nearby schools, fire stations, and police stations to minimize our impact.

**Description:**

City of Surprise

**Award Date:** August 2023

**Construction Costs:** \$2,442,332

**Estimated Completion Date:** November 2023

**Key Personnel:** Josh Skinner, Chad Montoya, Josh Lansford, Ryan Hammer

**Subcontractors:**

- WSP Inc | Asphalt Milling
- Metro Traffic Control | Traffic Control
- Franklin Striping | Striping
- Specialty Companies | Utility Adjustments



**PROJECT SIMILARITIES**

- Multiple Sites Simultaneously
- Asphalt Milling
- Preparation of surfaces and cleaning
- Engineer Approved Mixes & Specifications
- Traffic Control
- Manhole/Utility Adjustments
- Asphalt Patch After Underground Utility Repairs
- Protections of Landscape & Adjacent Property
- Community Outreach

**6 | Town of Queen Creek Cooperative JOC Emergency & General Repairs**



The Town of Queen Creek needed a contractor who would be readily available for various repairs and for rapid response to emergencies. M. R. Tanner was selected to meet these needs. These emergency and general repairs consisted of sinkholes, roadway failures, roadway excavation, roadway widening, asphalt paving, utility work, and striping. Our coordination with the community and businesses was vital to these repairs, especially in the emergency circumstances.

**Description:**

Town of Queen Creek

**Award Date:** July 2019

**Construction Costs:** \$3,002,741

**Estimated Completion Date:** 2023

**Key Personnel:** Josh Skinner, Chad Montoya, Josh Lansford, Ryan Hammer

**Subcontractors:**

- Bryco Asphalt Milling | Asphalt Milling
- Metro Traffic Control | Traffic Control
- Franklin Striping | Striping



**PROJECT SIMILARITIES**


- Concrete Sidewalks
- Curb and Gutter
- 
- Asphalt Repairs
- Asphalt Paving
- Stakeholder Coordination

**TAB B:**

**PAST PERFORMANCE**

PAST PERFORMANCE QUESTIONNAIRE

1 | The City of Phoenix JOC Mill and Overlay Pavement Maintenance Program

CONTRACT INFORMATION (To be completed by Contractor)	
<b>1. Contractor Information:</b>	
Firm Name: <u>M.R. TANNER DEVELOPMENT &amp; CONSTRUCTION, LLC</u>	Email: <u>CMONTOYA@MRTANNER.COM</u>
Address: <u>1327 W. SAN PEDRO, GILBERT, AZ 85233</u>	Contact Name: <u>CHAD MONTOYA</u>
Phone Number: <u>480-633-8500</u>	Contact Phone: <u>480-363-3163</u>
<b>2. Work Performed as:</b> <input checked="" type="checkbox"/> Prime Contractor <input type="checkbox"/> Sub Contractor <input type="checkbox"/> Joint Venture <input type="checkbox"/> Other (Explain):	
<b>3. Contract Information:</b>	
Contract Number: <u>4108JOC183</u>	
Contract Type: <input type="checkbox"/> Firm Fixed Price <input type="checkbox"/> Cost Reimbursement <input checked="" type="checkbox"/> Other (Please specify): <u>JOC</u>	
Contract Title: <u>City of Phoenix Mill &amp; Overlay Pavement Maintenance Program</u> Contract Location: <u>VARIOUS THROUGHOUT CITY</u>	
Award Date (mm/dd/yy): <u>APRIL 2019</u>	
Contract Completion Date: <u>DECEMBER 31, 2023</u> Actual Completion Date: <u>DECEMBER 31, 2023</u>	
Explain Differences: <u>N/A</u>	
Original Contract Price (Award Amount): <u>\$30,000,000</u>	
Final Contract Price (to include all modifications, if applicable): <u>\$26,622,227</u>	
Explain Differences: <u>CONTINUED TO RENEW JOC CONTRACT AND CONTINUING WORK.</u>	
<b>4. Project Description:</b>	
Complexity of Work: <input checked="" type="checkbox"/> High <input type="checkbox"/> Med <input type="checkbox"/> Routine	
How is this project relevant to project of submission? (Please provide details such as similar equipment, requirements, conditions, etc.) <u>M.R. TANNER PERFORMED ASPHALT MILLING, PREPERATION OF SURFACES &amp; CLEANING. ENGINEERED APPROVED MIXES &amp; SPECIFICATION, TRAFFIC CONTROL, MANHOLE/UTILITY ADJUSTMENTS, COMMUNITY OUTREACH, PROTECTION OF LANDSCAPE &amp; ADJACENT PROPERTY, MULTIPLE SITES SIMULTABEOUSLY, &amp; ASPHALT EMULSION SEAL COAT-PMM.</u>	
<b>CLIENT INFORMATION (To be completed by Client)</b>	
<b>5. Client Information:</b>	
Name: <u>RICK EVANS</u> Phone Number: <u>602-717-9544</u>	
Title: <u>PROJECT MANAGER</u> Email Address: <u>RICK.EVANS@PHOENIX.GOV</u>	
<b>6. Describe the client's role in the project:</b>	
<u>RESPONSIBLE FOR MANAGING THE LARGEST CITY IN ARIZONA'S PAVEMENT PRESERVATION &amp; CITY RIGHT OF WAY.</u>	
Client Signature: 	Date: <u>6.12.24</u>

**ADJECTIVE RATINGS AND DEFINITIONS TO BE USED TO BEST REFLECT  
YOUR EVALUATION OF THE CONTRACTOR'S PERFORMANCE**

**1 | The City of Phoenix JOC Mill and Overlay Pavement Maintenance Program**

<b>RATING</b>	<b>DEFINITION</b>	<b>NOTE</b>
<b>(E) Exceptional</b>	Performance meets contractual requirements and exceeds many to the Government/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with few minor problems for which corrective actions taken by the contractor were highly effective.	An Exceptional rating is appropriate when the contractor successfully performed multiple significant events that were of benefit to the Government/Owner. A singular benefit, however, could be of such magnitude that it alone constitutes an Exceptional rating. Also there should have been NO significant weaknesses identified.
<b>(VG) Very Good</b>	Performance meets contractual requirements and exceeds some to the Government/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with some minor problems for which corrective actions taken by the contractor were effective.	A Very Good rating is appropriate when the Contractor successfully performed a significant event that was a benefit to the Government/Owner. There should have been no significant weaknesses identified.
<b>(S) Satisfactory</b>	Performance meets minimum contractual requirements. The contractual performance of the element or sub-element contains some minor problems for which corrective actions taken by the contractor appear or were satisfactory.	A Satisfactory rating is appropriate when there were only minor problems, or major problems that the contractor recovered from without impact to the contract. There should have been NO significant weaknesses identified. Per DOD policy, a fundamental principle of assigning ratings is that the contractors will not be assessed a rating lower than Satisfactory solely for not performing beyond the requirements of the contract.
<b>(M) Marginal</b>	Performance does not meet some contractual requirements. The contractual performance of the element or sub-element being assessed reflects a serious problem for which the contractor has not yet identified corrective actions. The contractor's proposed actions appear only marginally effective or were not fully implemented.	A Marginal rating is appropriate when a significant event occurred that the contractor had trouble overcoming which impacted the Government/Owner.
<b>(U) Unsatisfactory</b>	Performance does not meet most contractual requirements and recovery is not likely in a timely manner. The contractual performance of the element or sub-element contains serious problem(s) for which the contractor's corrective actions appear to have been or were ineffective.	An Unsatisfactory rating is appropriate when multiple significant events occurred that the contractor had trouble overcoming and which impacted the Government/Owner. A singular problem, however, could be of such serious magnitude that it alone constitutes an unsatisfactory rating.
<b>(N) Not Applicable</b>	No information or did not apply to your contract.	Rating will be neither positive nor negative.

**1 | The City of Phoenix JOC Mill and Overlay Pavement Maintenance Program**

**PAST PERFORMANCE EVALUATION  
(TO BE COMPLETED BY CLIENT)**

<b>1. QUALITY:</b>						
a) Quality of technical data/report preparation efforts.	<input checked="" type="radio"/>	VG	S	M	U	N
b) Ability to meet quality standards specified for technical performance.	<input checked="" type="radio"/>	VG	S	M	U	N
c) Timeliness/effectiveness of contract problem resolution without extensive customer guidance.	<input checked="" type="radio"/>	VG	S	M	U	N
d) Adequacy/effectiveness of quality control program and adherence to contract quality assurance requirements (without adverse effect on performance).	<input checked="" type="radio"/>	VG	S	M	U	N
<b>2. SCHEDULE/TIMELINESS OF PERFORMANCE:</b>						
a) Compliance with contract delivery/completion schedules including any significant intermediate milestones. <i>(If liquidated damages were assessed or the schedule was not met, please address below).</i>	<input checked="" type="radio"/>	VG	S	M	U	N
b) Rate the contractor's use of available resources to accomplish tasks identified in the contract.	<input checked="" type="radio"/>	VG	S	M	U	N
<b>3. CUSTOMER SATISFACTION:</b>						
a) To what extent were the end users satisfied with the project?	<input checked="" type="radio"/>	VG	S	M	U	N
b) Contractor was reasonable and cooperative in dealing with your staff (including the ability to successfully resolve disagreements/disputes; responsiveness to administrative reports, communication, and professionalism).	<input checked="" type="radio"/>	VG	S	M	U	N
c) To what extent was the contractor cooperative, professional, and concerned with the interests of the customer?	<input checked="" type="radio"/>	VG	S	M	U	N
d) Overall customer satisfaction	<input checked="" type="radio"/>	VG	S	M	U	N
<b>4. MANAGEMENT/PERSONNEL/LABOR:</b>						
a) Effectiveness of on-site management of subcontractors, suppliers, materials, and/or labor force?	<input checked="" type="radio"/>	VG	S	M	U	N
b) Ability to hire, apply, and retain a qualified workforce through this effort.	<input checked="" type="radio"/>	VG	S	M	U	N
c) Government Property Control.	<input checked="" type="radio"/>	VG	S	M	U	N
d) Knowledge/expertise demonstrated by contractor personnel.	<input checked="" type="radio"/>	VG	S	M	U	N
e) Utilization of Small Business.	<input checked="" type="radio"/>	VG	S	M	U	N
f) Ability to simultaneously manage multiple projects with multiple disciplines.	<input checked="" type="radio"/>	VG	S	M	U	N
g) Ability to assimilate and incorporate changes in requirements and/or priorities, including planning, execution and response to Government changes.	<input checked="" type="radio"/>	VG	S	M	U	N
h) Effectiveness of overall management (including ability to effectively lead, manage and control the program).	<input checked="" type="radio"/>	VG	S	M	U	N

1 | The City of Phoenix JOC Mill and Overlay Pavement Maintenance Program

5. COST/FINANCIAL MANAGEMENT:	
a) Ability to meet the terms and conditions within the contractually agreed price(s)?	<input checked="" type="radio"/> E <input type="radio"/> VG <input type="radio"/> S <input type="radio"/> M <input type="radio"/> U <input type="radio"/> N
b) Contractor proposed innovative alternative methods/processes that reduced cost, improved maintainability or other factors that benefited the client.	E <input checked="" type="radio"/> VG <input type="radio"/> S <input type="radio"/> M <input type="radio"/> U <input type="radio"/> N
c) If this is/was a Government cost type contract, please rate the Contractor's timeliness and accuracy in submitting monthly invoices with appropriate back-up documentation, monthly status reports/budget variance reports, compliance with established budgets and avoidance of significant and/or unexplained variances (under runs or overruns).	<input checked="" type="radio"/> E <input type="radio"/> VG <input type="radio"/> S <input type="radio"/> M <input type="radio"/> U <input type="radio"/> N
d) Is the Contractor's accounting system adequate for management and tracking of costs? <i>If no, please explain in Remarks section.</i>	<input checked="" type="radio"/> Yes <input type="radio"/> No
e) If this is/was a Government contract, has/was this contract been partially or completely terminated for default or convenience or are there any pending terminations? <i>Indicate if show cause or cure notices were issued, or any default action in comment section below.</i>	Yes <input checked="" type="radio"/> No
f) Have there been any indications that the contractor has had any financial problems? <i>If yes, please explain below.</i>	Yes <input checked="" type="radio"/> No
6. SAFETY/SECURITY:	
a) To what extent was the contractor able to maintain an environment of safety, adhere to its approved safety plan, and respond to safety issues? (Includes: following the users rules, regulations, and requirements regarding housekeeping, safety, correction of noted deficiencies, etc.)	<input checked="" type="radio"/> E <input type="radio"/> VG <input type="radio"/> S <input type="radio"/> M <input type="radio"/> U <input type="radio"/> N
b) Contractor complied with all security requirements for the project and personnel security requirements.	<input checked="" type="radio"/> E <input type="radio"/> VG <input type="radio"/> S <input type="radio"/> M <input type="radio"/> U <input type="radio"/> N
7. GENERAL:	
a) Ability to successfully respond to emergency and/or surge situations (including notifying COR, PM or Contracting Officer in a timely manner regarding urgent contractual issues).	<input checked="" type="radio"/> E <input type="radio"/> VG <input type="radio"/> S <input type="radio"/> M <input type="radio"/> U <input type="radio"/> N
b) Compliance with contractual terms/ provisions (explain if specific issues).	<input checked="" type="radio"/> E <input type="radio"/> VG <input type="radio"/> S <input type="radio"/> M <input type="radio"/> U <input type="radio"/> N
c) Would you hire or work with this firm again? (if no, please explain below)	<input checked="" type="radio"/> Yes <input type="radio"/> No
d) In summary, provide an overall rating for the work performed by this contractor.	<input checked="" type="radio"/> E <input type="radio"/> VG <input type="radio"/> S <input type="radio"/> M <input type="radio"/> U <input type="radio"/> N

Please provide responses to the questions above (if applicable) and/or additional remarks. Additionally, please provide a brief narrative addressing specific strengths, weaknesses, deficiencies, or other comments which may assist the City in evaluating performance risk. (please attach additional pages if necessary).

Client Signature: 

Date: 6-12-24

PAST PERFORMANCE QUESTIONNAIRE

2 | The City of Chandler JOC Asphaltic Concrete Mill & Inlay, Maintenance & Repair Services

<b>CONTRACT INFORMATION (to be completed by contractor)</b>	
<b>1. Contractor Information:</b> Firm Name: <u>M.R. TANNER DEVELOPMENT AND CONSTRUCTION, LLC</u> Email: <u>info@mrtdc.com</u> Address: <u>1000 W. WYOMING STREET, CHANDLER, AZ 85224</u> Contract Name: <u>ASPHALTIC CONCRETE MILL &amp; INLAY, MAINTENANCE &amp; REPAIR SERVICES</u> City & State: <u>CHANDLER, AZ</u> Contract #/Title: <u>2025081</u>	
<b>2. Work Performance:</b> <input checked="" type="checkbox"/> Prime Contract <input type="checkbox"/> Sub Contract <input type="checkbox"/> Joint Venture <input type="checkbox"/> Other (Specify):	
<b>3. Contract Information:</b> Contract Number: <u>2025081</u> Contract Type: <input type="checkbox"/> Firm Fixed Price <input type="checkbox"/> Cost Reimbursement <input checked="" type="checkbox"/> Other (Specify): <u>CM@RISK</u> Contract Title: <u>ASPHALTIC CONCRETE MILL &amp; INLAY, MAINTENANCE &amp; REPAIR SERVICES</u> Contract Budget: <u>1,000,000.00</u> Award Date (mm/dd/yyyy): <u>08/12/2024</u> Contract Completion Date: <u>12/31/2024</u> Actual Contract Value to: <u>1,000,000.00</u> Budget Difference: <u>0</u> Original Contract Price (Award Amount): <u>1,000,000.00</u> Final Contract Price (per invoice) (actual contract value) (to date): <u>1,000,000.00</u> Total Difference: <u>CONTRACTED TO RECEIVE 100% OF 1,000,000.00 CONTRACT VALUE</u>	
<b>4. Project Evaluation:</b> Complexity of Work: <input checked="" type="checkbox"/> High <input type="checkbox"/> Med <input type="checkbox"/> Low/Low How well this project relates to project or submittal (Please provide details such as similar equipment, requirements, standards, etc.) <u>THIS WORKS TO CORRECT AND MAINTAIN, REPAIRATION OF SURFACES &amp; CLEANING. ENGINEER APPROVED WORKS WHICH IS THE SAME TO HOW WE MEDIATE THE WORKING. SAME BUSINESS AS WE DO WITH LANDSCAPE &amp; ADJACENT PROPERTY. MULTIPLE SITES SIMULTANEOUSLY, &amp; SCHEDULE UNION SCHEDULES.</u>	
<b>CLIENT INFORMATION (to be completed by client)</b>	
<b>5. Client Information:</b> Name: <u>CHANDLER</u> Phone Number: <u>480.667.4447</u> Title: <u>STREETS PROGRAM MANAGER</u> Email Address: <u>CHAS.HOFFMANN@CITYOFCHANDLER.AZ.GOV</u>	
<b>6. Describe your client's role in the project:</b> <u>MANAGES THE MAIN AND MORE THAN 2000 LANE MILES OF STREETS SYSTEMS.</u>	
Claim Structure: <u>CONTRACT DESIGN</u>	Date: <u>08/12/2024</u>

**ADJECTIVE RATINGS AND DEFINITIONS TO BE USED TO BEST REFLECT  
YOUR EVALUATION OF THE CONTRACTOR'S PERFORMANCE**

**2 | The City of Chandler JOC Asphaltic Concrete Mill & Inlay, Maintenance & Repair Services**

<b>RATING</b>	<b>DEFINITION</b>	<b>NOTE</b>
<b>(E) Exceptional</b>	Performance meets contractual requirements and exceeds many to the Government/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with few minor problems for which corrective actions taken by the contractor were highly effective.	An Exceptional rating is appropriate when the contractor successfully performed multiple significant events that were of benefit to the Government/Owner. A singular benefit, however, could be of such magnitude that it alone constitutes an Exceptional rating. Also there should have been NO significant weaknesses identified.
<b>(VG) Very Good</b>	Performance meets contractual requirements and exceeds some to the Government/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with some minor problems for which corrective actions taken by the contractor were effective.	A Very Good rating is appropriate when the Contractor successfully performed a significant event that was a benefit to the Government/Owner. There should have been no significant weaknesses identified.
<b>(S) Satisfactory</b>	Performance meets minimum contractual requirements. The contractual performance of the element or sub-element contains some minor problems for which corrective actions taken by the contractor appear or were satisfactory.	A Satisfactory rating is appropriate when there were only minor problems, or major problems that the contractor recovered from without impact to the contract. There should have been NO significant weaknesses identified. Per DOD policy, a fundamental principle of assigning ratings is that the contractors will not be assessed a rating lower than Satisfactory solely for not performing beyond the requirements of the contract.
<b>(M) Marginal</b>	Performance does not meet some contractual requirements. The contractual performance of the element or sub-element being assessed reflects a serious problem for which the contractor has not yet identified corrective actions. The contractor's proposed actions appear only marginally effective or were not fully implemented.	A Marginal rating is appropriate when a significant event occurred that the contractor had trouble overcoming which impacted the Government/Owner.
<b>(U) Unsatisfactory</b>	Performance does not meet most contractual requirements and recovery is not likely in a timely manner. The contractual performance of the element or sub-element contains serious problem(s) for which the contractor's corrective actions appear to have been or were ineffective.	An Unsatisfactory rating is appropriate when multiple significant events occurred that the contractor had trouble overcoming and which impacted the Government/Owner. A singular problem, however, could be of such serious magnitude that it alone constitutes an unsatisfactory rating.
<b>(N) Not Applicable</b>	No information or did not apply to your contract.	Rating will be neither positive nor negative.

2 | The City of Chandler JOC Asphaltic Concrete Mill & Inlay, Maintenance & Repair Services

PAST PERFORMANCE EVALUATION  
(TO BE COMPLETED BY CLIENT)

1. QUALITY:	
a) Quality of technical data/report preparation efforts.	<input type="radio"/> VG S M U N
b) Ability to meet quality standards specified for technical performance.	<input type="radio"/> VG S M U N
c) Timeliness/effectiveness of contract problem resolution without extensive customer guidance.	<input type="radio"/> VG S M U N
d) Adequacy/effectiveness of quality control program and adherence to contract quality assurance requirements (without adverse effect on performance).	<input type="radio"/> VG S M U N
2. SCHEDULE/TIMELINESS OF PERFORMANCE:	
a) Compliance with contract delivery/completion schedules including any significant intermediate milestones. <i>(If liquidated damages were assessed or the schedule was not met, please address below).</i>	<input type="radio"/> VG S M U N
b) Rate the contractor's use of available resources to accomplish tasks identified in the contract.	<input type="radio"/> VG S M U N
3. CUSTOMER SATISFACTION:	
a) To what extent were the end users satisfied with the project?	<input type="radio"/> VG S M U N
b) Contractor was reasonable and cooperative in dealing with your staff (including the ability to successfully resolve disagreements/disputes; responsiveness to administrative reports, communication, and professionalism).	<input type="radio"/> VG S M U N
c) To what extent was the contractor cooperative, professional, and concerned with the interests of the customer?	<input type="radio"/> VG S M U N
d) Overall customer satisfaction	<input type="radio"/> VG S M U N
4. MANAGEMENT/PERSONNEL/LABOR:	
a) Effectiveness of on-site management of subcontractors, suppliers, materials, and/or labor force?	<input type="radio"/> VG S M U N
b) Ability to hire, apply, and retain a qualified workforce through this effort.	<input type="radio"/> VG S M U N
c) Government Property Control.	<input type="radio"/> VG S M U N
d) Knowledge/expertise demonstrated by contractor personnel.	<input type="radio"/> VG S M U N
e) Utilization of Small Business.	<input type="radio"/> VG S M U N
f) Ability to simultaneously manage multiple projects with multiple disciplines.	<input type="radio"/> VG S M U N
g) Ability to assimilate and incorporate changes in requirements and/or priorities, including planning, execution and response to Government changes.	<input type="radio"/> VG S M U N
h) Effectiveness of overall management (including ability to effectively lead, manage and control the program).	<input type="radio"/> VG S M U N

**2 | The City of Chandler JOC Asphaltic Concrete Mill & Inlay, Maintenance & Repair Services**

<b>5. COST/FINANCIAL MANAGEMENT:</b>	
a) Ability to meet the terms and conditions within the contractually agreed price(s)?	<input type="radio"/> VG <input type="radio"/> S <input type="radio"/> M <input type="radio"/> U <input type="radio"/> N
b) Contractor proposed innovative alternative methods/processes that reduced cost, improved maintainability or other factors that benefited the client.	<input type="radio"/> VG <input type="radio"/> S <input type="radio"/> M <input type="radio"/> U <input type="radio"/> N
c) If this is/was a Government cost type contract, please rate the Contractor's timeliness and accuracy in submitting monthly invoices with appropriate back-up documentation, monthly status reports/budget variance reports, compliance with established budgets and avoidance of significant and/or unexplained variances (under runs or overruns).	<input type="radio"/> VG <input type="radio"/> S <input type="radio"/> M <input type="radio"/> U <input type="radio"/> N
d) Is the Contractor's accounting system adequate for management and tracking of costs? <i>If no, please explain in Remarks section.</i>	<input checked="" type="radio"/> Yes <input type="radio"/> No
e) If this is/was a Government contract, has/was this contract been partially or completely terminated for default or convenience or are there any pending terminations? <i>Indicate if show cause or cure notices were issued, or any default action in comment section below.</i>	<input type="radio"/> Yes <input checked="" type="radio"/> No
f) Have there been any indications that the contractor has had any financial problems? <i>If yes, please explain below.</i>	<input type="radio"/> Yes <input checked="" type="radio"/> No
<b>6. SAFETY/SECURITY:</b>	
a) To what extent was the contractor able to maintain an environment of safety, adhere to its approved safety plan, and respond to safety issues? (Includes: following the users rules, regulations, and requirements regarding housekeeping, safety, correction of noted deficiencies, etc.).	<input type="radio"/> VG <input type="radio"/> S <input type="radio"/> M <input type="radio"/> U <input type="radio"/> N
b) Contractor complied with all security requirements for the project and personnel security requirements.	<input type="radio"/> VG <input type="radio"/> S <input type="radio"/> M <input type="radio"/> U <input type="radio"/> N
<b>7. GENERAL:</b>	
a) Ability to successfully respond to emergency and/or surge situations (including notifying COR, PM or Contracting Officer in a timely manner regarding urgent contractual issues).	<input type="radio"/> VG <input type="radio"/> S <input type="radio"/> M <input type="radio"/> U <input type="radio"/> N
b) Compliance with contractual terms/ provisions <i>(explain if specific issues).</i>	<input type="radio"/> VG <input type="radio"/> S <input type="radio"/> M <input type="radio"/> U <input type="radio"/> N
c) Would you hire or work with this firm again? <i>(if no, please explain below)</i>	<input checked="" type="radio"/> Yes <input type="radio"/> No
d) In summary, provide an overall rating for the work performed by this contractor.	<input type="radio"/> VG <input type="radio"/> S <input type="radio"/> M <input type="radio"/> U <input type="radio"/> N

**Please provide responses to the questions above (if applicable) and/or additional remarks. Additionally, please provide a brief narrative addressing specific strengths, weaknesses, deficiencies, or other comments which may assist the City in evaluating performance risk. (please attach additional pages if necessary).**

**Client Signature:** *Charlie Serna*

**Date:** 06/12/2024

# PAST PERFORMANCE QUESTIONNAIRE

## PAST PERFORMANCE QUESTIONNAIRE

3 | Tawn af Paradise Valley, Asphalt Street

### CONTRACT INFORMATION (To be completed by Contractor)

#### 1. Contractor Information:

Firm Name: M.R. TANNER DEVELOPMENT & CONSTRUCTION, LLC Email: CMONTOYA@MRTANNER.COM  
Address: 1327 W. SAN PEDRO, GILBERT, AZ 85233 Contact Name: CHAD MONTOYA  
Phone Number: 480-633-8500 Contact Phone: 480-363-3163

2. Work Performed as:  Prime Contractor  Sub Contractor  Joint Venture  Other (Explain):

#### 3. Contract Information:

Contract Number: CON-18-0012-PBW  
Contract Type:  Firm Fixed Price  Cost Reimbursement  Other (Please specify): JOC  
Contract Title: TOWN OF PARADISE VALLEY STREET PRESERVATION. Contract Location: VARIOUS THROUGHOUT CITY

Award Date (mm/dd/yy): February 2018  
Contract Completion Date: DECEMBER 31, 2022 Actual Completion Date: DECEMBER 31, 2022  
Explain Differences: N/A

Original Contract Price (Award Amount): \$3,316,564  
Final Contract Price (to include all modifications, if applicable): \$4,427,525  
Explain Differences: CONTINUED TO RENEW JOC CONTRACT AND CONTINUING WORK.

#### 4. Project Description:

Complexity of Work:  High  Med  Routine  
How is this project relevant to project of submission? (Please provide details such as similar equipment, requirements, conditions, etc.) M.R. TANNER PERFORMED ASPHALT MILLING, PREPERATION OF SURFACES & CLEANING. ENGINEERED APPROVED MIXES & SPECIFICATION, TRAFFIC CONTROL, MANHOLE/UTILITY ADJUSTMENTS, COMMUNITY OUTREACH, PROTECTION OF LANDSCAPE & ADJACENT PROPERTY, MULTIPLE SITES SIMULTABEOUSLY, & ASPHALT EMULSION SEAL COAT-PMM.

### CLIENT INFORMATION (To be completed by Client)

#### 5. Client Information:

Name: JERRY COOPER Phone Number: 602-717-9544  
Title: PUBLIC WORKS SUPERINTENDENT Email Address: JCOOPER@PARADISE VALLEYAZ.GOV

#### 6. Describe the client's role in the project:

RESPONSIBLE FOR MANAGING THE PLANNING, MAINTENANCE, & CONSTRUCTION OF THE TOWNS INFRASTRUCTURE, FACILITIES, AND TRAFFIC SIGNALS.

Client Signature: Jerry Cooper Date: 06/12/2024

ADJECTIVE RATINGS AND DEFINITIONS TO BE USED TO BEST REFLECT  
YOUR EVALUATION OF THE CONTRACTOR'S PERFORMANCE

3 | Town of Paradise Valley, Asphalt Street Overlay  
JOC

RATING	DEFINITION	NOTE
<b>(E) Exceptional</b>	Performance meets contractual requirements and exceeds many to the Government/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with few minor problems for which corrective actions taken by the contractor were highly effective	An Exceptional rating is appropriate when the contractor successfully performed multiple significant events that were of benefit to the Government/Owner. A singular benefit, however, could be of such magnitude that it alone constitutes an Exceptional rating. Also there should have been NO significant weaknesses identified.
<b>(VG) Very Good</b>	Performance meets contractual requirements and exceeds some to the Government/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with some minor problems for which corrective actions taken by the contractor were effective	A Very Good rating is appropriate when the Contractor successfully performed a significant event that was a benefit to the Government/Owner. There should have been no significant weaknesses identified.
<b>(S) Satisfactory</b>	Performance meets minimum contractual requirements. The contractual performance of the element or sub-element contains some minor problems for which corrective actions taken by the contractor appear or were satisfactory	A Satisfactory rating is appropriate when there were only minor problems, or major problems that the contractor recovered from without impact to the contract. There should have been NO significant weaknesses identified. Per DOD policy, a fundamental principle of assigning ratings is that the contractors will not be assessed a rating lower than Satisfactory solely for not performing beyond the requirements of the contract.
<b>(M) Marginal</b>	Performance does not meet some contractual requirements. The contractual performance of the element or sub-element being assessed reflects a serious problem for which the contractor has not yet identified corrective actions. The contractor's proposed actions appear only marginally effective or were not fully implemented.	A Marginal rating is appropriate when a significant event occurred that the contractor had trouble overcoming which impacted the Government/Owner.
<b>(U) Unsatisfactory</b>	Performance does not meet most contractual requirements and recovery is not likely in a timely manner. The contractual performance of the element or sub-element contains serious problem(s) for which the contractor's corrective actions appear or were ineffective.	An Unsatisfactory rating is appropriate when multiple significant events occurred that the contractor had trouble overcoming and which impacted the Government/Owner. A singular problem, however, could be of such serious magnitude that it alone constitutes an unsatisfactory rating.
<b>(N) Not Applicable</b>	No information or did not apply to your contract	Rating will be neither positive nor negative.

3 | Town of Paradise Valley, Asphalt Street Overlay  
JOC

PAST PERFORMANCE EVALUATION  
(TO BE COMPLETED BY CLIENT)

a) Quality of technical data/report preparation efforts	<input type="checkbox"/> E	VG	S	M	U	N
b) Ability to meet quality standards specified for technical performance	<input type="checkbox"/> E	VG	S	M	U	N
c) Timeliness/effectiveness of contract problem resolution without extensive customer guidance	<input type="checkbox"/> E	VG	S	M	U	N
d) Adequacy/effectiveness of quality control program and adherence to contract quality assurance requirements (without adverse effect on performance)	<input type="checkbox"/> E	VG	S	M	U	N
<b>2. SCHEDULE/TIMELINESS OF PERFORMANCE:</b>						
a) Compliance with contract delivery/completion schedules including any significant intermediate milestones. <i>(If liquidated damages were assessed or the schedule was not met, please address below)</i>	<input type="checkbox"/> E	VG	S	M	U	N
b) Rate the contractor's use of available resources to accomplish tasks identified in the contract	<input type="checkbox"/> E	VG	S	M	U	N
<b>Customer Satisfaction:</b>						
a) To what extent were the end users satisfied with the project?	<input type="checkbox"/> E	VG	S	M	U	N
b) Contractor was reasonable and cooperative in dealing with your staff (including the ability to successfully resolve disagreements/disputes; responsiveness to administrative reports, communication and professionalism)	<input type="checkbox"/> E	VG	S	M	U	N
c) To what extent was the contractor cooperative, professional, and concerned with the interests of the customer?	<input type="checkbox"/> E	VG	S	M	U	N
d) Overall customer satisfaction	<input type="checkbox"/> E	VG	S	M	U	N
<b>Management:</b>						
a) Effectiveness of on-site management of subcontractors, suppliers, materials, and/or labor force?	<input type="checkbox"/> E	VG	S	M	U	N
b) Ability to hire, apply, and retain a qualified workforce through this effort	<input type="checkbox"/> E	VG	S	M	U	N
c) Government Property Control	<input type="checkbox"/> E	VG	S	M	U	<input type="checkbox"/> N
d) Knowledge/expertise demonstrated by contractor personnel	<input type="checkbox"/> E	VG	S	M	U	N
e) Utilization of Small Business	<input type="checkbox"/> E	VG	S	M	U	<input type="checkbox"/> N
f) Ability to simultaneously manage multiple projects with multiple disciplines	<input type="checkbox"/> E	VG	S	M	U	N
g) Ability to assimilate and incorporate changes in requirements and/or priorities, including planning, execution and response to Government changes.	<input type="checkbox"/> E	VG	S	M	U	N
h) Effectiveness of overall management (including ability to effectively lead, manage and control the program)	<input type="checkbox"/> E	VG	S	M	U	N

3 | Town of Paradise Valley, Asphalt Street Overlay JOC

a) Ability to meet the terms and conditions within the contractually agreed price(s)?	<input checked="" type="radio"/> E	VG	S	M	U	N
b) Contractor proposed innovative alternative methods/processes that reduced cost, improved maintainability or other factors that benefited the client	<input checked="" type="radio"/> E	VG	S	M	U	N
c) If this is/was a Government cost type contract, please rate the Contractor's timeliness and accuracy in submitting monthly invoices with appropriate back-up documentation, monthly status reports/budget variance reports, compliance with established budgets and avoidance of significant and/or unexplained variances (under runs or overruns)	<input checked="" type="radio"/> E	VG	S	M	U	N
d) Is the Contractor's accounting system adequate for management and tracking of costs? <i>If no, please explain in Remarks section.</i>	<input checked="" type="radio"/> Yes					No
e) If this is/was a Government contract, has/was this contract been partially or completely terminated for default or convenience or are there any pending terminations? <i>Indicate if show cause or cure notices were issued, or any default action in comment section below.</i>		Yes				No
f) Have there been any indications that the contractor has had any financial problems? <i>If yes, please explain below.</i>		Yes				No
a) To what extent was the contractor able to maintain an environment of safety, adhere to its approved safety plan, and respond to safety issues? (Includes: following the users rules, regulations, and requirements regarding housekeeping, safety, correction of noted deficiencies, etc.)	<input checked="" type="radio"/> E	VG	S	M	U	N
b) Contractor complied with all security requirements for the project and personnel security requirements.	<input checked="" type="radio"/> E	VG	S	M	U	N
a) Ability to successfully respond to emergency and/or surge situations (including notifying COR, PM or Contracting Officer in a timely manner regarding urgent contractual issues)	<input checked="" type="radio"/> E	VG	S	M	U	N
b) Compliance with contractual terms/ provisions ( <i>explain if specific issues</i> )	<input type="radio"/> E	VG	S	M	U	<input checked="" type="radio"/> N
c) Would you hire or work with this firm again? ( <i>if no, please explain below</i> )		Yes				No
d) In summary, provide an overall rating for the work performed by this contractor.	<input type="radio"/> E	VG	S	M	U	<input type="radio"/> N

Please provide responses to the questions above (if applicable) and/or additional remarks. Additionally, please provide a brief narrative addressing specific strengths, weaknesses, deficiencies, or other comments which the City will use in evaluating performance risk. (please attach additional pages if necessary)

Client Signature: 

Date: 06/12/2024

PAST PERFORMANCE QUESTIONNAIRE

4 | Town of Fountain Hills Pavement Preservation JOC

**CONTRACT INFORMATION (To be completed by Contractor)**

**1. Contractor Information:**  
 Firm Name: M.R. TANNER DEVELOPMENT & CONSTRUCTION, LLC Email: CMONTOYA@MRTANNER.COM  
 Address: 1327 W. SAN PEDRO, GILBERT, AZ 85233 Contact Name: CHAD MONTOYA  
 Phone Number: 480-633-8500 Contact Phone: 480-363-3163

**2. Work Performed as:**  Prime Contractor  Sub Contractor  Joint Venture  Other (Explain):

**3. Contract Information:**  
 Contract Number: 2020-065  
 Contract Type:  Firm Fixed Price  Cost Reimbursement  Other (Please specify): JOC  
 Contract Title: FOUNTAIN HILLS OVERLAY Contract Location: VARIOUS THROUGHOUT CITY  
 Award Date (mm/dd/yy): OCTOBER 2019  
 Contract Completion Date: JUNE 30, 2022 Actual Completion Date: JUNE 30, 2022  
 Explain Differences: N/A  
 Original Contract Price (Award Amount): \$3,400,000  
 Final Contract Price (to include all modifications, if applicable): \$29,704,312  
 Explain Differences: CONTINUED TO RENEW JOC CONTRACT AND CONTINUING WORK.

**4. Project Description:**  
 Complexity of Work:  High  Med  Routine  
 How is this project relevant to project of submission? (Please provide details such as similar equipment, requirements, conditions, etc.) M.R. TANNER PERFORMED ASPHALT MILLING, PREPERATION OF SURFACES & CLEANING. ENGINEERED APPROVED MIXES & SPECIFICATION, TRAFFIC CONTROL, MANHOLE/UTILITY ADJUSTMENTS, COMMUNITY OUTREACH, PROTECTION OF LANDSCAPE & ADJACENT PROPERTY, MULTIPLE SITES SIMULTABEOUSLY, & ASPHALT EMULSION SEAL COAT-PMM.

**CLIENT INFORMATION (To be completed by Client)**

**5. Client Information:**  
 Name: JEFF PIERCE Phone Number: 480-816-5129  
 Title: PUBLIC WORKS STREET SUPERINTENDENT Email Address: JPIERCE@FOUNTAINHILLSAZ.GOV

**6. Describe the client's role in the project:**  
RESPONSIBLE FOR MANAGING THE MAINTENANCE OF TRAFFIC SIGNALS, STREET RELATED EMERGENCY RESPONSES, ASPHALT, CURB, AND SIDEWALK REPAIRS. ALSO RESPONSIBLE FOR THE MANAGEMENT OF STREET MAITENANCE.

Client Signature: **APPROVED** Date: By Jeff Pierce at 9:09 am, Jun 12, 2024

ADJECTIVE RATINGS AND DEFINITIONS TO BE USED TO BEST REFLECT  
YOUR EVALUATION OF THE CONTRACTOR'S PERFORMANCE

4 | Town of Fountain Hills Pavement Preservation JOC

RATING	DEFINITION	NOTE
<b>(E) Exceptional</b>	Performance meets contractual requirements and exceeds many to the Government/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with few minor problems for which corrective actions taken by the contractor were highly effective	An Exceptional rating is appropriate when the contractor successfully performed multiple significant events that were of benefit to the Government/Owner. A singular benefit, however, could be of such magnitude that it alone constitutes an Exceptional rating. Also there should have been NO significant weaknesses identified.
<b>(VG) Very Good</b>	Performance meets contractual requirements and exceeds some to the Government/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with some minor problems for which corrective actions taken by the contractor were effective	A Very Good rating is appropriate when the Contractor successfully performed a significant event that was a benefit to the Government/Owner. There should have been no significant weaknesses identified.
<b>(S) Satisfactory</b>	Performance meets minimum contractual requirements. The contractual performance of the element or sub-element contains some minor problems for which corrective actions taken by the contractor appear or were satisfactory	A Satisfactory rating is appropriate when there were only minor problems, or major problems that the contractor recovered from without impact to the contract. There should have been NO significant weaknesses identified. Per DOD policy, a fundamental principle of assigning ratings is that the contractors will not be assessed a rating lower than Satisfactory solely for not performing beyond the requirements of the contract.
<b>(M) Marginal</b>	Performance does not meet some contractual requirements. The contractual performance of the element or sub-element being assessed reflects a serious problem for which the contractor has not yet identified corrective actions. The contractor's proposed actions appear only marginally effective or were not fully implemented.	A Marginal rating is appropriate when a significant event occurred that the contractor had trouble overcoming which impacted the Government/Owner.
<b>(U) Unsatisfactory</b>	Performance does not meet most contractual requirements and recovery is not likely in a timely manner. The contractual performance of the element or sub-element contains serious problem(s) for which the contractor's corrective actions appear to have been or were ineffective.	An Unsatisfactory rating is appropriate when multiple significant events occurred that the contractor had trouble overcoming and which impacted the Government/Owner. A singular problem, however, could be of such serious magnitude that it alone constitutes an unsatisfactory rating.
<b>(N) Not Applicable</b>	No information or did not apply to your contract	Rating will be neither positive nor negative.

4 | Town of Fountain Hills Pavement Preservation JOC

PAST PERFORMANCE EVALUATION  
(TO BE COMPLETED BY CLIENT)

a) Quality of technical data/report preparation efforts	E	<input checked="" type="radio"/> VG	S	M	U	N
b) Ability to meet quality standards specified for technical performance	<input checked="" type="radio"/> E	VG	S	M	U	N
c) Timeliness/effectiveness of contract problem resolution without extensive customer guidance	<input checked="" type="radio"/> E	VG	S	M	U	N
d) Adequacy/effectiveness of quality control program and adherence to contract quality assurance requirements (without adverse effect on performance)	<input checked="" type="radio"/> E	VG	S	M	U	N
<b>2. SCHEDULE/TIMELINESS OF PERFORMANCE:</b>						
a) Compliance with contract delivery/completion schedules including any significant intermediate milestones. (If liquidated damages were assessed or the schedule was not met, please address below)	<input checked="" type="radio"/> E	VG	S	M	U	N
b) Rate the contractor's use of available resources to accomplish tasks identified in the contract	<input checked="" type="radio"/> E	VG	S	M	U	N
<b>Customer Satisfaction:</b>						
a) To what extent were the end users satisfied with the project?	<input checked="" type="radio"/> E	VG	S	M	U	N
b) Contractor was reasonable and cooperative in dealing with your staff (including the ability to successfully resolve disagreements/disputes; responsiveness to administrative reports, communication and professionalism)	<input checked="" type="radio"/> E	VG	S	M	U	N
c) To what extent was the contractor cooperative, professional, and concerned with the interests of the customer?	<input checked="" type="radio"/> E	VG	S	M	U	N
d) Overall customer satisfaction	<input checked="" type="radio"/> E	VG	S	M	U	N
<b>Contractor Management:</b>						
a) Effectiveness of on-site management of subcontractors, suppliers, materials, and/or labor force?	<input checked="" type="radio"/> E	VG	S	M	U	N
b) Ability to hire, apply, and retain a qualified workforce through this effort	<input checked="" type="radio"/> E	VG	S	M	U	N
c) Government Property Control	E	VG	S	M	U	<input checked="" type="radio"/> N
d) Knowledge/expertise demonstrated by contractor personnel	<input checked="" type="radio"/> E	VG	S	M	U	N
e) Utilization of Small Business	<input checked="" type="radio"/> E	VG	S	M	U	N
f) Ability to simultaneously manage multiple projects with multiple disciplines	<input checked="" type="radio"/> E	VG	S	M	U	N
g) Ability to assimilate and incorporate changes in requirements and/or priorities, including planning, execution and response to Government changes.	<input checked="" type="radio"/> E	VG	S	M	U	N
h) Effectiveness of overall management (including ability to effectively lead, manage and control the program)	<input checked="" type="radio"/> E	VG	S	M	U	N

4 | Town of Fountain Hills Pavement Preservation JOC

5. COST/FINANCIAL MANAGEMENT:	
a) Ability to meet the terms and conditions within the contractually agreed price(s)?	<input checked="" type="radio"/> E VG S M U N
b) Contractor proposed innovative alternative methods/processes that reduced cost, improved maintainability or other factors that benefited the client.	<input checked="" type="radio"/> E VG S M U N
c) If this is/was a Government cost type contract, please rate the Contractor's timeliness and accuracy in submitting monthly invoices with appropriate back-up documentation, monthly status reports/budget variance reports, compliance with established budgets and avoidance of significant and/or unexplained variances (under runs or overruns).	E <input checked="" type="radio"/> VG S M U N
d) Is the Contractor's accounting system adequate for management and tracking of costs? <i>If no, please explain in Remarks section.</i>	<input checked="" type="radio"/> Yes No
e) If this is/was a Government contract, has/was this contract been partially or completely terminated for default or convenience or are there any pending terminations? <i>Indicate if show cause or cure notices were issued, or any default action in comment section below.</i>	Yes <input checked="" type="radio"/> NO
f) Have there been any indications that the contractor has had any financial problems? <i>If yes, please explain below.</i>	Yes <input checked="" type="radio"/> NO
6. SAFETY/SECURITY:	
a) To what extent was the contractor able to maintain an environment of safety, adhere to its approved safety plan, and respond to safety issues? (Includes: following the users rules, regulations, and requirements regarding housekeeping, safety, correction of noted deficiencies, etc.).	<input checked="" type="radio"/> E VG S M U N
b) Contractor complied with all security requirements for the project and personnel security requirements.	<input checked="" type="radio"/> E VG S M U N
7. GENERAL:	
a) Ability to successfully respond to emergency and/or surge situations (including notifying COR, PM or Contracting Officer in a timely manner regarding urgent contractual issues).	<input checked="" type="radio"/> E VG S M U N
b) Compliance with contractual terms/ provisions <i>(explain if specific issues).</i>	<input checked="" type="radio"/> E VG S M U N
c) Would you hire or work with this firm again? <i>(if no, please explain below)</i>	<input checked="" type="radio"/> Yes No
d) In summary, provide an overall rating for the work performed by this contractor.	<input checked="" type="radio"/> E VG S M U N

Please provide responses to the questions above (if applicable) and/or additional remarks. Additionally, please provide a brief narrative addressing specific strengths, weaknesses, deficiencies, or other comments which may assist the City in evaluating performance risk. *(please attach additional pages if necessary).*

**APPROVED**  
By Jeff Pierce at 9:15 am, Jun 12, 2024

Client Signature: \_\_\_\_\_ Date: \_\_\_\_\_

PAST PERFORMANCE QUESTIONNAIRE

5 | City  Surprise JDC

CONTRACT INFORMATION (To be completed by Contractor)	
<b>1. Contractor Information:</b>	
Firm Name: <u>M.R. TANNER DEVELOPMENT &amp; CONSTRUCTION, LLC</u>	Email: <u>CMONTOYA@MRTANNER.COM</u>
Address: <u>1327 W. SAN PEDRO, GILBERT, AZ 85233</u>	Contact Name: <u>CHAD MONTOYA</u>
Phone Number: <u>480 633-8500</u>	Contact Phone: <u>480-363-3163</u>
<b>2. Work Performed as:</b> <input checked="" type="checkbox"/> Prime Contractor <input type="checkbox"/> Sub Contractor <input type="checkbox"/> Joint Venture <input type="checkbox"/> Other (Explain):	
<b>3. Contract Information:</b>	
Contract Number: <u>2230432</u>	
Contract Type: <input checked="" type="checkbox"/> Firm Fixed Price <input type="checkbox"/> Cost Reimbursement <input type="checkbox"/> Other (Please specify):	
Contract Title: <u>CITY OF SURPRISE OVERLAY</u>	Contract Location: <u>VARIOUS THROUGHOUT CITY</u>
Award Date (mm/dd/yy): <u>AUGUST 2023</u>	
Contract Completion Date: <u>NOVEMBER 2023</u>	Actual Completion Date: <u>NOVEMBER 2023</u>
Explain Differences: <u>N/A</u>	
Original Contract Price (Award Amount): <u>\$2,442,332</u>	
Final Contract Price (to include all modifications, if applicable): <u>\$2,442,332</u>	
Explain Differences: <u>N/A</u>	
<b>4. Project Description:</b>	
Complexity of Work: <input checked="" type="checkbox"/> High <input type="checkbox"/> Med <input type="checkbox"/> Routine	
How is this project relevant to project of submission? (Please provide details such as similar equipment, requirements, conditions, etc.) <u>M.R. TANNER PERFORMED ASPHALT MILLING, PREPERATION OF SURFACES &amp; CLEANING. ENGINEERED APPROVED MIXES &amp; SPECIFICATION, TRAFFIC CONTROL, MANHOLE/UTILITY ADJUSTMENTS, COMMUNITY OUTREACH, PROTECTION OF LANDSCAPE &amp; ADJACENT PROPERTY, &amp; MULTIPLE SITES SIMULTANEOUSLY.</u>	
CLIENT INFORMATION (To be completed by Client)	
<b>5. Client Information:</b>	
Name: <u>TITO SOLIS</u>	Phone Number: <u>623-222-6234</u>
Title: <u>PUBLIC WORKS STREET SUPERVISOR</u>	Email Address: <u>TITO.SOLIS@SURPRISEAZ.GOV</u>
<b>6. Describe the client's role in the project:</b>	
<u>RESPONSIBLE FOR MANAGING THE MAITENANCE AND DESIGN/PLANNING INCLUDING SIGNS, SIGNALS, PAVEMENT MARKINGS WORK ZONE TRAFFIC CONTROL, INCIDENT RESPONSE, AND ROADWAYS</u>	
Client Signature: <u>Tito Solis</u>	Date: <u>June 12, 2024</u>

**ADJECTIVE RATINGS AND DEFINITIONS TO BE USED TO BEST REFLECT  
YOUR EVALUATION OF THE CONTRACTOR'S PERFORMANCE**

5 | City  Surprise JDC


<b>RATING</b>	<b>DEFINITION</b>	<b>NOTE</b>
<b>(E) Exceptional</b>	Performance meets contractual requirements and exceeds many to the Government/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with few minor problems for which corrective actions taken by the contractor were highly effective.	An Exceptional rating is appropriate when the contractor successfully performed multiple significant events that were of benefit to the Government/Owner. A singular benefit, however, could be of such magnitude that it alone constitutes an Exceptional rating. Also there should have been NO significant weaknesses identified.
<b>(VG) Very Good</b>	Performance meets contractual requirements and exceeds some to the Government/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with some minor problems for which corrective actions taken by the contractor were effective.	A Very Good rating is appropriate when the Contractor successfully performed a significant event that was a benefit to the Government/Owner. There should have been no significant weaknesses identified.
<b>(S) Satisfactory</b>	Performance meets minimum contractual requirements. The contractual performance of the element or sub-element contains some minor problems for which corrective actions taken by the contractor appear or were satisfactory.	A Satisfactory rating is appropriate when there were only minor problems, or major problems that the contractor recovered from without impact to the contract. There should have been NO significant weaknesses identified. Per DOD policy, a fundamental principle of assigning ratings is that the contractors will not be assessed a rating lower than Satisfactory solely for not performing beyond the requirements of the contract.
<b>(M) Marginal</b>	Performance does not meet some contractual requirements. The contractual performance of the element or sub-element being assessed reflects a serious problem for which the contractor has not yet identified corrective actions. The contractor's proposed actions appear only marginally effective or were not fully implemented.	A Marginal rating is appropriate when a significant event occurred that the contractor had trouble overcoming which impacted the Government/Owner.
<b>(U) Unsatisfactory</b>	Performance does not meet most contractual requirements and recovery is not likely in a timely manner. The contractual performance of the element or sub-element contains serious problem(s) for which the contractor's corrective actions appear to have been or were ineffective.	An Unsatisfactory rating is appropriate when multiple significant events occurred that the contractor had trouble overcoming and which impacted the Government/Owner. A singular problem, however, could be of such serious magnitude that it alone constitutes an unsatisfactory rating.
<b>(N) Not Applicable</b>	No information or did not apply to your contract.	Rating will be neither positive nor negative.

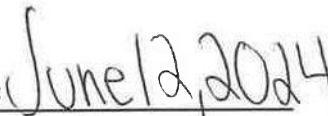
**PAST PERFORMANCE EVALUATION**  
(TO BE COMPLETED BY CLIENT)

1. QUALITY:					
a) Quality of technical data/report preparation efforts.	<input checked="" type="radio"/> E	VG	S	M	U N
b) Ability to meet quality standards specified for technical performance.	<input checked="" type="radio"/> E	VG	S	M	U N
c) Timeliness/effectiveness of contract problem resolution without extensive customer guidance.	<input checked="" type="radio"/> E	VG	S	M	U N
d) Adequacy/effectiveness of quality control program and adherence to contract quality assurance requirements (without adverse effect on performance).	<input checked="" type="radio"/> E	VG	S	M	U N
2. SCHEDULE/TIMELINESS OF PERFORMANCE:					
a) Compliance with contract delivery/completion schedules including any significant intermediate milestones. (If liquidated damages were assessed or the schedule was not met, please address below).	<input checked="" type="radio"/> E	VG	S	M	U N
b) Rate the contractor's use of available resources to accomplish tasks identified in the contract.	<input checked="" type="radio"/> E	VG	S	M	U N
3. CUSTOMER SATISFACTION:					
a) To what extent were the end users satisfied with the project?	<input checked="" type="radio"/> E	VG	S	M	U N
b) Contractor was reasonable and cooperative in dealing with your staff (including the ability to successfully resolve disagreements/disputes; responsiveness to administrative reports, communication, and professionalism).	<input checked="" type="radio"/> E	VG	S	M	U N
c) To what extent was the contractor cooperative, professional, and concerned with the interests of the customer?	<input checked="" type="radio"/> E	VG	S	M	U N
d) Overall customer satisfaction	<input checked="" type="radio"/> E	VG	S	M	U N
4. MANAGEMENT/PERSONNEL/LABOR:					
a) Effectiveness of on-site management of subcontractors, suppliers, materials, and/or labor force?	<input checked="" type="radio"/> E	VG	S	M	U N
b) Ability to hire, apply, and retain a qualified workforce through this effort.	<input checked="" type="radio"/> E	VG	S	M	U N
c) Government Property Control.	<input checked="" type="radio"/> E	VG	S	M	U N
d) Knowledge/expertise demonstrated by contractor personnel.	<input checked="" type="radio"/> E	VG	S	M	U N
e) Utilization of Small Business.	<input checked="" type="radio"/> E	VG	S	M	U N
f) Ability to simultaneously manage multiple projects with multiple disciplines.	<input checked="" type="radio"/> E	VG	S	M	U N
g) Ability to assimilate and incorporate changes in requirements and/or priorities, including planning, execution and response to Government changes.	<input checked="" type="radio"/> E	VG	S	M	U N
h) Effectiveness of overall management (including ability to effectively lead, manage and control the program).	<input checked="" type="radio"/> E	VG	S	M	U N

<b>5. COST/FINANCIAL MANAGEMENT:</b>	
a) Ability to meet the terms and conditions within the contractually agreed price(s)?	<input checked="" type="radio"/> E VG S M U N
b) Contractor proposed innovative alternative methods/processes that reduced cost, improved maintainability or other factors that benefited the client.	<input checked="" type="radio"/> E VG S M U N
c) If this is/was a Government cost type contract, please rate the Contractor's timeliness and accuracy in submitting monthly invoices with appropriate back-up documentation, monthly status reports/budget variance reports, compliance with established budgets and avoidance of significant and/or unexplained variances (under runs or overruns).	<input checked="" type="radio"/> E VG S M U N
d) Is the Contractor's accounting system adequate for management and tracking of costs? <i>If no, please explain in Remarks section.</i>	<input checked="" type="radio"/> Yes No
e) If this is/was a Government contract, has/was this contract been partially or completely terminated for default or convenience or are there any pending terminations? <i>Indicate if show cause or cure notices were issued, or any default action in comment section below.</i>	Yes <input checked="" type="radio"/> No
f) Have there been any indications that the contractor has had any financial problems? <i>If yes, please explain below.</i>	Yes <input checked="" type="radio"/> No
<b>6. SAFETY/SECURITY:</b>	
a) To what extent was the contractor able to maintain an environment of safety, adhere to its approved safety plan, and respond to safety issues? (Includes: following the users rules, regulations, and requirements regarding housekeeping, safety, correction of noted deficiencies, etc.).	<input checked="" type="radio"/> E VG S M U N
b) Contractor complied with all security requirements for the project and personnel security requirements.	<input checked="" type="radio"/> E VG S M U N
<b>7. GENERAL:</b>	
a) Ability to successfully respond to emergency and/or surge situations (including notifying COR, PM or Contracting Officer in a timely manner regarding urgent contractual issues).	<input checked="" type="radio"/> E VG S M U N
b) Compliance with contractual terms/ provisions <i>(explain if specific issues).</i>	<input checked="" type="radio"/> E VG S M U N
c) Would you hire or work with this firm again? <i>(if no, please explain below)</i>	<input checked="" type="radio"/> Yes No
d) In summary, provide an overall rating for the work performed by this contractor.	<input checked="" type="radio"/> E VG S M U N

Please provide responses to the questions above (if applicable) and/or additional remarks. Additionally, please provide a brief narrative addressing specific strengths, weaknesses, deficiencies, or other comments which may assist the City in evaluating performance risk. *(please attach additional pages if necessary).*

Client Signature: 

Date: 

PAST PERFORMANCE QUESTIONNAIRE

B | Town of Queen Creek Cooperative JOC Emergency  
B General Repairs

**CONTRACT INFORMATION (To be completed by Contractor)**

**1. Contractor Information:**

Firm Name: M.R. TANNER DEVELOPMENT & CONSTRUCTION, LLC Email: CMONTOYA@MRTANNER.COM  
 Address: 1327 W. SAN PEDRO, GILBERT, AZ 85233 Contact Name: CHAD MONTOYA  
 Phone Number: 480-633-8500 Contact Phone: 480-363-3163

2. Work Performed as:  Prime Contractor  Sub Contractor  Joint Venture  Other (Explain):

**3. Contract Information:**

Contract Number: 20200023-00  
 Contract Type:  Firm Fixed Price  Cost Reimbursement  Other (Please specify): JOC  
 Contract Title: Town of Queen Creek General Repairs Contract Location: VARIOUS THROUGHOUT CITY

Award Date (mm/dd/yy): JULY 2019  
 Contract Completion Date: DECEMBER 31, 2023 Actual Completion Date: DECEMBER 31, 2023  
 Explain Differences: N/A

Original Contract Price (Award Amount): \$630,000.00  
 Final Contract Price (to include all modifications, if applicable): \$3,002,741  
 Explain Differences: CONTINUED TO RENEW JOC CONTRACT AND CONTINUING WORK.

**4. Project Description:**

Complexity of Work:  High  Med  Routine  
 How is this project relevant to project of submission? (Please provide details such as similar equipment, requirements, conditions, etc.) M.R. TANNER PERFORMED ASPHALT MILLING, PREPERATION OF SURFACES & CLEANING. ENGINEERED APPROVED MIXES & SPECIFICATION, TRAFFIC CONTROL, MANHOLE/UTILITY ADJUSTMENTS, COMMUNITY OUTREACH, PROTECTION OF LANDSCAPE & ADJACENT PROPERTY, MULTIPLE SITES SIMULTANEOUSLY, & ASPHALT EMULSION SEAL COAT-PMM.

**CLIENT INFORMATION (To be completed by Client)**

**5. Client Information:**

Name: AGUSTINE BONILLA Phone Number: 480-358-3826  
 Title: PROJECT MANAGER Email Address: AGUSTIN.BONILLA@QUEENCREEKAZ.GOV

**6. Describe the client's role in the project:**

RESPONSIBLE FOR MANAGING THE DAILY MAINTENANCE AND REPAIR OF EXISTING ROADS & RIGHT-OF-WAY OF OVER 900 PAVED LANE MILES & ESTABLISH MAINTENANCE PRIORITIES.

Client Signature: 

Date: 6/13/24

**ADJECTIVE RATINGS AND DEFINITIONS TO BE USED TO BEST REFLECT  
YOUR EVALUATION OF THE CONTRACTOR'S PERFORMANCE**

**B | Town of Queen Creek Cooperative JOC Emergency  
B General Repairs**

<b>RATING</b>	<b>DEFINITION</b>	<b>NOTE</b>
<b>(E ) Exceptional</b>	Performance meets contractual requirements and exceeds many to the Government/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with few minor problems for which corrective actions taken by the contractor were highly effective.	An Exceptional rating is appropriate when the contractor successfully performed multiple significant events that were of benefit to the Government/Owner. A singular benefit, however, could be of such magnitude that it alone constitutes an Exceptional rating. Also there should have been NO significant weaknesses identified.
<b>(VG) Very Good</b>	Performance meets contractual requirements and exceeds some to the Government/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with some minor problems for which corrective actions taken by the contractor were effective.	A Very Good rating is appropriate when the Contractor successfully performed a significant event that was a benefit to the Government/Owner. There should have been no significant weaknesses identified.
<b>(S) Satisfactory</b>	Performance meets minimum contractual requirements. The contractual performance of the element or sub-element contains some minor problems for which corrective actions taken by the contractor appear or were satisfactory.	A Satisfactory rating is appropriate when there were only minor problems, or major problems that the contractor recovered from without impact to the contract. There should have been NO significant weaknesses identified. Per DOD policy, a fundamental principle of assigning ratings is that the contractors will not be assessed a rating lower than Satisfactory solely for not performing beyond the requirements of the contract.
<b>(M) Marginal</b>	Performance does not meet some contractual requirements. The contractual performance of the element or sub-element being assessed reflects a serious problem for which the contractor has not yet identified corrective actions. The contractor's proposed actions appear only marginally effective or were not fully implemented.	A Marginal rating is appropriate when a significant event occurred that the contractor had trouble overcoming which impacted the Government/Owner.
<b>(U) Unsatisfactory</b>	Performance does not meet most contractual requirements and recovery is not likely in a timely manner. The contractual performance of the element or sub-element contains serious problem(s) for which the contractor's corrective actions appear to have been or were ineffective.	An Unsatisfactory rating is appropriate when multiple significant events occurred that the contractor had trouble overcoming and which impacted the Government/Owner. A singular problem, however, could be of such serious magnitude that it alone constitutes an unsatisfactory rating.
<b>(N) Not Applicable</b>	No information or did not apply to your contract.	Rating will be neither positive nor negative.

**6 | Town of Queen Creek Cooperative JOC Emergency  
6 General Repairs**

**PAST PERFORMANCE EVALUATION  
(TO BE COMPLETED BY CLIENT)**

<b>1. QUALITY:</b>	
a) Quality of technical data/report preparation efforts.	<input type="radio"/> F VG S M U N
b) Ability to meet quality standards specified for technical performance.	<input type="radio"/> E VG S M U N
c) Timeliness/effectiveness of contract problem resolution without extensive customer guidance.	<input type="radio"/> E VG S M U N
d) Adequacy/effectiveness of quality control program and adherence to contract quality assurance requirements (without adverse effect on performance).	<input type="radio"/> E VG S M U N
<b>2. SCHEDULE/TIMELINESS OF PERFORMANCE:</b>	
a) Compliance with contract delivery/completion schedules including any significant intermediate milestones. <i>(If liquidated damages were assessed or the schedule was not met, please address below).</i>	<input type="radio"/> E VG S M U N
b) Rate the contractor's use of available resources to accomplish tasks identified in the contract.	<input type="radio"/> E VG S M U N
<b>3. CUSTOMER SATISFACTION:</b>	
a) To what extent were the end users satisfied with the project?	<input type="radio"/> F VG S M U N
b) Contractor was reasonable and cooperative in dealing with your staff (including the ability to successfully resolve disagreements/disputes; responsiveness to administrative reports, communication, and professionalism).	<input type="radio"/> E VG S M U N
c) To what extent was the contractor cooperative, professional, and concerned with the interests of the customer?	<input type="radio"/> E VG S M U N
d) Overall customer satisfaction	<input type="radio"/> E VG S M U N
<b>4. MANAGEMENT/PERSONNEL/LABOR:</b>	
a) Effectiveness of on-site management of subcontractors, suppliers, materials, and/or labor force?	<input type="radio"/> F VG S M U N
b) Ability to hire, apply, and retain a qualified workforce through this effort.	<input type="radio"/> E VG S M U N
c) Government Property Control.	<input type="radio"/> E VG S M U N
d) Knowledge/expertise demonstrated by contractor personnel.	<input type="radio"/> E VG S M U N
e) Utilization of Small Business.	<input type="radio"/> E VG S M U N
f) Ability to simultaneously manage multiple projects with multiple disciplines.	<input type="radio"/> E VG S M U N
g) Ability to assimilate and incorporate changes in requirements and/or priorities, including planning, execution and response to Government changes.	<input type="radio"/> E VG S M U N
h) Effectiveness of overall management (including ability to effectively lead, manage and control the program).	<input type="radio"/> E VG S M U N

**6 | Town of Queen Creek Cooperative JOC Emergency & General Repairs**

5. COST/FINANCIAL MANAGEMENT:	
a) Ability to meet the terms and conditions within the contractually agreed price(s)?	<input checked="" type="radio"/> E VG S M U N
b) Contractor proposed innovative alternative methods/processes that reduced cost, improved maintainability or other factors that benefited the client.	<input checked="" type="radio"/> E VG S M U N
c) If this is/was a Government cost type contract, please rate the Contractor's timeliness and accuracy in submitting monthly invoices with appropriate back-up documentation, monthly status reports/budget variance reports, compliance with established budgets and avoidance of significant and/or unexplained variances (under runs or overruns).	<input checked="" type="radio"/> E VG S M U N
d) Is the Contractor's accounting system adequate for management and tracking of costs? <i>If no, please explain in Remarks section.</i>	<input checked="" type="radio"/> Yes No
e) If this is/was a Government contract, has/was this contract been partially or completely terminated for default or convenience or are there any pending terminations? <i>Indicate if show cause or cure notices were issued, or any default action in comment section below.</i>	Yes <input checked="" type="radio"/> No
f) Have there been any indications that the contractor has had any financial problems? <i>If yes, please explain below.</i>	Yes <input checked="" type="radio"/> No
6. SAFETY/SECURITY:	
a) To what extent was the contractor able to maintain an environment of safety, adhere to its approved safety plan, and respond to safety issues? (Includes: following the users rules, regulations, and requirements regarding housekeeping, safety, correction of noted deficiencies, etc.).	<input checked="" type="radio"/> E VG S M U N
b) Contractor complied with all security requirements for the project and personnel security requirements.	<input checked="" type="radio"/> E VG S M U N
7. GENERAL:	
a) Ability to successfully respond to emergency and/or surge situations (including notifying COR, PM or Contracting Officer in a timely manner regarding urgent contractual issues).	<input checked="" type="radio"/> E VG S M U N
b) Compliance with contractual terms/ provisions <i>(explain if specific issues).</i>	<input checked="" type="radio"/> E VG S M U N
c) Would you hire or work with this firm again? <i>(if no, please explain below)</i>	<input checked="" type="radio"/> Yes No
d) In summary, provide an overall rating for the work performed by this contractor.	<input checked="" type="radio"/> E VG S M U N

**Please provide responses to the questions above (if applicable) and/or additional remarks. Additionally, please provide a brief narrative addressing specific strengths, weaknesses, deficiencies, or other comments which may assist the City in evaluating performance risk. (please attach additional pages if necessary).**

Client Signature:  Date: 6/13/24

**TAB C:**

**EXPERIENCE OF**

# EXPERIENCE OF KEY PERSONNEL

OSHA 30-Hour



**JOSH SKINNER**

**Role: JOC Account Manager,**

**Firm Associated: M. R. Tanner**

**Industry Tenure: 16 years**

**Firm Tenure: 14 years**

Josh has been involved in construction his entire career with many agencies and owners in Arizona. With excellent project management skills on pavement preservation projects and extensive first-hand knowledge in project scheduling, estimating, budgeting and field management, Josh brings the necessary leadership to each project.

He ensures adequate personnel and resources are available through the life of the project. Josh will attend task force meetings with the team and coordinate with the design and phasing of the project to ensure efficiencies in scope, schedule and budget. Throughout the project, Josh’s experience will be an invaluable asset in creating a collaborative atmosphere.

- B. S. Construction Management | Brigham Young University

**Registration/Certifications:**

- Rule 310 Comprehensive Dust Control Certification
- Backflow Certification
- CPR & First-Aid Certified

**Project Assignment/Experience:**

- City of Chandler 2018 Asphalt Concrete Mill & Inlay | Project Manager/Preconstruction Manager
- Town of Paradise Valley 2019 Street Overlay | Project Manager
- City of Phoenix JOC Mill and Overlay Pavement Maintenance Program | Project Manager
- Town of Fountain Hills Pavement Preservation JOC | Project
- City of Surprise JOC for Overlay | Project Manager
- City of Scottsdale 2017-18 Street Replacement | Project Manager/Preconstruction Manager
- City of Scottsdale 2016 Asphalt Patch | Project Manager/Preconstruction Manager
- City of Phoenix Residential Overlay | Project Manager/Preconstruction Manager
- City of Phoenix 2019 T2050 Phoenix Crack Seal Program | Project Manager/Preconstruction Manager
- Fountain Hills 2018 Overlay | Project Manager
- City of Chandler 2019 Minor Services Agreement | Project Manager/Preconstruction Manager
- City of Phoenix Thomas Road Reconstruction | Project Manager/Preconstruction Manager



Hour



**Role: Estimator/Preconstruction Director**

**Firm Associated: M. R. Tanner**

**Industry Tenure: 10 years**

**Firm Tenure: 10 years**

**Chad Montoya**

Chad has more than 10 years of construction experience, specifically paving and concrete operations. Chad will lead the estimating effort and develop budgets, estimates, options analysis, and system analysis for the project during the preconstruction phase as well as support the team during the construction phase. He has excellent project management skills on pavement preservation and concrete projects. With extensive first-hand knowledge in project scheduling, estimating, budgeting, and field management, Chad brings the necessary leadership to each project. He will attend task force meetings with the team and coordinate with the project team to ensure scope, schedule, and budget efficiencies.

- B.S. Construction Management | Arizona State University

**Registration/Certifications:**

- Rule 310 Comprehensive Dust Control Certification
- 
- CPR & First-Aid Certified

**Project Assignment/Experience:**

- Town of Paradise Valley 2019 Street Overlay | Estimator
- Fountain Hills 2018 Overlay | Estimator
- City of Chandler 2018 Asphalt Concrete Mill & Inlay | Project Director
- City of Phoenix JOC Mill and Overlay Pavement Maintenance Program | Precon Director
- City of Surprise JOC for Overlay | Precon Director
- City of Scottsdale 2016 Asphalt Patch | Estimator
- City of Scottsdale 2017-18 Street Replacement | Estimator
- City of Phoenix Residential Overlay | Project Director
- City of Phoenix Thomas Road Reconstruction | Estimator
- City of Phoenix 2016 T2050 Major Street Overlay Program | Estimator
- City of Phoenix 2019 T2050 Phoenix Crack Seal Program | Estimator
- City of Chandler 2019 Minor Services Agreement | Estimator



Hour **Josh Lansford**

**Role: Project Manager**

**Firm Associated: M. R. Tanner**

**Industry Tenure: 25 years**

**Firm Tenure: 9 years**

Josh began his career at M. R. Tanner in the Pavement Management Division and has continued to grow within the company.

During construction, Josh will manage specialty superintendents and trade subcontractors, manpower and equipment needs, temporary and permanent materials, and supplies and methods to complete projects on schedule and within budget. His attention to detail and ability to manage field operations is unmatched. Josh will be an asset for M. R. Tanner and the City of Buckeye on this project.

- B.S. Business Management | Cal Poly University

**Registration/Certifications:**

- Rule 310 Comprehensive Dust Control Certification
- Backflow Certification
- 
- CPR & First-Aid Certified

**Project Assignment/Experience:**

- Town of Paradise Valley 2019 Street Overlay | Project Engineer
- Town of Fountain Hills Mill & Overlay | Project Engineer
- City of Chandler 2018 Asphalt Concrete Mill & Inlay | Project Engineer
- City of Surprise JOC for Overlay | Project Manager
- City of Phoenix JOC Mill and Overlay Pavement Maintenance Program | Project Manager
- City of Phoenix Residential Overlay | Project Engineer
- City of Phoenix Thomas Road Reconstruction | Project Engineer
- City of Phoenix 2019 T2050 Accelerated Local Streets Overlay Program | Project Engineer
- City of Scottsdale 2017 Street Replacement | Project Engineer
- City of Scottsdale 2019 Street Replacement | Project Engineer
- City of Surprise PPP Mill & Overlay #21700275 | Project Engineer
- Apache Wedding Venue Site Concrete, Red Hawk Construction



**RYAN HAMMER**

**Role: Superintendent / Quality Control Manager**

**Firm Associated: M. R. Tanner**

**Industry Tenure: 18 years**

**Firm Tenure: 15 years**

Ryan has over 18 years of experience and has advanced through many positions at M. R. Tanner to become an experienced Project Manager. His extensive knowledge and expertise with asphalt are crucial to our success on every project. As the Quality Control Manager for this project, Ryan will play a pivotal role in ensuring all field activities meet the highest standards. He will develop and implement rigorous quality control plans, perform regular inspections, and document all activities to maintain compliance and continuous improvement. As superintendent, Ryan will oversee all field activities and coordinate with on-site teams daily, providing training on procedures and monitoring progress to identify and address potential issues early. Supervisors and his team trust and respect his direction, as his decision-making is backed by the experience of executing work at every level. Ryan's leadership will be instrumental in delivering a product that meets all specifications and exceeds expectations.

N/A

**Registration/Certifications:**

- Rule 310 Comprehensive Dust Control Certification
- CPR & First-Aid Certified
- CDL Certification

**Project Assignment/Experience:**

- Town of Paradise Valley 2019 Street Overlay JOC | Superintendent
- City of Chandler 2018 Asphalt Concrete Mill & Inlay JOC | Superintendent/Quality Control Manager
- City of Phoenix JOC Mill and Overlay Pavement Maintenance Program | Superintendent / Quality Control Manager
- Town of Fountain Hills Pavement Preservation JOC | Superintendent / Quality Control Manager
- City of Surprise JOC for Overlay | Superintendent / Quality Control
  
- Town of Queen Creek Sossaman and Queen Creek Intersection | Project Manager
- Town of Queen Creek Meridian Road Repair | Project Manager
- City of Scottsdale 2019 Asphalt Patch | Superintendent/Quality Control Manager
- City of Phoenix Residential Overlay JOC | Superintendent/Quality Control Manager
- City of Phoenix 2019 Hurf Arterial Streets Overlay JOC Program | Project Manager
- Town of Paradise Valley 2019 Paradise Valley Street Preservation | Superintendent/Quality Control Manager

## EXPERIENCE OF KEY PERSONNEL



**Role: Safety Manager**

**Firm Associated: M. R. Tanner**

**Industry Tenure: 18 years**

**Firm Tenure: 1 year**

**ROB SLOAN**

Apollo High School

**Registration/Certifications:**

- Rule 310 Comprehensive Dust Control Certification
- 
- CPR & First-Aid Certified
- Confined Space
- Site Access & ACAD
- Maricopa Dust Card
- Fall Protection
- Scaffolding & Ladders

Rob has extensive experience in the construction industry in various roles relating to Safety Management. Rob is proficient in operating heavy machinery like backhoes, loaders, dozers, and more, with experience in excavation, utility backfill, dust control, landfill and roadway maintenance, erosion and ditch cleaning, and cooling tower sludge removal. As a Safety Manager, Rob develops thorough safety policies to ensure all projects meet rigorous quality standards and safety regulations. He has a history of managing both the Safety and HR Recruiting departments for DBA Construction. Rob's qualifications include Confined Space, PAT, Site Access & ACAD, Maricopa Dust Card, Fall Protection, and Scaffolding & Ladders certifications. Rob is known for his vast industry knowledge, dedication to safety, and loyalty to his employers.

**Project Assignment/Experience:**

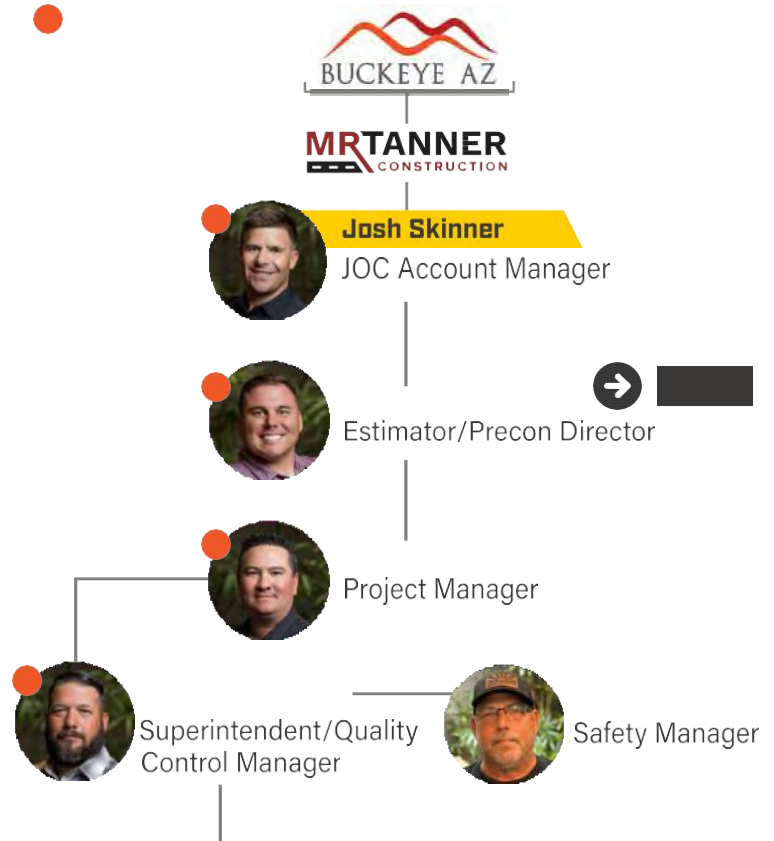
- Town of Queen Creek Sossaman and Queen Creek Intersection | Safety Manager
- Town of Queen Creek Cooperative/JOC Emergency & General Repairs | Safety Manager

**The Firm**

We believe that the largest asset in our company is the employees who put in countless hours to complete the work. Our daily work would not be possible without their constant, dedicated and thorough work. We commit to them that we will procure the amount of work to keep them busy all week. A large portion of M. R. Tanner employees have been loyal employees for more than 10 years. This has many benefits, but one is synergy. We have worked so long together that everyone knows what to expect from one another, and it allows us to be more efficient than other companies. Most of the new employees we hire are driven by word of mouth from current employees, which we believe reflects the value and mission of M. R. Tanner, that the employees would refer their family and friends to work here. If training is needed, they enter a training program to allow them to receive the knowledge they need to be successful.

The City of Buckeye will receive a qualified team with more than 60 years of paving and concrete experience that is committed to delivering on call services to the City. Overseeing the team will be **Josh Skinner** (JOC Account Manager), with **Chad Montoya** (Estimator/Precon Director) as the main point of contact for the project. Chad will lead all estimating efforts as well as support the field staff with scheduling and cost control. **Josh Lansford** (Project Manager) and **Ryan Hammer** (Superintendent/Quality Control Manager) will manage the M. R. Tanner crews and subcontractors/suppliers once they have been chosen. Ryan will be responsible for M. R. Tanner's concrete and paving divisions. **Rob Sloan** (Safety Manager) will train all personnel and oversee all safety efforts on and off the field. Our highly-esteemed concrete division, formally known as Temcon Concrete, specializes in residential subdivisions, commercial and municipal concrete. The City of Buckeye can be assured that it will have a well-rounded and prepared team

**Organizational Chart**



- Traffic Control Management
- Asphalt Milling
- Supplier Utility Adjustments

“Every time I have had work performed by MR Tanner it has been a great experience. From small projects to large, they provide great knowledge of the products they use and the workmanship goes above and beyond excellence. The communication skills they provide before, during, and after the project are top notch. If you are looking for a company to run your project stress-free, then these guys are it.”

- Joshua Wagner, Superintendent, City of Chandler



JOC - General Category 1: Street Maintenance

**TAB D:**

**METHOD OF**

**General Project Approach:**

**1. Commitment to the City**

At M. R. Tanner, we firmly believe in prioritizing job orders for the City of Buckeye, irrespective of the project size. Whether it's a small-scale endeavor or a large-scale undertaking, our commitment to serving the community remains unwavering. We understand the importance of every project in contributing

communicating and living by the processes created from years of experience. We also understand that we are maintaining and paving streets in communities and neighborhoods. Though the streets are maintained by the City, we know that the funds to the growth and development of the City. We commit to come from the taxpayers who reside in Buckeye. We pave each and every road as though we are working for and reporting to the thousands of residents in Buckeye (whether we are paving a residential, collector, or arterial roadway).

**Understanding the Project Goals**

M. Tanner is dedicated to responding swiftly and effectively to any needs of the City of Buckeye. This includes planning, design input, budgeting, scheduling, and the construction of any street maintenance needs. With our multiple paving and concrete crews, we are well-equipped to act promptly on these projects. Our track record and repeat clients are a testament to our commitment to delivering excellence to your projects every day. We take pride in our ability to get the job done right the first time. Our efficient production and high-quality products have been the reasons why other municipalities and agencies choose us year after year. Drawing on our pre-established relationship with the City, working on Buckeye roads, and our comprehensive understanding of the project's scope, our team has identified three key goals.

**Meeting Project Deadlines:** The M. R. Tanner team proactively initiates internal planning discussions with staff, coordinates schedules and scopes with subcontractors, and ensures that material suppliers are prepared to meet the project's demands. As we have demonstrated on all previous projects, we can accomplish every project milestone, even with tight time constraints.

2

collaboration with M. R. Tanner, the City, businesses, and residents, promoting economic growth and sustainable development. We ensure the community is a part of this partnership by notifying impacted residents through hand-delivered notifications.

**Building Partnerships:** We want to continue fostering

3

**Maintaining Budgets:** We understand that Buckeye operates on a budget and commit to pricing this work aggressively through our reliable local trade connections. Our ability to price our work competitively is unparalleled by our competitors.

**Scope of Services**

M. R. Tanner is able to complete the following scopes of work:

- Crack Sealing
- Asphalt Emulsion Slurry Seal Coat
- Asphalt Milling
- Asphalt Concrete Pavement
- Asphalt-Rubber Concrete, Gap Graded
- Fog Seal Coat
- High Density Mineral Bond
- Tire Rubber Modified Sealcoat
- Polymer-Modified Masterseal
- Tire Rubber Modified Surface Seal
- Painted Pavement Markings
- Thermoplastic Pavement Markings
- Reflective Pavement Markers
- Traffic Control

**Equipment on hand**

<b>2</b>	<b>2</b>		
Boot Trucks	Seal Coat Trucks	Backhoes	Form Trucks
R.	<b>4</b>	<b>5</b>	<b>4</b>
<b>10</b>	Seal Coat Trailers	Brooms	Dump Trucks
Asphalt Pavers	<b>6</b>	Pickup Trucks	<b>5</b>
<b>36</b>	Crackseal Trailers		<b>45</b>
Trailers			Saw Trucks



## 2. Handling Cost Control, Scheduling, and Overruns

**Cost Control:** M. R. Tanner's preconstruction team employs a custom estimating template to create and manage project estimate budgets from daily reports through project completion. Josh consults with the assembled team to peer review the estimates and budgets, ensuring that the scope is completely captured. Working in partnership with the City and receiving input from different viewpoints enables the project's costs to be effectively managed.

M. R. Tanner utilizes B2W track and Spectrum for accounting and cost control. This allows M. R. Tanner to provide immediate cost updates and control to prevent overruns. This technology, reports can be reported daily, weekly, or monthly as needed.

In the preconstruction phase, a project schedule will be developed using Microsoft Project. M. R. Tanner provides a detailed schedule assessing the critical path of each project. Prior to construction, the entire team will meet to address all potential schedule impacts to the project, any efficiencies that can be achieved (while maintaining quality and safety), task durations, and overall durations. Upon addressing each task, its duration, and complexity, a contingency plan will be developed to maintain the overall project schedule

### EFFICIENCIES TO STAYING ON SCHEDULE

Our efficient production process is one of the reasons why other municipalities and agencies decide to choose us year after year. M. R. Tanner has held more than 50 contracts, which were renewable in nature to the maximum allowable time.

The schedule will be communicated to the City by updating the schedule on a weekly basis, projecting a 3-week outlook and providing any revisions to the project schedule on a weekly basis. We will have a weekly meeting and daily communication with inspection staff to discuss the project schedule and any revisions.

**Identified and Mitigated Cost Overruns:** Unexpected factors can often lead to cost overruns in job order contracting. At M. R. Tanner, we strictly adhere to budget and scope constraints to avoid cost overruns on our end. If scope changes arise, we efficiently adjust to accommodate them, minimizing stress for the City.

### M. R. Tanner's Commitment to Schedule:

Accurately tracking, updating, and communicating the project schedule is critical for the success of each project. M. R. Tanner utilizes Microsoft Project, which enables us to identify critical paths and key scopes. Additionally, the project team is able to track and manage the project and effectively share the schedule with the City and all others involved with the project. Project Manager Josh Lansford will coordinate daily to ensure the project is on track, with regular updates shared with the City, the subcontractors, and suppliers.

**Scheduling:** Our company and each team member have adopted a philosophy that there is no reason why we should ever fall behind schedule. We feel so strongly about this because being behind schedule impacts not only the contractor and the City but also the residents. If not handled properly, this can affect residents' ability to get to school or work and cause unnecessary disruption. By adhering to our schedule, we can avoid disruptions and confusion.

We carefully choose our trade partners to ensure a shared philosophy. The schedule is communicated daily with everyone. The project manager and superintendent will follow up with our trade partners to keep the project on schedule.

We don't accept equipment failure as an excuse. Every day that we are on-site, we have a backup piece of equipment for everything that we would need. This way, in the unforeseen cases where a piece of equipment breaks down, we simply switch it out and continue the work, ensuring we stay on schedule.

Lastly, we are committed to producing the highest quality product in an extremely time-efficient manner. Each one of the agencies and municipalities that we have worked with would tell you that we are capable of such production on a daily basis.

### 3. Conflict Communication Plan and Proposed Escalation Ladder

**Lines Of Communication:** We strongly believe the City of Buckeye is our partner on all projects.

Building on the trust we have established with the City over the last four years, we will continue to use our thorough communication methods with all stakeholders to ensure the success of each project in this Street Maintenance JOC. Teamwork is paramount to project success and requires every person working together, from the field to the office to guarantee a high-quality project. M. R. Tanner’s essentials to a great partnership include transparency, communication, and coordination, see **figure 1**.

**Emergency Response Notification:** The nature of street maintenance services typically do not require a 24-hour response. However, we have local crews that are available to dispatch within the same day in emergency situations. Having an office located in the Valley provides great resources for all stakeholders. Our ability to self-perform over 75% of the scope of work allows us to control the schedule, eliminating reliance on subcontractors.

**Notification Protocol:** We will start every project by communicating the schedule with the City’s management team at least four weeks before the start of construction. Once approved by the City, we will proactively notify residents to minimize any conflicts utilizing the following methodology:

- Contracts are executed.
- The schedule is sent to our Public Information Assistant (PIA), who is available 24/7.
- 72 hours prior to the start date on each road, residents and business owners are notified of the work with a hand-delivered door hanger.

We will notify every fire and police department, school, and church individually. We leave contact information and coordinate drop-off times, pick-up times, etc. It is imperative that we communicate our schedule effectively. This will

allow City staff and residents to adjust their own schedules accordingly and minimize the impact of construction.

**Escalation Ladder:** If the issue cannot be solved in the field, it would be necessary to escalate the process to the next in command. We cannot speak for the City, but our chain of

Figure 1: Communication Process

#### Transparency

We complete each and every one of our projects with an open-book approach. Through this approach, the City will have up-to-date information regarding budget and schedule.

#### Communication

We believe in prompt communication. If there is a question or concern, M. R. Tanner will address it in a timely manner.

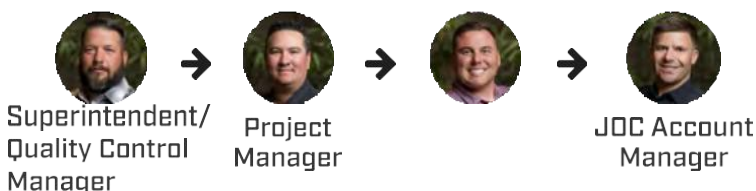
M. R. Tanner will coordinate meetings between the City, subcontractors, stakeholders, and vendors. We will work with public relations personnel to disseminate notifications to surrounding residents and businesses that may be affected by construction.

command would be as follows:

### 4. Project Closeout and Final Documentation Process

A well-managed and successful project is entirely dependent on a strong project team working together throughout the entire duration of the contract. We recognize that project closeout is just as crucial as the preconstruction and construction phases. Project closeout allows the City to thoroughly review the work completed and ensures that we have not only met but exceeded their expectations. We prioritize the final stages of each project and our warranty period to reinforce the trust and confidence we have built with the owners throughout the project’s duration.

Communication between the M. R. Tanner team and the City must occur regularly and often through all stages of construction. Our proposed team will form a partnership with the City staff to ensure that each individual project is managed from inception to the closeout and final documentation



## Job Order Management

M. R. Tanner does extensive research to qualify pursuits that align with our strengths, resources, and core competencies to ensure a project is a fit for the owner, M. R. Tanner, and the stakeholders. Drawing on our experience with the City, we feel confident in exceeding the street maintenance scope requirements. This approach of mindfully selecting projects guarantees success for all stakeholders.

We understand that we will be asked to work timely, meet tight deadlines, and meet budgets. As demonstrated in past projects with the City, we will continue to respond quickly to successfully complete all projects for the City. Whether it's rapid cost estimate and schedule turnarounds, paperwork, documentation, or mobilization to the project, M. R. Tanner is organized to respond immediately.

### 1. Process and Completion of Necessary Paperwork

M. R. Tanner's preconstruction team employs **within 24 hours**, a custom estimating template to create, manage, and process project estimate budget paperwork through B2W Estimating and B2W Track softwares. Josh consults with the assembled team to peer review the estimates and budgets, ensuring that the scope is completely captured in the documents. Working in partnership with the City and receiving input from different viewpoints enables the project's costs to be effectively managed.

### 2. Mobilizing Forces and Starting Construction

Prioritizing the City, M. R. Tanner can promptly mobilize the team for construction **within the same 24 hours as the notice or sooner in emergency situations**. The project team is strategically selected based on their expertise in working on public JOC projects. M. R. Tanner thoroughly understands the scope, ensuring an efficient Notice to Proceed process. From our previous contract with the City, we not only have a deep understanding of the existing conditions, but we also established local relationships and knowledge of the area, allowing us to expedite the beginning stages of construction and mobilize our team in an advantageous manner. Our dedicated team is equipped with the knowledge, skills, and resources to deliver exceptional results on every project, ensuring that the needs and expectations of the City of Buckeye are always at the forefront. We take pride in our ability to provide personalized attention and tailored solutions, regardless of project size, to ensure that every endeavor contributes positively to the City.

### 3. Change Orders

Due to the expedited nature of job order contract work, change orders are common. M. R. Tanner has extensive experience with scope changes and can competently adjust efficiently with expertise. The team strives to understand the scope entirely and its potential impacts with our proactive process. By immediately discussing scope changes when they arise, the team can mitigate any impacts to cost and schedule. Establishing guidelines and goals during preconstruction by communicating unit costs, task durations, staffing, and additional subcontracting prior to the change will allow for project success and scheduling to perform the work as expeditiously as possible within cost constraints. The response should include any automated systems to be used and a narrative description of the processes that would be applied.

Reviews scope and compares quantities with actual field measurements from site visits. Any discrepancies are communicated.

Provides scope and goals for the project, and input on who the stakeholders are.

Pulls all necessary permits, provides submittals and mix designs, notifies public, and schedules kick-off meeting. Mobilize as quickly as the project demands

**THE CITY:** Reviews submittals and attends kick-off meeting. Assists M. R. Tanner in communicating with stakeholders about upcoming work.

Performs work per plans and specifications, providing feedback to the City of changes or issues.

Performs inspections, QA testing and attends weekly project meetings to review CPM schedule.

Promptly addresses any punch list items, submits any warranties, manuals or as-built documents.

Provides punch list (if any) to M. R. Tanner and reviews final pay estimate.

**Value Analysis/Value Engineering/Risk Mitigation**

**1. Additional Value Analysis/Value Engineering and Willingness to Provide Services**

The team we have assembled to manage construction for the on-call projects will be involved throughout the entire duration of the contract. The team will provide value engineering services starting with preconstruction to ensure the design is accurate and aligned with the City's goals. Leveraging our team's decades of experience in preconstruction, M. R. Tanner would get involved early in the design process and thoroughly evaluate each specific project through our value analysis process.

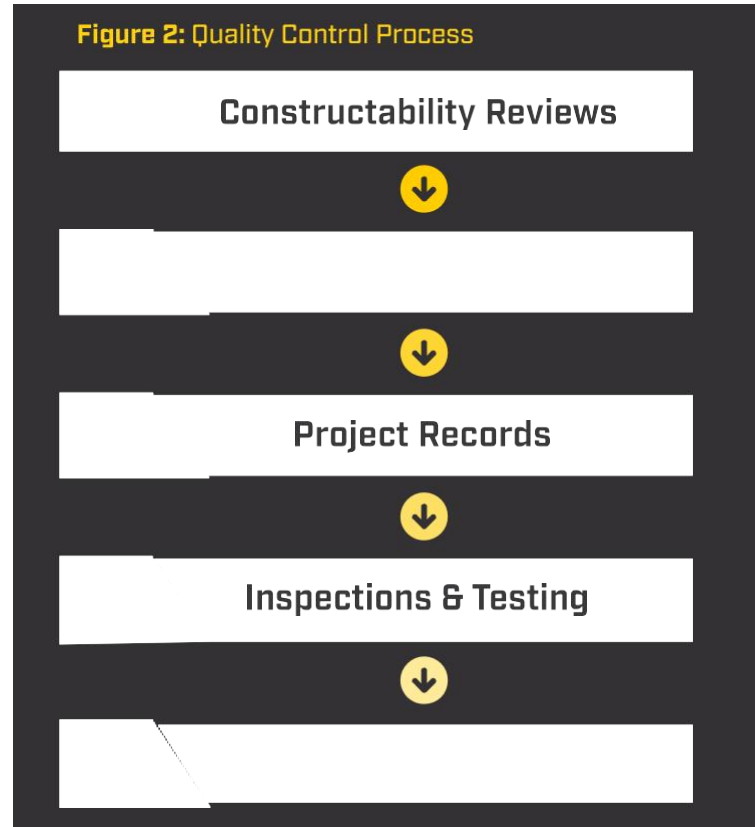
M. R. Tanner and all employees have adopted a philosophy that we are only as good as the product that we leave behind. We have developed an internal value analysis plan to ensure that we only utilize the best materials and the highest quality service. The implementation of the quality control plan will be managed and monitored by the experienced field staff (Chad and Ryan). They will work with the City, consulting engineers, suppliers, and subcontractors to ensure the design meets all current specifications and allows for quality construction.

The first line of defense that we use to deliver a quality product is through the crews who will be performing the work. The City will benefit from the same qualified team of experts with a proven track record of successful project and familiarity with the area. With tens of thousands of hours a year devoted to concrete and paving projects throughout the Valley, these men and women know the quality that we require and are committed to exceeding all standards set by City. The second line of defense is the foreman and superintendents, who drive

the job site thoroughly every morning and evening to inspect the work that was performed that day. We also utilize many checks and balances during production to ensure that our product exceeds all standard specifications, see **figure 2**.

To further our commitment to quality, we send our key personnel to seminars and trainings on a yearly basis where

**Figure 2: Quality Control Process**



**M. R. TANNER ADDED VALUE**

The Town of Queen Creek was set to open a multi-million-dollar Aquatics Center and Park on June 8, 2024. The Town had received complaints about the intersection of the Aquatics Center and park the week before their grand opening. The Town of Queen Creek enlisted M. R. Tanner's assistance in adding an additional through lane at the intersection before the grand opening. M. R. Tanner was given the approval to go ahead on the afternoon of June 3 and was on-site with equipment at 5:30 am on June 4. M. R. Tanner was able to schedule and complete traffic control, survey, excavation, demolition, haul-off, compaction, asphalt paving, striping, and traffic control removal by June 7. Because of our ability to mobilize and execute swiftly, the Aquatics Center and Park were able to hold their grand opening.



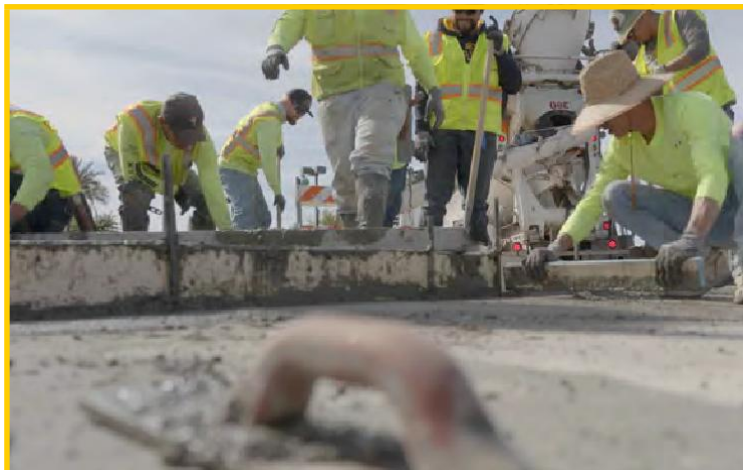
materials (asphalt, concrete, slurry seal, chip seal, etc.) are thoroughly discussed. Even though the materials do not change drastically year to year, we feel it is vital to our success to stay on top of the best methods and procedures to achieve a high-quality product.

**Personnel Performing Quality Control:** Josh Lansford will proactively conduct quality control throughout the duration of this project. As an example of our quality control, we will spray over a 1 SY sheet of metal on a daily basis. We will take this sheet of metal and weigh it, which helps us to guarantee that we are providing the City with the requested application rate. M. R. Tanner takes pride in having high standards and exceeding those standards.

**How Construction Quality is Ensured:** Unlike most companies, our foreman is part of the crew and is on the ground with them. He is keenly aware of the quality on the ground and making sure it meets all standards. Ryan will also be on-site, ensuring quality on a daily basis. All of our crews have worked together for years and contribute to the quality that M. R. Tanner expects.

**2. Capabilities to Identify and Communicate Various Opportunities for Risk Mitigation, and Strategies Employed and Shared with Owners**

M. R. Tanner has completed more \$300 million in pavement maintenance projects within the Valley in the last five years. We leveraged our extensive experience to make certain assumptions for the scope of work proposed in order to mitigate any potential risks. We have encountered and resolved the discussed challenges below often on JOC projects. Our ability to respond quickly with action comes from decades of first-hand experience on street maintenance projects. We are committed to continuing to exceed expectations and dedicated manpower to complete all work. Productivity and communication with the Owner are the number one way to mitigate risks. M. R. Tanner will leverage our readily available resources and pre-established relationship with the City to seamlessly overcome any issues that may arise at the time of Job Order development.



We feel that our work history and renewable contracts demonstrate that we bring the best to your projects every day. We take pride in our risk mitigation tactics; getting the job done right the first time. This efficient production and high-quality product has been the reason why other municipalities and agencies decide to choose us year after year. M. R. Tanner has held more than 50 contracts that were renewable in nature.

All of these contracts have been renewed to the maximum allowable time.

M. R. Tanner is fortunate to have multiple crews, enabling us to act quickly on these projects. Below is the process of how M. R. Tanner mitigates common issues in JOC street maintenance work.

**Traffic Control Plan:** M. R. Tanner allows for ten business days for the traffic control plan (TCP) submittal process in our schedules. Notification Message Boards typically can only go up once the TCP has been approved, and message boards must be placed a week before construction starts. That is close to three weeks before the job can start when traffic control plans need to be submitted. If not handled properly, this could cause delays in the project. We commit to planning each project early and submitting the TCPs early and often.

**Delays in Schedule:** Once we publish a schedule to the City, they, in turn, forward that schedule to PIOs, other departments, etc. We understand that this published schedule needs to be followed, and we at M. R. Tanner have adopted a philosophy that it is not an option to finish behind schedule.

**Equipment Issues:** Anytime M. R. Tanner is on a project, we will have a backup piece of equipment. This allows us to simply switch out the piece of equipment and keep moving. There will never be a reason to stop because of equipment. Our extensive equipment fleet ensures we can fully complete all projects without delay.

**Power Utility Coordination:** A major hurdle to overcome is utility coordination and locating. Our power utility coordination includes potholing to locate surrounding utilities and confirm conflicts. Power utility relocations will not only impact the public by disrupting traffic and access but can also create service interruptions during construction. To address this, M. R. Tanner has proven plans and procedures to ensure minimal impact.

Once we have identified the utility coordination needed, our team is able to confirm materials and plan the duration of the work. The next step is communicating with the affected stakeholders and determining what works best for them. For instance, businesses might prefer late-night shutdowns so daily operations are not impacted. Homeowners may prefer mid-morning or mid-afternoon during a normal workday. This information is used to prepare the final plan to be distributed for review and comments by City and key stakeholders.

**Annual Pavement Maintenance Contracts with:**

- Scottsdale
- Mesa
- Queen Creek
- Paradise Valley
- Fountain Hills

**Performing Work in a Widely Dispersed Area:** One way we mitigate the risk of performing work over a large geographic area like Gilbert is by self-performing the work. Most of the time, when work is performed throughout a large area, it's hard to be able to manage all the different facets of work properly. When you self-perform all phases of the project, you can give clear direction to the superintendents we work with daily. Another way we mitigate the challenges of working in a widely dispersed area is to take advantage of building items that are closest to each other.

## Subcontractor Selection Plan

M. R. Tanner will select subcontractors based on a combination of experience, qualifications and price. We will submit our list of proposed subcontractors for prequalification to the City of Buckeye for approval. For the selection of major subcontractors, M. R. Tanner will pre-qualify a minimum of three subcontractors for each major package or work category.

Before interested subcontractors can submit bids on these packages, they must be pre-qualified by furnishing the following information and meeting the stated criteria:

- Possession of an appropriate contractor's license.
- Ability to meet insurance requirements.
- If required, provide a statement from their surety company verifying bonding capacity and bonding rate.
- Identify and describe projects of similar scope, size and schedule completed by the subcontractor which demonstrates their capacity to perform.
- Furnish project management team resumes if no previous experience with M. R. Tanner (project manager and project superintendent at a minimum).
- Identify a contract or subcontract held by firm or officer of the firm, which has been terminated within the last five years.
- Identify any claim arising from a contract which resulted in litigation or arbitration within the last five years. Briefly describe the circumstances and the outcomes. State their ability to provide manpower and resources to meet the project schedule and milestones.
- Maintenance of a formal safety program.
- State their current E-Mod rate.

Subcontractors submitting satisfactory responses to the above will be pre-qualified, and then requested to submit a competitive bid. M. R. Tanner will distribute drawings and specifications, and when appropriate, conduct pre-bid conferences with the pre-qualified subcontractors.



### 1. Identify your Firm's Safety Manager



M. R. Tanner's **Safety Manager is Rob Sloan**

He has more than 18 years of experience and is proficient in operating heavy machinery like backhoes, loaders, dozers, and more, with experience in excavation, utility backfill, dust control, landfill and roadway maintenance, erosion and ditch cleaning, and cooling tower sludge removal.

### 2. List all major Certifications and Training obtained by the Safety Manager

- CPR & First-Aid Certified
- Confined Space Training
- OSHA Protection Training
- Scaffolding & Ladder Training
- Rule 310 Comprehensive Dust Control Certification

### 3. Describe Safety Training protocol provided to Field Staff at a Project site

M. R. Tanner Construction is committed to construction safety. Weekly on-site meetings and regular safety meetings with the construction crews and staff have allowed the company to maintain an excellent safety record. The safety plan for the JOC will address:

- Project safety personnel
- Project training
- Accident prevention plan
- Emergency action plan
- Hazardous materials
- Communication plan

In a contract involving multiple scopes, projects and locations, the safety plan will be updated continually to assure safety for all parties involved. Our dedication and focus on safety is exemplified with our E-Mod rating. It is one of the lowest in the industry.

In addition to providing the right staffing and the right equipment throughout the project, we have dedicated Ryan Hammer and Rob Sloan to perform the QC functions, safety and traffic management functions on this JOC. Our project management approach is centered on creating open communication at all levels of project work - from City departments to craft workers in the field.

### 4. Current Experience Modification Rate (EMR)

# Appendix

# Current Bac log/Project List

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## M R TANNER CONSTRUCTION Job Listing Sorted by Job Number

Job # / Master Job Number	Division Number	Job Description / Contract #	Address	Phone / Site Phone	Superintendent / Fax Phone	Project Mgr. / Estimator	Job Status / Certified?
							A N
489-01		TIERRA MONTANA PH 1J PAVE PREV CONT #40340100-R-000095	55TH AVE & W CARVER RD, MARICOPA COUNTY, PHOENIX, AZ			MONCHA	A N
497-02		LEGADO PH 2&3 PARC E-J PV 48500100-R-000015 & MASTER 295	SOSSAMAN RD & OCOTILLO RD, MARICOPA COUNTY, QUEEN CREEK, AZ			MONCHA	A N
505-05		23-24 CHANDLER ST MAINTNC PW0-745-4183	VARIOUS LOCATIONS, MARICOPA COUNTY, CHANDLER, AZ			MONCHA	A N
510-05		2022 SCOTTSDALE WESTWORLD 20RP013 / PO #P00361773	VARIOUS LOCATIONS, MARICOPA COUNTY, SCOTTSDALE, AZ			MONCHA	A N
510-08		23-24 SCTSDALE CRACK FILL	VARIOUS LOCATIONS, MARICOPA COUNTY, SCOTTSDALE, AZ			MONCHA	A N
510-10		23-24 SCOTTSDALE OVERLAY 20RP013	VARIOUS LOCATIONS, MARICOPA, SCOTTSDALE, AZ			MONCHA	A N
511-66		WASHINGTON HS PAVE WO # 23031.02	2217 W GLENDALE AVE, MARICOPA COUNTY, PHOENIX, AZ 85021			MONCHA	A N
511-67		CORTEZ HIGH SCHOOL PAVE WO #23033.02	8628 N 31ST AVE, MARICOPA COUNTY, PHOENIX, AZ 85051			MONCHA	A N
511-72		SHADOW RIDGE HS TRACK 23171.07	10909 N PERRYVILLE RD, MARICOPA COUNTY, SURPRISE, AZ 85388			MONCHA	A N
511-73		VALLEY VISTA HS TRACK 23172.05	15550 N PARKVIEW PLACE, MARICOPA COUNTY, SURPRISE, AZ 85374			MONCHA	A N
511-74		PARK LINK REPAIR 24100	E PARK LINK RD & CAMINO ADELAN, PINAL COUNTY, RED ROCK, AZ			MONCHA	A N
514-11		PHX MASTER OVERLAY JOC 4108JOC183	VARIOUS LOCATIONS, MARICOPA COUNTY, PHOENIX, AZ			MONCHA	A N
517-01		22 BUCKEYE PAVE&MILL DC,1 2019005-03/DO 1	VARIOUS LOCATIONS, MARICOPA COUNTY, BUCKEYE, AZ			MONCHA	A N
519-05		DEERVALLEY CRCKSL SEALCOT 24007155	VARIOUS LOCATIONS, MARICOPA COUNTY, PHOENIX, AZ			MARERI	A N
519-06		DEER VALLEY CONCRETE 24007156	VARIOUS LOCATIONS, MARICOPA COUNTY, PHOENIX, AZ			MARERI	A N
520-05		2024 CHANDLER OVERLAY PW-745-4183 AMENDMENT 6	VARIOUS LOCATIONS, MARICOPA COUNTY, CHANDLER, AZ			MONCHA	A N

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# Current Bac log/Project List

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## M R TANNER CONSTRUCTION Job Listing Sorted by Job Number

Job # / Master Job Number	Division Number	Job Description / Contract #	Address	Phone / Site Phone	Superintendent / Fax Phone	Project Mgr. / Estimator	Job Status / Certified?
							A N
535-01		LA MIRA PHASE 2 PAVE PO #55123100-R000056	WILLIAMS FIELD&SIGNAL BUTTE RD, MARICOPA COUNTY, MESA, AZ			MONCHA	A N
540-02		CANTAMIA PARCEL 38 PAVE 55140100-R-000164	W WILLIS RD & S ESTRELLA PKWY, MARICOPA COUNTY, GOODYEAR, AZ			MONCHA	A N
550-00		SMALL JOB PLACEHOLDER					A N
550-13		ALA OLIVE AVE SEAL STRIPE MRTCJ18B	17608 W OLIVE AVE, MARICOPA COUNTY, MARICOPA COUNTY, AZ	480 529-1054		MONCHA	A N
550-14		OLIVE MAJR PROJEC ZANJERO MRTCJ18C	17608 W OLIVE AVE, MARICOPA COUNTY, MARICOPA COUNTY, AZ			MONCHA	A N
550-15		VERDE TRAILS UNIT 2 PUNCH 0720-008-LEN	SWC 107TH AVE & BROADWAY RD, MARICOPA COUNTY, AVONDALE, AZ			MONCHA	A N
550-16		ZANJERO OLIVE AVE SEAL 635-00 CO 1	CITRUS RD & OLIVE AVE, MARICOPA COUNTY, GLENDALE, AZ			MONCHA	A N
550-17		SANTAN GROVES ASPHALT RPR MRTCJ55017	W INGRID LN & THOMPSON RD, PINAL COUNTY, PINAL COUNTY, AZ			MONCHA	A N
550-18		RNCHO MRCDO 15&16 PNCHLST PO 2310 2299	HAPPY VALLEY & MCMICKEN WAY, MARICOPA COUNTY, SURPRISE, AZ			MONCHA	A N
550-19		MERRILL RANCH 57 PNCHLST MRTC0:1-538-03	N HUNT HWY & MERRILL RANCH PKW, PINAL COUNTY, FLORENCE, AZ			MONCHA	A N
550-20		RANCHO MERCADO PUNCHLIST PO 2381	145TH AVE & HAPPY VALLEY RD, MARICOPA COUNTY, SURPRISE, AZ			MONCHA	A N
551-01		COMBS RANCH PHASE 2 PAVE 357	N SCHNEFF RD & E COMBS RD, PINAL COUNTY, PINAL COUNTY, AZ			MONCHA	A N
559-00		VENTANA DE ESTRELLAS PAVE 23272252-1	W YUMA RD & S CITRUS RD, MARICOPA COUNTY, GOODYEAR, AZ			MONCHA	A N
568-02		ELLSWORTH RANCH PHASE 2 CONTRACT #: 295 PO # 1823	ELLSWORTH RD & CHANDLER HEIGHT, MARICOPA COUNTY, QUEEN CREEK, AZ			MONCHA	A N
568-03		ELLSWORTH RANCH COLLECTOR 1966	ELLSWORTH RD & CHANDLER HEIGHT, MARICOPA COUNTY, QUEEN CREEK, AZ			MONCHA	A N
570-03		PHX MASTER CRACK SEAL SCT 4108JOC199	VARIOUS LOCATIONS, MARICOPA COUNTY, PHOENIX, AZ			MONCHA	A N

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## M R TANNER CONSTRUCTION Job Listing Sorted by Job Number

Job # / Master Job Number	Division Number	Job Description / Contract #	Address	Phone / Site Phone	Superintendent / Fax Phone	Project Mgr. / Estimator	Job Status / Certified?
574-01		STONE HAVEN PAR 17&18 PV PO #1244	CAMELBACK & 83RD AVE, MARICOPA COUNTY, GLENDALE, AZ			MONCHA	A N
574-02		STONE HAVEN PAR 11&18 PV 1341	87TH AVE & CAMELBACK RD, MARICOPA COUNTY, GLENDALE, AZ			MONCHA	A N
574-03		STONEHAVEN PARCEL 20 MASTER: 295 PO: 1562	87TH AVE & CAMELBACK RD, MARICOPA COUNTY, GLENDALE, AZ			MONCHA	A N
575-00		PARKSIDE PAVE PO #65490100-R-000036	99TH AVE & INDIAN SCHOOL RD, MARICOPA COUNTY, AVONDALE, AZ			MONCHA	A N
580-05		ALLEN RANCHES PARCEL H PO 1825 MA 295	CAMELBACK RD & CITRUS RD, MARICOPA COUNTY, GLENDALE, AZ			MONCHA	A N
580-06		ALLEN RANCHES PARCEL J PO 1826 MA 295	CAMELBACK RD & CITRUS RD, MARICOPA COUNTY, GLENDALE, AZ			MONCHA	A N
580-07		ALLEN RANCHES PARCEL I PO 1827	CAMELBACK RD & CITRUS RD, MARICOPA COUNTY, GLENDALE, AZ			MONCHA	A N
583-00		ENCLAVE ON OLIVE PAVE 80868519	N 175TH AVE & W OLIVE AVE, MARICOPA COUNTY, BUCKEYE, AZ			MONCHA	A N
587-00		TRIL VERDE RIVER 7A&B PH2 39290 HL	E RIO VERDE DR & N VERDE RIVER, MARICOPA COUNTY, MARICOPA COUNTY, AZ			MONCHA	A N
591-00		PALOMA CREEK PAVE 82128899	W HAPPY VALLEY RD&N 183RD AVE, MARICOPA COUNTY, SURPRISE, AZ			MONCHA	A N
596-00		HAWES TRL ALLIANCE PKLOTS	COON BLUFF RD & BUSH HWY, MARICOPA COUNTY, MARICOPA COUNTY, AZ			MARERI	A N
597-00		ENTRADA DEL ORO PAR 2B PV	EL CAMINO VIEJO&ENT DEL ORO BD, PINAL COUNTY, PINAL COUNTY, AZ			MONCHA	A N
599-00		WATERSTON CENTRAL PAVE 34543	E Ocotillo Rd & S Val Vista Dr, MARICOPA COUNTY, GILBERT, AZ			MONCHA	A N
606-08		MESA RSDTL ST OVERLY M08C 24002226	VARIOUS LOCATIONS, MARICOPA COUNTY, MESA, AZ			MONCHA	A N
606-09		MESA RESDTL ST OVRLY I08 DO24003677	VAL VISTA & BASELINE, MARICOPA, MESA, AZ			MONCHA	A N
606-11		FALCONFIELD CRCK & FOG SEL LF0197FY24	4800 E FALCON DIVE, MARICOPA COUNTY, MESA, AZ			MONCHA	A N

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## M R TANNER CONSTRUCTION Job Listing Sorted by Job Number

Job # / Master Job Number	Division Number	Job Description / Contract #	Address	Phone / Site Phone	Superintendent / Fax Phone	Project Mgr. / Estimator	Job Status / Certified?
607-00		COPPER FALLS PH2 PR 3 4 5 C000930	S MILLER RD & W BROADWAY RD, MARICOPA COUNTY, BUCKEYE, AZ			MONCHA	A N
608-00		ABEL RANCH PHASE 1 PAVE 84555325	N CITRUS RD & W CAMELBACK RD, MARICOPA COUNTY, GOODYEAR, AZ			MONCHA	A N
618-00		ALORAVITA PARC 4 12 14 15 C1005, C1006, C1007 & C1009	75TH AVE & W JOMAX RD, MARICOPA COUNTY, PEORIA, AZ			MONCHA	A N
622-00		HERITAGE FARMS WARRANTY 2 PREV. JOB # 470-00W	W WADDELL RD & N 175TH AVE, MARICOPA COUNTY, SURPRISE, AZ			MONCHA	A N
629-00		GLENDALE 22-23 PVMT MAINT JOA C22-1274/PROJ #19006	VARIOUS LOCATIONS, MARICOPA COUNTY, GLENDALE, AZ			MARERI	A N
629-01		GLENDALE LIQUID ROAD 324000229 PO: 22401329, 30, 31	VARIOUS LOCATIONS, MARICOPA COUNTY, GLENDALE, AZ			MONCHA	A N
630-00		EMMANUEL LUTHERAN CHURCH	715 W SOUTHERN AVE, MARICOPA COUNTY, TEMPE, AZ 85282			DURADR	A N
631-00		HAWES CROSSING PAR A-E PV PO# 1075	E ELLIOT RD & S SOSSAMAN RD, MARICOPA COUNTY, MESA, AZ			MONCHA	A N
631-01		HAWES CROSSING COLLECTOR PO #1183, 1184 & 1185	E ELLIOT RD & S SOSSAMAN RD, MARICOPA COUNTY, MESA, AZ			MONCHA	A N
631-02		HWES CROSNQ PH 2 F G H PV 2209	E ELLIOT RD & S SOSSAMAN RD, MARICOPA COUNTY, MESA, AZ			MONCHA	A N
633-00		QUAIL RANCH PAVE QR-PAVING	HASHKNIFE DRAW RD&SIERRA VISTA, PINAL COUNTY, PINAL COUNTY, AZ			MONCHA	A N
634-00		OCOTILLO LANE GRADE	7TH AVE & OCOTILLO RD, MARICOPA COUNTY, PHOENIX, AZ			MONCHA	A N
637-00		HAWES QC INTERIM SIGNALS 2020-090A, WO #10	VARIOUS LOCATIONS, MARICOPA COUNTY, QUEEN CREEK, AZ			MONCHA	A N
638-01		RESIDENCE COTTON OFFSITE OT22-022-GTI	COTTON RD&NORTHERN AVE, MARICOPA COUNTY, GLENDALE, AZ			MONCHA	A N
639-00		CHANDLER PARKS R&R	4500 S BASHA RD, MARICOPA COUNTY, CHANDLER, AZ 85248			MARERI	A N
640-00		TOQC 23-24 ASPHALT REPAIR	VARIOUS LOCATIONS, MARICOPA COUNTY, QUEEN CREEK, AZ			MONCHA	A N

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## M R TANNER CONSTRUCTION Job Listing Sorted by Job Number

Job # / Master Job Number	Division Number	Job Description / Contract #	Address	Phone / Site Phone	Superintendent / Fax Phone	Project Mgr. / Estimator	Job Status / Certified?
							A N
641-00		ZANJERO PASS PH 2 PAVE ZP-PHASE 2 PAVING	CITRUS RD & OLIVE AVE, MARICOPA COUNTY, GLENDALE, AZ			MONCHA	A N
641-01		ZANJERO PASS PHASE 3 PAVE MRTCJ64101	CITRUS RD & OLIVE AVE, MARICOPA COUNTY, GLENDALE, AZ			MONCHA	A N
643-00		SONORAN FOOTHILLS ONSITE 73-W007-23	N VALLEY PKWY & FOOTHILLS, MARICOPA COUNTY, PHOENIX, AZ			MONCHA	A N
644-01		SCTSDALE CONCRETE REPAIR 1774RFP24	VARIOUS LOCATIONS, MARICOPA COUNTY, SCOTTSDALE, AZ			MONCHA	A N
646-00		RANCHO MIRAGE PAVE 89816740	HARTMAN RD & RANCHO MIRAGE BLV, PINAL COUNTY, MARICOPA, AZ			MONCHA	A N
647-00		LEGADO WST P1&2 OCLLO PWR C1258, C1259, C1260, C1257	POWER RD & OCOTILLO RD, MARICOPA COUNTY, QUEEN CREEK, AZ			MONCHA	A N
649-01		WINDSTONE RANCH PAVE 1252364901	HAPPY VALLEY RD & 151ST AVE, MARICOPA COUNTY, PHOENIX, AZ			MONCHA	A N
650-00		WLS RNCH KENWORTH RD PAVE MRTC650-00	E COMBS RD & N SCHNEPH RD, PINAL COUNTY, PINAL COUNTY, AZ			MONCHA	A N
651-00		TIERRA RICO PAVE 160450	DALE LN & 171ST ST, MARICOPA COUNTY, SURPRISE, AZ			MONCHA	A N
652-00		PINALCOUNTY MAINT & RPR 234128ROQ	VARIOUS LOCATIONS, PINAL COUNTY, AZ			MONCHA	A N
653-00		BONITA RANCH MIRAVIDA PV 160450	JOMAX RD & 147TH AVE, MARICOPA COUNTY, SURPRISE, AZ			MONCHA	A N
656-00		EARNHARDT RANCH PAVE MRTCJ656-00	HUNT HWY & S MCQUEEN RD, MARICOPA COUNTY, CHANDLER, AZ			MONCHA	A N
659-00		PIONEER CROSSING PAVE MRTCJ65900	VAL VISTA & LOOP 202, MARICOPA COUNTY, MESA, AZ			MONCHA	A N
660-00		BELLA VISTA PH 2 PAVE 90358379	E BELLA VISTA RD & GANTZEL RD, PINAL COUNTY, AZ			MONCHA	A N
661-00		EL MIRAGE 2024 CRACK SEAL 24143	VARIOUS LOCATIONS, MARICOPA COUNTY, EL MIRAGE, AZ			MONCHA	A N
662-00		LAS VENTANAS PH 1&2 PAVE 71550-160450	W YUMA RD & S PERRYVILLE RD, MARICOPA COUNTY, GOODYEAR, AZ			MONCHA	A N

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## M R TANNER CONSTRUCTION Job Listing Sorted by Job Number

Job # / Master Job Number	Division Number	Job Description / Contract #	Address	Phone / Site Phone	Superintendent / Fax Phone	Project Mgr. / Estimator	Job Status / Certified?
864-01		LEMON LANE PAVE 0723-002-EMP	3725 E MCLELLAN RD, MARICOPA COUNTY, MESA, AZ			MONCHA	A N
867-00		AVONDALE PAVEMENT MANGEME 22401569	VARIOUS LOCATIONS, MARICOPA COUNTY, AVONDALE, az			MONCHA	A N
868-00		DEERVALLEY WLMS RD PAVE TEMCONJ66800	WILLIAMS RD & DEER VALLEY RD, MARICOPA COUNTY, SURPRISE, AZ			MONCHA	A N
869-00		DESERT MOON YUMA RD PAVE 149995	WYUMA RD & S APACHE RD, MARICOPA COUNTY, BUCKEYE, AZ			MONCHA	A N
870-00		ELMIRAGE 24 PVMNT MAINTN 24187	VARIOUS LOCATIONS, MARICOPA COUNTY, BUCKEYE, AZ			MONCHA	A N
871-00		MNLGHT PH1 GREEN COLECTOR 50124	GREEN RD & SMITH ENKE RD, PINAL COUNTY, MARICOPA, AZ			MONCHA	A N
872-00		DESERT MOON PARCEL 7&8 150810	S APACHE RD & LOWER BUCKEYE RD, MARICOPA COUNTY, BUCKEYE, AZ			MONCHA	A N
873-00		APACHE FARMS PHASE 2 PAVE 151809	APACHE RD & BUCKEYE RD, MARICOPA COUNTY, BUCKEYE, AZ			MONCHA	A N
874-00		FARLON RMNGTN LINT 3 PAVE 200233 OF	ROOKS RD & SOUTHERN AVE, MARICOPA COUNTY, BUCKEYE, AZ			MONCHA	A N
875-00		LEGADO PARCEL E&F PAVE 246	SOSSAMAN RD & OCOTILLO RD, MARICOPA COUNTY, QUEEN CREEK, AZ			MONCHA	A N
876-00		ASANTE JV A3 OFFSITE PAVE	WHAPPY VALLEY RD & 163RD DR, MARICOPA COUNTY, SURPRISE, AZ			MONCHA	A N
877-00		WARE FARMS PAVE	E COMBS RD & N SCHNEPF RD, PINAL COUNTY, PINAL COUNTY, AZ			MONCHA	A N
878-00		ASANTE MODEL PARKING LOT C05062024_MRT	163RD AVE & ASANTE BLVD, MARICOPA COUNTY, SURPRISE, AZ			MONCHA	A N
879-00		LOOP 101 REGRIND 2401 PO 658252	L101 CHANDLER TO RIO SALADO, MARICOPA COUNTY, MESA, AZ			MONCHA MARCHA	A N
880-00		PARADISI PARCEL C PAVE 2257	PEORIA AVE & LOOP 303, MARICOPA COUNTY, SURPRISE, AZ			MONCHA	A N
881-00		MOONLIGHT AP-B PAVE 153753	SR 238 & GREEN RD, PINAL COUNTY, MARICOPA, AZ			MONCHA	A N



M R TANNER CONSTRUCTION  
Job Listing Sorted by Job Number

Job # / Master Job Number	Division Number	Job Description / Contract #	Address	Phone / Site Phone	Superintendent / Fax Phone	Project Mgr. / Estimator	Job Status / Certified?
682-00		ASANTE PAT TILLMAN PH 3 1314080	PAT TILLMAN BLVD & 163RD AVE, MARICOPA COUNTY, SURPRISE, AZ			MONCHA	A N
923-82		KENILWORTH ELEM CRACKFILL 230348	1210 N 5TH AVE, PHOENIX, MARICOPA COUJNTY, AZ			MARCHA DURADR	A N
923-86		BICENTENNIAL S CONCRETE	7240 W COLTER ST, MARICOPA COUNTY, GLENDALE, AZ 85303			MARCHA DURADR	A N
924-28		2405 E SOUTHERN SEAL COAT	2405 E SOUTHERN AVE, MARICOPA COUNTY, TEMPE, AZ 85282			MARERI	A N
924-31		13806 W CAMINO DEL SOL SC	13606 W CAMINO DEL SOL, MARICOPA COUNTY, SUN CITY WEST, AZ 85375			MARERI	A N
924-32		GREENFIELD SUITE 24 CRKSL	107 N GREENFIELD RD, MARICOPA COUNTY, MESA, AZ 85205			MARERI	A N
924-35		HICKMANS FAMILY FARMS SCT	6515 JACKRABBIT TRL, MARICOPA COUNTY, BUCKEYE, AZ 85326			MARERI	A N
924-38		MERCY GILBERT SEAL COAT PO #512917625-0-SERV	3555 S VAL VISTA DR, MARICOPA COUNTY, GILBERT, AZ			MARERI	A N
924-39		AGAVE VILLAGE SEAL COAT PO #1476	7087 E MAIN ST, MARICOPA COUNTY, MESA, AZ 85207			MARERI MARCHA	A N
924-43		CANDLEWOOD PAVE	E DYNAMITE BLVD&N ALMA SCHOOL, MARICOPA COUNTY, SCOTTSDALE, AZ 85250			MARERI	A N
924-44		CITRUS WEST PAVE	177TH AVE & GLENDALE AVE, MARICOPA COUNTY, MARICOPA COUNTY, AZ			MARERI	A N
924-45		ECHO CANYON SEAL COAT	E MCDONALD DR&N ECHO CANYON, MARICOPA COUNTY, PHOENIX, AZ 85018			MARERI	A N
924-46		TAVALO AT CADENCE SEAL CT	9410 E CADENCE PKWY, MARICOPA COUNTY, MESA, AZ 85212			MARERI	A N
924-47		TAVALO QCC SEAL COAT	ELLSWORTH RD & E CLOUD RD, MARICOPA COUNTY, QUEEN CREEK, AZ 85142			MARERI	A N
924-48		SPSTN SPRINGS CC SINKHOLE	7235 E HAMPTON AVE, MARICOPA COUNTY, MESA, AZ 85209			MARERI	A N
924-50		SUPERSTITION MNTN PV 24	SUPERSTITION MNTN & WILDERNESS, PINAL COUNTY, GOLD CANYON, AZ			MARERI	A N

M R TANNER CONSTRUCTION  
Job Listing Sorted by Job Number

Job # / Master Job Number	Division Number	Job Description / Contract #	Address	Phone / Site Phone	Superintendent / Fax Phone	Project Mgr. / Estimator	Job Status / Certified?
924-51		LAGUNA SAN JUAN PATCH	HAYDEN RD&E JACKRABBIT RD, MARICOPA COUNTY, SCOTTSDALE, AZ 85250			MARERI	A N
924-52		3592 S ATHERTON CRACKFILL	3592 S ATHERTON BLVD, MARICOPA COUNTY, GILBERT, AZ 85297			MARERI MARCHA	A N
982-18		QUEEN CREEK PIT	EAST ON US 60, BETWEEN MP 209 & 210, PINAL COUNTY, AZ				A N
480-00W		RM PARCELS A11,12,14 WNTY PREV CONT NO. 3787777 OF 000	N RANCHO MERCADO&HAPPY VALLEY, MARICOPA COUNTY, SURPRISE, AZ			MONCHA	A N
TMP-NEW		Template - New					A N
PVMT TMP		Pavement Maint Template					A N

End of report -- 132 jobs printed



**SOLICITATION AMENDMENT  
RFQ NO. 2024193  
CITY OF BUCKEYE**

**AMENDMENT NO. 1**

**NOTE:** Attach to the Request for Qualifications (RFQ). However, if the Statement of Qualifications (SOQ) has already been submitted, complete this Amendment and return for attachment to your SOQ no later than 3:00 PM, June 17, 2024.

City of Buckeye  
Attn: Travis Stewart, Contracts Administrator  
Finance Department  
tstewart@buckeyeaz.gov

**SOLICITATION: RFQ NO. 2024193 – REQUEST FOR QUALIFICATIONS  
JOB ORDER CONTRACTING (JOC) GENERAL**

Last Day for Questions: **June 10, 2024, no later than 3:00 PM local time**  
SOQ Due Date and Time: **June 17, 2024, no later than 3:00 PM local time**

**NOTICE TO CONTRACTORS:**

This Amendment forms a part of the Contract and clarifies, corrects, or modifies the original Request for Qualifications documents prepared by the City of Buckeye.

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**The balance of the specifications and instructions remain the same. Offeror must acknowledge receipt and acceptance of this Amendment by returning the attached Solicitation Amendment Acknowledgement Page with the SOQ.**

**Questions from Contractors:**

**Q1.** Section 4 – Submittal Requirements specifies that there is a one (1) page limit for the cover letter and two (2) page limit for the financial information. Can additional pages be submitted for financial information if needed?

**A1.** The cover letter will be limited to one (1) page. Financial information can be provided as an appendix to the submittal without any page limitations.

**Q2.** Do submittals have to be in a searchable “PDF” file format? There is a potential issue with the Past Performance Questionnaire that once signed prevents the submittal from being a searchable “PDF”.

**A2.** It is preferred that the “PDF” file be searchable, but due to the acknowledged potential issue with the questionnaires contractors will not be penalized if a submittal isn’t searchable.

**The Past Performance Questionnaires can also be submitted as a separate file. The solicitation has been setup to allow for submission of multiple files.**

**Q3. Can you please clarify what you are looking for in Tab A, Item No. 2 Multiple Award JOC Contracts with Public Entities. (City, State, School District, County)?**

**A3. This is to show any experience with Multiple Award JOC Contracts, current or previous, that a contractor may have with public entities of any kind. The contracts would not necessarily need to be of the same type of work as the category the contractor is providing a submission for. It is show contractor experience performing work under similar types of contract.**

**Q4. Can you please clarify what you are looking for in Tab C, Item (b) Project Assignment (i.e. current project assignment, previous project assignment, or other)?**

**A4. It would be projects the person worked on, current or previous, where the type of work performed is similar to the JOC category in question or where the person was in a similar role they would be under this JOC.**

**Q5. Will the City of Buckeye share forecast spending by each of the defined categories for the proposed period of the JOCs?**

**A5. The City of Buckeye has not fully defined the spending forecast for each category at this time. The potential usage has been set at \$6 million a year per contractor per category with a limit of \$2 million for project.**

PLEASE ACKNOWLEDGE YOUR FIRM'S RECEIPT OF THIS AMENDMENT BY SIGNING THE ATTACHED SOLICITATION AMENDMENT ACKNOWLEDGEMENT.

## SOLICITATION AMENDMENT ACKNOWLEDGEMENT

**SOLICITATION: RFQ NO. 2024193**  
**JOB ORDER CONTRACTING (JOC) GENERAL**  
**AMENDMENT NUMBER 1**  
**AMENDMENT ISSUE DATE: June 3, 2024**

Offeror certifies that Offeror has read, understands, and will fully and faithfully comply with this Request for Qualifications, its attachments and any referenced documents. Offeror also certifies that this SOQ was independently developed without consultation with any of the other Submitters or potential Submitters.

Name of Company: M.R. TANNER DEVELOPMENT & CONSTRUCTION, LLC.

Authorized Signature: 

Print Name and Title: CHAD MONTOYA, VICE PRESIDENT

Date: 6/10/2024

Address: 1327 W. SAN PEDRO

City, State, Zip Code: GILBERT, AZ, 85233

Telephone Number: 480-633-8500

Email Address: CMONTOYA@MRTANNER.COM

**SOLICITATION AMENDMENT  
RFQ NO. 2024193  
CITY OF BUCKEYE**

**AMENDMENT NO. 2**

**NOTE:** Attach to the Request for Qualifications (RFQ). However, if the Statement of Qualifications (SOQ) has already been submitted, complete this Amendment and return for attachment to your SOQ no later than 3:00 PM, June 17, 2024.

City of Buckeye  
Attn: Travis Stewart, Contracts Administrator  
Finance Department  
tstewart@buckeyeaz.gov

**SOLICITATION: RFQ NO. 2024193 – REQUEST FOR QUALIFICATIONS  
JOB ORDER CONTRACTING (JOC) GENERAL**

Last Day for Questions: **June 10, 2024, no later than 3:00 PM local time**

SOQ Due Date and Time: **June 17, 2024, no later than 3:00 PM local time**

**NOTICE TO CONTRACTORS:**

This Amendment forms a part of the Contract and clarifies, corrects, or modifies the original Request for Qualifications documents prepared by the City of Buckeye.

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**The balance of the specifications and instructions remain the same. Offeror must acknowledge receipt and acceptance of this Amendment by returning the attached Solicitation Amendment Acknowledgement Page with the SOQ.**

**Questions from Contractors:**

**Q1.** In Tab A – Project Experience, it states that all projects must have been completed within the last five (5) years. Does this exclude projects that are currently in progress?

**A1.** Tab A is meant to reflect projects that have been completed. This gives the City a better idea of a Contractor's experience through the entirety of a project. Projects that are currently in progress can be listed under the current backlog/project list.

**Q2.** Past Performance Questionnaire, it states that the project owner must fill out the form. Are we allowed to list City of Buckeye projects and project owners?

**A2.** Yes, projects completed for the City of Buckeye reflect experience working with City personnel and at locations within the City.

**Q3.** The proposed method of file naming the PDF results in an inability to save the file. Could we shorten the proposed file name and remove symbols that prevent saving such as '/' and '&'?

**A3.** Yes, the original intention was for the file name to include the RFQ number and/or name and contractor name. File names can be shortened. The City is only requesting that the file name include the RFQ number and contract name, which can be abbreviated. Examples: RFQ 2024193 ABC Const, RFQ 2024194 ABC Inc, 2024193 ABC and 2024194 ABC Inc.

**Q4.** Do you want this (Tab A: Item 2) – added as its own page after my projects appear since it is a list?

**A4.** Item 2 is intended to be examples of the types of projects that can be included in Tab A. If a contractor has projects that fit this category, then this shows experience with similar types of contracts. This should be added as another project in this section if the contractor chooses to include it as a project.

**Q5.** Do you just need the rate for the Experience Modification Rate (EMR), or do you require a letter from our Insurance Carrier?

**A5.** The City is only requesting the rate at this time.

**Q6.** For showing the evidence of the appropriate Arizona State contractor license, can this be put on the Financial information page?

**A6.** Yes, this information can be included on the cover letter or financial information page.

**Q7.** Additional clarification on requested Financial Information:

1. Financial Capacity/Bonding/Insurance
2. Total Bonding Capacity – Single Limit and Aggregate Limit
3. Current Backlog/Project List
4. Insurance Provider Rating

**A7.** Items 1-3 have been requested to be documented/verified by your surety or insurance carrier. This can be done via a one (1) page letter from your surety or insurance carrier. Item 1 – Financial Capacity/Bonding/Insurance: this item is more of a general status of your company with your surety or insurance carrier. Is the company in good standing? Are there any outstanding claims that may affect future work? Item 2 – Total Bonding Capacity: this item is to provide a view of your company's current limits, single and aggregate. If there is no aggregate limit then the limit can be reflected as N/A or no limit. Item 3 – Current Backlog/Project List: this information can be included as an attachment to the above information. Item 4 – Insurance Provider Rating: A rating from one of the websites (e.g. A.M. Best, Moody's, S&P, etc.) is sufficient. There is no requirement to obtain anything officially from the insurance provider specifying the rating.

**Q8.** What is the maximum total page count for the SOQ?

**A8.** There isn't a maximum page count. There are sections that have page limitations. There are also sections where the page limit is dependent on the information provided (Tab A and B are dependent on the number of projects presented by a contractor). The City has also removed the page limitation on the Financial Information section.

**Q9.** Are contractors required to provide a Certificate of Insurance with their submission?

**A9.** No, the City will be requesting a Certificate of Insurance to those contractors awarded under each JOC category.

**\*REMINDER:** All questions received to date should have been addressed between Amendment No. 1 and 2. If there is a question that hasn't been addressed, please reach out to the Contracts Administrator for this solicitation.

# Appendix - Amendment 1

PLEASE ACKNOWLEDGE YOUR FIRM'S RECEIPT OF THIS AMENDMENT BY SIGNING THE ATTACHED SOLICITATION AMENDMENT ACKNOWLEDGEMENT.

## SOLICITATION AMENDMENT ACKNOWLEDGEMENT

SOLICITATION: RFQ NO. 2024193  
JOB ORDER CONTRACTING (JOC) GENERAL  
AMENDMENT NUMBER 2  
AMENDMENT ISSUE DATE: June 5, 2024

Offeror certifies that Offeror has read, understands, and will fully and faithfully comply with this Request for Qualifications, its attachments and any referenced documents. Offeror also certifies that this SOQ was independently developed without consultation with any of the other Submitters or potential Submitters.

Name of Company: M.R. TANNER DEVELOPMENT & CONSTRUCTION, LLC.  
Authorized Signature:   
Print Name and Title: CHAD MONTOYA, VICE PRESIDENT  
Date: 6/10/2024  
Address: 1327 W. SAN PEDRO  
City, State, Zip Code: GILBERT, AZ, 85233  
Telephone Number: 480-633-8500  
Email Address: CMONTOYA@MRTANNER.COM



**SOLICITATION AMENDMENT  
RFQ NO. 2024193  
CITY OF BUCKEYE**

**AMENDMENT NO. 3**

**NOTE:** Attach to the Request for Qualifications (RFQ). However, if the Statement of Qualifications (SOQ) has already been submitted, complete this Amendment and return for attachment to your SOQ no later than 3:00 PM, June 17, 2024.

City of Buckeye  
Attn: Travis Stewart, Contracts Administrator  
Finance Department  
tstewart@buckeyeaz.gov

**SOLICITATION: RFQ NO. 2024193 – REQUEST FOR QUALIFICATIONS  
JOB ORDER CONTRACTING (JOC) GENERAL**

Last Day for Questions: **June 10, 2024, no later than 3:00 PM local time**

SOQ Due Date and Time: **June 17, 2024, no later than 3:00 PM local time**

**NOTICE TO CONTRACTORS:**

This Amendment forms a part of the Contract and clarifies, corrects, or modifies the original Request for Qualifications documents prepared by the City of Buckeye.

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**The balance of the specifications and instructions remain the same. Offeror must acknowledge receipt and acceptance of this Amendment by returning the attached Solicitation Amendment Acknowledgement Page with the SOQ.**

**Questions from Contractors:**

**Q1.** On page 6 of the RFQ for Job Order Contracting (JOC) General, you ask for a Current Backlog/Project List. Is this a list of backlog projects that are bonded? Or all backlog?

**A1.** This is a list of all backlog projects that are bonded.

**Q2.** I would just like confirmation that the org chart can be an 11 x 17 page?

**A2.** Yes, the organizational chart can be submitted in a 11"x17" page.

**Q3.** Page 4 Section 2 - the first paragraph states; "separate Contractors in each category who will subsequently compete for individual Job Orders (Delivery Orders) for projects by providing a proposal as each project arises"



Does this mean that ALL projects procured under this contract will be bid amongst ALL contractors holding that category of this contract?

**A3. No, the City has the option to award individual Job Orders through two methods. The City of Buckeye reserves the right to issue individual Job Orders (Delivery Orders) for projects either by requesting proposals from all contractors under a particular JOC category through a Delivery Order Request for Proposal (DORFP) or through direct negotiations with a contractor based off the next most qualified contractor as each project is identified and awarded. The idea is for all contractors, under each category, to have equal opportunity for projects, to the extent reasonably practicable.**

**Q4. Page 4 Section 2 - the second paragraph states; "The City reserves the right to issue individual Job Orders by negotiating with the contractor that scored as the most qualified under a JOC category.:**

Please clarify what "most qualified" refers to.

**A4. All submittals received in a category will be evaluated and scored by an evaluation panel after the solicitation due date. Those contractors that are awarded under a category will be identified as qualified contractors for that category and ranked based off their evaluation scores. The contractor that scored the highest in a category would be "most qualified".**

**Q5. Page 4 Section 2 - the second paragraph states; "projects will be rotated through all contractors under the JOC category to provide equal opportunity"**

How will the City handle this if all projects are being bid amongst all the contractors in that category and then being negotiated with the most qualified?

**A5. The City will select which method will be utilized to award an individual Job Order as each project is identified. Projects bid amongst all contractors in a category provide equal opportunity for all contractors to be awarded those opportunities.**

**Projects negotiated directly with contractors based off qualifications will be awarded on a round-robin method. The initial project will be negotiated with the contractor identified as the most qualified. If negotiations are unsuccessful, the City will go to the next most qualified contractor. The process will continue until negotiations are successful or the contractor list is exhausted. If negotiations are successful with a contractor for a project, then negotiations will be initiated with the next most qualified contractor for the following project utilizing this method. This process will continue as new projects are identified. The idea is for the City to rotate projects through all contractors under a category to provide equal opportunity as practicable.**

**Q6. If we are interested in certain tasks under a category do we note that in the cover letter or will additional categories be added?**



**A6. Contractors should have experience in all tasks in the categories they have interest in. If there are areas a contractor specializes in, that can be identified in the cover letter. Additional categories will not be added to this solicitation. The City may solicit additional JOC categories in the future.**

**Q7. On page 20 of the RFQ, Category 4: Steel Building/Structure Construction Services, bullet point 1 states renovations on existing buildings/structures. Does this include non-steel structure renovations and repairs? I.e. concrete repairs to mezzanines**

**A7. This can include renovations and repairs for non-steel buildings/structures. Depending on the type of work needed to be completed it would fall under Category 2: General Construction Services or Category 4: Steel Building/Structure Construction Services.**



# Appendix - Amendment 1

PLEASE ACKNOWLEDGE YOUR FIRM'S RECEIPT OF THIS AMENDMENT BY SIGNING THE ATTACHED SOLICITATION AMENDMENT ACKNOWLEDGEMENT.

## SOLICITATION AMENDMENT ACKNOWLEDGEMENT

SOLICITATION: RFQ NO. 2024193  
JOB ORDER CONTRACTING (JOC) GENERAL  
AMENDMENT NUMBER 3  
AMENDMENT ISSUE DATE: June 10, 2024

Offeror certifies that Offeror has read, understands, and will fully and faithfully comply with this Request for Qualifications, its attachments and any referenced documents. Offeror also certifies that this SOQ was independently developed without consultation with any of the other Submitters or potential Submitters.

Name of Company: M.R. TANNER DEVELOPMENT & CONSTRUCTION, LLC.  
Authorized Signature:   
Print Name and Title: CHAD MONTOYA, VICE PRESIDENT  
Date: 6/10/2024  
Address: 1327 W. SAN PEDRO  
City, State, Zip Code: GILBERT, AZ, 85233  
Telephone Number: 480-633-8500  
Email Address: CMONTOYA@MRTANNER.COM



1327 W. San Pedro St.  
Gilbert, AZ 85233  
480-633-8500 | [www.mrfanner.com](http://www.mrfanner.com)



**EXHIBIT B  
TO  
JOB ORDER CONTRACT FOR  
STREET MAINTENANCE  
BETWEEN  
CITY OF BUCKEYE  
AND  
M. R. TANNER DEVELOPMENT AND CONSTRUCTION, LLC**

[THE CITY OF BUCKEYE'S REQUEST FOR QUALIFICATIONS IS ATTACHED TO RFQ NO. 2024193]  
SEE FOLLOWING PAGES

T



**CITY OF BUCKEYE  
REQUEST FOR QUALIFICATIONS  
RFQ: 2024193  
JOB ORDER CONTRACTING (JOC)  
GENERAL**

**CATEGORY 1: Street Maintenance Pave, Patch & Mill Projects / Sealing Applications Projects**

**CATEGORY 2: General Construction Services**

**CATEGORY 3: Road Construction Services**

**CATEGORY 4: Steel Building/Structure Construction Services**

**CONTACT PERSON**

**Travis M. Stewart - Contracts Administrator  
Finance Division / City of Buckeye  
623.349.6173  
[tstewart@buckeyeaz.gov](mailto:tstewart@buckeyeaz.gov)**

**Date Issued: Monday, May 20, 2024  
Pre-Submittal Conference: Wednesday, May 29, 2024 at 10:00 AM  
Last Day for Questions: Monday, June 10, 2024 at 3:00 PM  
RFQ Due Date: Monday, June 17, 2024 at 3:00 PM**

**PLEASE NOTE: IF DOCUMENTS WERE DOWNLOADED FROM THE CITY OF BUCKEYE'S BONFIRE WEBSITE, CONTRACTORS ARE RESPONSIBLE FOR OBTAINING ANY ADDENDA EITHER THROUGH UPDATES ON THE WEBSITE, OR BY CONTACTING THE CITY CONTACT PERSON LISTED ABOVE.**

## TABLE OF CONTENTS

<b>SECTION</b>	<b>DESCRIPTION</b>	<b>PAGE NO.</b>
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2.	Project Summary/ Scope of Work.....	4
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<b>SECTION</b>	<b>ATTACHMENTS</b>	<b>PAGE NO.</b>
1.	Past Performance Questionnaire.....	A-1
2.	Scope of Work by Category.....	A-2
3.	JOC Selection Checklist.....	A-3
4.	Street Maintenance Technical Specifications Manual.....	A-4
5.	Sample Contract.....	A-5

## SECTION 1 - INTRODUCTION

The City of Buckeye is currently looking to establish Job Order Contracts (JOCs) for indefinite quantity and indefinite delivery for various projects in the City of Buckeye, Arizona. Individual categories under this JOC are listed in detail in *Attachment A-2*. Interested contractors will have the ability to show related experience and a proven record of accomplishment in Job Order Contracting projects of the same nature and magnitude. The selected contractors will be expected to deliver turnkey projects, which may include design, preconstruction services, permitting, regulatory requirements, and as-built/close-out documents.

The contract period will be for an initial term of one (1) year with no more than four (4) additional one-year extensions. During the term of the contract, work shall be conducted as a series of individual job orders referred to as Delivery Orders. The effective date of the initial term shall be dependent on the expiration of the City's current JOC categories. The anticipated one (1) year

start date of each JOC category is as follows:

Street Maintenance: Pave, Patch & Mill Projects / Sealing Applications Projects	8/6/2024
General Construction Services	8/1/2024
Road Construction Services	8/1/2024
Steel Building/Structure Construction Services	8/1/2024

The JOC categories are intended for small to mid-sized projects. Estimated values for individual projects are expected not to exceed \$1,000,000.00. Most projects are anticipated to be completed within the same fiscal year they are initiated or within three hundred sixty-five (365) days. Projects may extend into the next fiscal year and beyond, but in no instance will any one project under a JOC category exceed \$2,000,000.00. The total amount for all projects for any one contractor will not exceed \$6,000,000.00 per category in any given fiscal year.

Any contract resulting from this solicitation shall be for the use of the City of Buckeye. In addition, specific eligible political subdivisions and nonprofit educational or public health institutions may also participate at their discretion. In order to participate in any resultant contract, a political subdivision or nonprofit educational or public health institution must have been invited to participate in this specific solicitation and the contractor must be in agreement with the cooperative transaction. In addition to cooperative purchasing, any eligible agency may elect to participate (piggyback) on any resultant contract; the specific eligible political subdivision, nonprofit educational or public health institution and the contractor must be in agreement.

Any delivery order placed to the successful contractor will be placed by the specific agencies participating in this purchase. Payment for purchases made under this agreement will be the sole responsibility of each participating agency. The City shall not be responsible for any disputes arising out of transactions made by others.

## SECTION 2 PROJECT(S) SUMMARY/SCOPE OF WORK

The intent of this solicitation is to award Job Order Contracts in seven Categories as listed in *Attachment A-2* to at least three (3) and no more than five (5) separate Contractors in each category who will subsequently compete for individual Job Orders (Delivery Orders) for projects by providing a proposal as each project arises based off of a Delivery Order Request for Proposal (DORFP) that is issued by the City of Buckeye. Each Job Order will be implemented by issuing a Delivery Order for the work. Each Job Order will be a separate contract for construction. Individual Delivery Orders shall not exceed \$2,000,000.00, including all change orders. The scope of work for each project cannot be precisely defined at this time, but the expectation is that the majority of Job Orders will be in the \$100,000 to \$1,000,000 range.

The City reserves the right to issue individual Job Orders by negotiating with the contractor that scored as the most qualified under a JOC category. If negotiations fail, the City will go to the next most qualified contractor for negotiations. The process is repeated until negotiations are successful, or the JOC contractor list is expended. As individual Job Orders are issued in this manner, negotiations will be initiated with the next most qualified contractor as each project is identified. To the extent reasonably practicable, which shall be at the City's sole discretion, projects will be rotated through all contractors under the JOC category to provide equal opportunity for all contractors, the byproduct of which is efficiency through competitive pricing, as discussed in the following paragraphs.

The City of Buckeye has elected to use the JOC delivery method for these projects as outlined under A.R.S. Title 34. Cost effective construction in the shortest possible time period and within the City's tolerance of financial risk will be the guiding principles behind the work associated with Job Order Contracting.

The Contractors may provide separate qualification submittals for one or multiple categories described in *Attachment A-2*. The list of services under each category is not comprehensive and the City reserves the right to add related services to each category as necessary.

**The City anticipates it will award contracts to at least three (3) and no more than five (5) separate contractors in each category (The number of contractors will be determined in the evaluation phase.).**

For projects determined by the City to be appropriate for this Job Order Contract, the City will request that the Contractor prepare a cost proposal and project schedule. If acceptable, the City will issue an Individual Job Order Contract and direct the Contractor to proceed with the work. Although the City anticipates that awarded Contractors will be issued work, the Contractor is guaranteed neither a minimum amount of work nor any jobs at all. The City reserves the right and will issue job orders based on the ability of the Contractor to meet the City's work schedule and the availability of trades and expertise in relation to each project. Appropriate payment and performance bonding per project shall be required.

**Scope of Work:** See *Attachment 2*.

### SECTION 3 - PRE-SUBMITTAL CONFERENCE

The pre-submittal conference has been scheduled for **Wednesday, May 29, 2024, at 10:00 AM via Microsoft Teams**. Attendance is encouraged but not required.

Microsoft Teams: [Link](#)

### SECTION 4 SUBMITTAL REQUIREMENTS

The **One (1) page Cover letter** submitted with your **Statement of Qualifications (SOQ)** packet, must indicate which category(s) your Firm wishes to be considered for using the **JOC Selection Checklist (Attachment A-3)**. Firms must submit a separate SOQ for each category they wish to be considered for. When the selection process is complete, Firms may be awarded in one or multiple Categories based on the SOQs submitted.

Submissions must be received through the City of Buckeye's Bonfire website by **Monday, 3:00 PM, local time on June 17, 2024**. Submit a complete copy of the Qualifications using a "PDF" file format. searchable

Submittals must be received by the specified time. On the PDF file, please display: Firm name, Request for Qualifications (RFQ) title, RFQ Number #2024193, Category Number/Name. All submittals must be uploaded to the solicitation posting on the City of Buckeye's Bonfire website: <https://buckeyeaz.bonfirehub.com/opportunities/114292>.

All Questions concerning this Request for Qualifications (RFQ) can be submitted through Bonfire or directly to the Contracts Administrator: (Phone/Email)

City of Buckeye  
530 East Monroe Avenue  
Buckeye, AZ 85326  
Attn: Travis M. Stewart  
[tstewart@buckeyeaz.gov](mailto:tstewart@buckeyeaz.gov)  
623.349.6173

**Questions must be received by the deadline to be considered. The deadline for questions is June 10, 2024, 3:00 PM Local Time.**

Submittal: one (1) page cover letter, Two (2) pages financial information)

TAB A: Project Experience (one page per project, maximum of eight (8) projects)  
TAB B: Past Performance Questionnaire (one form per projects identified in TAB A)  
TAB C: Key Personnel Resumes (one page per resume, plus organizational chart)  
TAB D: Method of Approach (25 pages)

## **COVER LETTER/FINANCIAL INFORMATION**

Within the one-page cover letter, include your firm's full company name, address, phone number and the email address for your firm's contact person for the RFQ and Category (2) you wish to be considered for.

Adherence to the maximum page criterion is critical: each page side (maximum 8 1/2" x 11") with criteria information will be counted. Do not use 11" x 14" or 11" x 17" size sheets (e.g., fold-outs) unless specifically authorized. Pages that have project photos, charts and/or graphs will be counted towards the required number of pages. Front and back covers, Table of Contents, and divider (tab) pages will not be counted unless they include qualification information that could be considered by the selection panel.

Resumes should provide information for key staff (no company profiles) and should not include project pictures or general firm information. Any additional company information or non-key staff information included in the resume section will be counted against the maximum page requirement. Do not submit information that is not listed herein.

Font size must be 10 point or greater.

1. Financial Capacity/Bonding/Insurance
2. Total Bonding Capacity - Single Limit and Aggregate Limit
3. Current Backlog/Project List
4. Insurance Provider Rating (e.g. A.M. Best, Moody's, S&P, etc.)

(Items 1-3 must be documented /verified from your surety or insurance carrier)

## **TAB A - PROJECT EXPERIENCE**

Identify at least Five (5) but no more than Eight (8) comparable projects. Demonstrate the experience of your firm and/or proposed team, including sub-contractors, on projects same/similar to that described in the solicitation for same/similar services. The projects submitted should also demonstrate that the contractor and/or the team have performed a same/similar type of services at multiple sites simultaneously. Same and or similar type services may be as follows:

1. Job Order Contracts for the services in the individual category the firm is submitting under as described in *Attachment A-2*.
2. Multiple Award JOC Contracts with Public Entities. (City, State, School District, County)
3. One (1) project presented in TAB A must represent a multitude of disciplines and job Duties.
4. Two (2) projects must highlight your firm's ability to perform similar projects and have a final construction value of greater than \$1,000,000.
5. All projects submitted must have been completed within the last five (5) years.

## **TAB B - PAST PERFORMANCE QUESTIONNAIRE**

For each project submitted in TAB A, you must submit a completed Past Performance Questionnaire, ATTACHMENT (A-1). The firm is directed to provide this form to the project owner or Point of Contact. Instruct the owner to complete the form and return the form with your submission.

## **TAB C - EXPERIENCE OF KEY PERSONNEL**

The Firm must provide resume data for the following key personnel: JOC Account Manager, JOC Estimator, Project Manager, Project Superintendent, and Quality Control Manager.

The Firm may also include resume data for other personnel that you consider key. Resume information to be provided shall be limited to no more than one (1) page per person and shall include the following information as a minimum:

- (a) Name and title
- (b) Project assignment
- (c) Name of firm with which associated
- (d) Years' experience with this firm and with other firms
- (e) Active professional registration, year first registered, if applicable
- (f) Other experience and qualifications relevant to same/similar work required under this contract
- (g) Education: degree(s), year, specialization, if applicable

Include an organizational chart (maximum 2 pages) at the end of this tab, chart may be 11"X17" submitted Provide an organizational chart that depicts the project team organization and lines of authority. Clearly indicate superior/subordinate reporting relationships; provide names of Project Managers, Site Supervisors, Inspectors and Estimators. Include if applicable, Key Personnel from major Subcontractors or Suppliers that would contribute to major portions of any work associated with this JOC solicitation.

## **TAB D - METHOD OF APPROACH**

### **General Project Approach:**

1. Describe your firm's overall commitment to responding to the City's requests for services.
2. Describe how your firm handles cost control (daily, monthly, and completion tracking/reporting); scheduling (initial and progress schedules); how are cost overruns identified and how are they mitigated?
3. Describe your firm's conflict communication plan; what is your proposed escalation ladder?
4. Describe your firm's project closeout and final documentation process.

### **Job Order Management:**

Describe your firm's ability to timely and appropriately process necessary paperwork and issue cost estimates and schedules related to the City's job order requests. Include in your response specific detail regarding the following:

1. Upon receipt of a job order request for proposal from the City, how many days does your firm require to process and complete all necessary paperwork and return a proposal to the City?
2. Upon acceptance of a proposal and issuance of a Notice to Proceed, how many days does your firm typically require to mobilize forces and start construction?
3. Describe your firm's change request procedure and how change Orders are communicated with the City.

### **Value Analysis/Value Engineering/Risk Mitigation:**

1. What capabilities does your firm have to provide additional Value Analysis/Value Engineering to Job Orders of limited design prior to construction? What is your willingness to provide these services as part of your job order quotation?
2. What capabilities do you have to identify and communicate various opportunities for risk mitigation with the City at the time of Job Order development? What risk Avoidance strategies have you commonly employed and shared with Owners to Reduce threats to the project's success?

***NOTE: Specific pricing information, including proposed value engineering or cost savings information shall not be submitted with the respondent's initial Statement of Qualifications. Any Statement of Qualifications that contains any information of this type may, in the sole discretion of the City, be deemed non-responsive and be returned to the Contractor.***

### **Subcontractor Selection Plan:**

Each Contractor's subcontracting plan will be incorporated by reference into the Agreement. Each Contractor will be obligated to comply with its own plan. Note that a subcontractor selection plan is a requirement of A.R.S. § 34-604(C)(2)(e)(i) and, as such, must be submitted; failure to submit a subcontractor selection plan will result in rejection of the Statement of Qualifications.

### **Safety:**

1. Identify your Firm's Safety Manager.
2. List all major Certifications and Training obtained by the Safety Manager.
3. Describe Safety Training protocol provided to Field Staff at a Project site.
4. Provide your Firm's most current Experience Modification Rate (EMR).

## SECTION 5 - SELECTION PROCESS

This Request for Qualifications (RFQ) is being conducted pursuant to A.R.S. § 34-604. The process will be to review and evaluate the submittals using a Scoring System. The selection criteria and relative weights for determining the order of firms on the final list are as follows:

SECTION	MAX SCORE
Cover Letter	0
Project Experience	30
Past Performance Questionnaire	20
Experience of Key Personnel	20
Method of Approach	30
<b>Total Maximum Points</b>	<b>100</b>

The Selection Panel will evaluate each SOQ according to the criteria set forth in Section 4 above. The City will select firm(s) based on the SOQs received; formal interviews may or may not be conducted. The City may conduct a due diligence review on the firm(s) receiving the highest scores.

A "Selection Committee" will be comprised of City employees and at least one senior management employee of a licensed contractor and one person who is an architect or engineer registered pursuant to A.R.S. § 32-121. These members may be employees of the City or outside consultants. The selection committee will review, evaluate, and score the RFQ responses in accordance with the evaluation criteria established above.

The City may then decide, if necessary, to conduct interviews of firms to make final selections.

The City will then award a Job Order Contract to the highest-ranked firms within each Category.

The City expects to award contracts in all categories listed in *Attachment A-3*.

## SECTION 6 - GENERAL INFORMATION

**City Rights.** The City of Buckeye reserves the right to reject any or all Statements of Qualifications, to waive any informality or irregularity in any Statement of Qualifications received, and to be the sole judge of the merits of the respective Statements of Qualifications received.

**Acceptance of Evaluation Methodology.** By submitting Qualifications in response to this SOQ, respondent acknowledges and accepts the evaluation process, the established criteria and associated Scoring System that determination of the "most qualified" firm(s) will require subjective judgments by the City.

and

**Release of Project Information.** The City shall provide the release of all public information concerning this project, including selection announcements and contract award. Those desiring to release information to the public must receive prior written approval from the City.

**Contact with City Employees.** All firms interested in this project (including the firm's employees, representatives, agents, lobbyists, attorneys, and subcontractors) will refrain, under penalty of disqualification, from direct or indirect contact for the purpose of influencing the selection or creating bias in the selection process with any person who may play a part in the selection process, including the evaluation panel, the City Manager, Department Heads and other City staff. This policy is intended to create a level playing field for all potential firms, assure that contract decisions are made in public and to protect the integrity of the selection process. All contact on this selection process should be addressed to the authorized representative identified below.

**Data Confidentiality.** Except as specifically provided in the Contract, the Contractor or its subcontractors shall not divulge data to any third party without prior written consent of the City.

**Legal Worker Requirements.** The City of Buckeye is prohibited by A.R.S. § 41-4401 from awarding a contract to any contractor who fails, or whose subcontractors fail, to comply with A.R.S. § 23- 214(A). The contractor and each subcontractor shall comply with all federal immigration laws and regulations related to their employees and compliance with the stated law. The City of Buckeye retains the legal right to inspect the papers of any contractor or subcontractor employee who is awarded a contract to ensure that the firm or subcontractor is complying with the law.

**Lawful Presence Requirement.** Pursuant to A.R.S. §§ 1-501 and 1-502, the City of Buckeye is prohibited from awarding a contract to any natural person who cannot establish that such person is lawfully present in the United States. To establish lawful presence, a person must produce qualifying identification and sign a City-provided affidavit affirming that the identification provided is genuine. This requirement will be imposed at the time of contract award. This requirement does not apply to business organizations such as corporations, partnerships or limited liability companies.

**Protest Procedures.** Firms wishing to respond to disqualification or a procurement outcome may refer to The City of Buckeye Procurement Code, Section 24-3-17 which governs protest procedures utilized throughout the selection process.

**Suspension/Debarment.** By submitting a proposal in response to this solicitation, the respondent is certifying that it is neither debarred nor suspended nor under consideration for suspension or debarment by any federal, state, or local government or agency. If a respondent is not able to so certify, the respondent must submit a letter that identifies the agency involved and a contact and explains why respondent is suspended, debarred, or being considered for suspension or debarment.

**Questions.** Questions pertaining to this selection process or contract issues should be directed to Travis M. Stewart, Contracts Administrator at 623-349-6173 / [tstewart@buckeyeaz.gov](mailto:tstewart@buckeyeaz.gov) or through the City of Buckeye's Bonfire website. All questions relating to the RFQ must be received no later than the deadline for questions as stated on the cover sheet of the RFQ. Responses to questions that materially change the scope or intent of this SOQ will be issued via addendum on the City of Buckeye website. The City will not notify Respondents of posting of addenda. Therefore, it is the Respondents' sole responsibility to check the website periodically for issued addenda. Failure to include acknowledgement of all addenda may be cause for rejection of the proposal.

# **ATTACHMENT A-1**

## **PAST PERFORMANCE QUESTIONNAIRE**

# PAST PERFORMANCE QUESTIONNAIRE

## CONTRACT INFORMATION (To be completed by Contractor)

### 1. Contractor Information:

Firm Name: \_\_\_\_\_ Email : \_\_\_\_\_  
Address: \_\_\_\_\_ Contact Name: \_\_\_\_\_  
Phone Number: \_\_\_\_\_ Contact Phone: \_\_\_\_\_

2. Work Performed as:  Prime Contractor  Sub Contractor  Joint Venture  Other (Explain):

### 3. Contract Information:

Contract Number: \_\_\_\_\_  
Contract Type:  Firm Fixed Price  Cost Reimbursement  Other (Please specify):  
Contract Title: \_\_\_\_\_ Contract Location: \_\_\_\_\_  
  
Award Date (mm/dd/yy): \_\_\_\_\_  
Contract Completion Date: \_\_\_\_\_ Actual Completion Date : \_\_\_\_\_  
Explain Differences:  
  
Original Contract Price (Award Amount): \_\_\_\_\_  
Final Contract Price (to include all modifications, if applicable): \_\_\_\_\_  
Explain Differences:

### 4. Project Description:

Complexity of Work:  High  Med  Routine  
How is this project relevant to project of submission? (Please provide details such as similar equipment, requirements, conditions, etc.)

## CLIENT INFORMATION (To be completed by Client)

### 5. Client Information:

Name: \_\_\_\_\_ Phone Number: \_\_\_\_\_  
Title: \_\_\_\_\_ Email Address: \_\_\_\_\_

### 6. Describe the client's role in the project:

Client Signature:

Date:

**ADJECTIVE RATINGS AND DEFINITIONS TO BE USED TO BEST REFLECT  
YOUR EVALUATION OF THE CONTRACTOR'S PERFORMANCE**

<b>RATING</b>	<b>DEFINITION</b>	<b>NOTE</b>
<b>(E) Exceptional</b>	Performance meets contractual requirements and exceeds many to the Government/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with few minor problems for which corrective actions taken by the contractor were highly effective	An Exceptional rating is appropriate when the contractor successfully performed multiple significant events that were of benefit to the Government/Owner. A singular benefit, however, could be of such magnitude that it alone constitutes an Exceptional rating. Also there should have been NO significant weaknesses identified.
<b>(VG) Very Good</b>	Performance meets contractual requirements and exceeds some to the Government/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with some minor problems for which corrective actions taken by the contractor were effective	A Very Good rating is appropriate when the Contractor successfully performed a significant event that was a benefit to the Government/Owner. There should have been no significant weaknesses identified.
<b>(S) Satisfactory</b>	Performance meets minimum contractual requirements. The contractual performance of the element or sub-element contains some minor problems for which corrective actions taken by the contractor appear or were satisfactory	A Satisfactory rating is appropriate when there were only minor problems, or major problems that the contractor recovered from without impact to the contract. There should have been NO significant weaknesses identified. Per DOD policy, a fundamental principle of assigning ratings is that the contractors will not be assessed a rating lower than Satisfactory solely for not performing beyond the requirements of the contract.
<b>(M) Marginal</b>	Performance does not meet some contractual requirements. The contractual performance of the element or sub-element being assessed reflects a serious problem for which the contractor has not yet identified corrective actions. The contractor's proposed actions appear only marginally effective or were not fully implemented.	A Marginal rating is appropriate when a significant event occurred that the contractor had trouble overcoming which impacted the Government/Owner.
<b>(U) Unsatisfactory</b>	Performance does not meet most contractual requirements and recovery is not likely in a timely manner. The contractual performance of the element or sub-element contains serious problem(s) for which the contractor's corrective actions appear to have been or were ineffective.	An Unsatisfactory rating is appropriate when multiple significant events occurred that the contractor had trouble overcoming and which impacted the Government/Owner. A singular problem, however, could be of such serious magnitude that it alone constitutes an unsatisfactory rating.
<b>(N) Not Applicable</b>	No information or did not apply to your contract	Rating will be neither positive nor negative.

**PAST PERFORMANCE EVALUATION**  
(TO BE COMPLETED BY CLIENT)

a) Quality of technical data/report preparation efforts	E	VG	S	M	U	N
b) Ability to meet quality standards specified for technical performance	E	VG	S	M	U	N
c) Timeliness/effectiveness of contract problem resolution without extensive customer guidance	E	VG	S	M	U	N
d) Adequacy/effectiveness of quality control program and adherence to contract quality assurance requirements (without adverse effect on performance)	E	VG	S	M	U	N
<b>2. SCHEDULE/TIMELINESS OF PERFORMANCE:</b>						
a) Compliance with contract delivery/completion schedules including any significant intermediate milestones. <i>(If liquidated damages were assessed or the schedule was not met, please address below)</i>	E	VG	S	M	U	N
b) Rate the contractor's use of available resources to accomplish tasks identified in the contract	E	VG	S	M	U	N
<b>Customer Satisfaction:</b>						
a) To what extent were the end users satisfied with the project?	E	VG	S	M	U	N
b) Contractor was reasonable and cooperative in dealing with your staff (including the ability to successfully resolve disagreements/disputes; responsiveness to administrative reports, communication and professionalism)	E	VG	S	M	U	N
c) To what extent was the contractor cooperative, professional, and concerned with the interests of the customer?	E	VG	S	M	U	N
d) Overall customer satisfaction	E	VG	S	M	U	N
<b>Management:</b>						
a) Effectiveness of on-site management of subcontractors, suppliers, materials, and/or labor force?	E	VG	S	M	U	N
b) Ability to hire, apply, and retain a qualified workforce through this effort	E	VG	S	M	U	N
c) Government Property Control	E	VG	S	M	U	N
d) Knowledge/expertise demonstrated by contractor personnel	E	VG	S	M	U	N
e) Utilization of Small Business	E	VG	S	M	U	N
f) Ability to simultaneously manage multiple projects with multiple disciplines	E	VG	S	M	U	N
g) Ability to assimilate and incorporate changes in requirements and/or priorities, including planning, execution and response to Government change	E	VG	S	M	U	N
h) Effectiveness of overall management (including ability to effectively lead, manage and control the program)	E	VG	S	M	U	N

c

a) Ability to meet the terms and conditions within the contractually agreed price(s)?	E VG S M U N
b) Contractor proposed innovative alternative methods/processes that reduced cost, improved maintainability or other factors that benefited the client	E VG S M U N
c) If this is/was a Government cost type contract, please rate the Contractor's timeliness and accuracy in submitting monthly invoices with appropriate back-up documentation, monthly status reports/budget variance reports, compliance with established budgets and avoidance of significant and/or unexplained variances (under runs or overruns)	E VG S M U N
d) Is the Contractor's accounting system adequate for management and tracking of costs? <i>If no, please explain in Remarks section.</i>	Yes No
e) If this is/was a Government contract, has/was this contract been partially or completely terminated for default or convenience or are there any pending terminations? <i>Indicate if show cause or cure notices were issued, or any default action in comment section below.</i>	Yes No
f) Have there been any indications that the contractor has had any financial problems? <i>If yes, please explain below.</i>	Yes No
a) To what extent was the contractor able to maintain an environment of safety, adhere to its approved safety plan, and respond to safety issues? (Includes: following the users rules, regulations, and requirements regarding housekeeping, safety, correction of noted deficiencies, etc.)	E VG S M U N
b) Contractor complied with all security requirements for the project and personnel security requirements.	E VG S M U N
a) Ability to successfully respond to emergency and/or surge situations (including notifying COR, PM or Contracting Officer in a timely manner regarding urgent contractual issues)	E VG S M U N
b) Compliance with contractual terms/ provisions ( <i>explain if specific issues</i> )	E VG S M U N
c) Would you hire or work with this firm again? ( <i>if no, please explain below</i> )	Yes No
d) In summary, provide an overall rating for the work performed by this contractor.	E VG S M U N

**Please provide responses to the questions above (if applicable) and/or additional remarks. Additional , please provide a brief narrative addressing specific strengths, weaknesses, deficiencies, or other comments which the City is using in evaluating performance risk. (please attach additional pages if necessary)**

**Client Signature:**

**Date:**

# **ATTACHMENT A-2**

## **SCOPE OF WORK BY CATEGORY**

The intent of this solicitation is to award a Job Order Contract to at least three (3) and no more than five (5) separate Contractors in each category who will subsequently compete for individual Job Orders for projects by providing a proposal as each project arises. Each Job Order will be implemented by issuing a Delivery Order (DO) for the work. Each Job Order (DO) will be a separate contract for construction. Individual Delivery Orders shall not exceed \$2,000,000.00, including all change orders. The scope of work for each project cannot be precisely defined at this time, but the expectation is that the majority of Job Orders will be in the \$50,000 to \$1,000,000 range. Projects delivered under the Job Order Contract will be restricted to the services outlined in each category. Interested contractors will have the ability to show related experience and a proven track record in projects of the same nature and magnitude. The selected contractors will be expected to deliver turn key projects, including all permitting and compliance with regulatory requirements. For any project determined by the City to be appropriate for the Job Order Contract, the City will issue a Delivery Order Request for Proposals (DORFP).

The City reserves the right to issue individual Job Orders by negotiating with the contractor that scored as the most qualified under a JOC category. If negotiations fail, the City will go to the next most qualified contractor for negotiations. The process is repeated until negotiations are successful, or the JOC contractor list is expended. As individual Job Orders are issued in this manner, negotiations will be initiated with the next most qualified contractor as each project is identified. Projects will be rotated through all contractors under the JOC category to provide equal opportunity for all contractors.

The City will receive proposals and execute individual Delivery Orders specifying the cost and completion schedule for each project. Design services or post design services may be required for some of the projects. The scope of work for design or post design services, when applicable, will be defined by the City and included in each Delivery Order Request for Proposals. Any as-builts required to be completed as part of the post design services will be specified.

The following work activities may be included in individual projects under each category. Not all activities will be included in all projects. The activities are not inclusive of the work that may be required on all projects. The successful contractors shall have experience, knowledge, and ability to accomplish the following tasks but not limited to:

**CATEGORY 1: STREET MAINTENANCE: PAVE, PATCH & MILL PROJECTS**

May include but not limited to the following Services more particularly described in the attached Street Maintenance Technical Specifications Manual (*Attachment A-4*):

- Asphalt Milling
- Meet Compaction and MAG Standards for Asphalt Breaks
- Striping and Pavement Marking
- Preparation of surfaces and Cleaning
- Material Quality Control and Testing

•

Engineer Approved Mixes and Specifications  
Traffic Control  
Manhole/Utility Adjustments  
Asphalt Patch After Underground Utility  
Repairs Protection of Landscape and Adjacent  
Property Community Outreach

### **CATEGORY 1: STREET MAINTENANCE: SEALING APPLICATION PROJECTS**

May include but not limited to the following Services more particularly described in the attached Street Maintenance Technical Specifications Manual (*Attachment A-4*):

Asphalt Emulsion Seal Coat-Master seal  
Asphalt Emulsion Seal Coat-PMM  
Asphalt Emulsion Seal Coat-Slurry Seal Type II  
Equipment Required for Sealing Applications  
Preparation of Surfaces and Cleaning  
Protection of Landscape and Adjacent Property  
Community Outreach  
Traffic Control  
Quality Control Standards and Testing

### **CATEGORY 2: General Construction Services**

- 1) General building/site construction for various renovations, new building construction, site enhancements, painting, project management, cost estimating and miscellaneous improvements.
- 2) Knowledge of and compliance with current City of Buckeye adopted codes and inspection requirements.
- 3) Simultaneous management of Subcontractors, project schedule and budgets through all phases of construction.
- 4) Design Services; Design services may be required for some work assignments. The contractor shall use Arizona registered professional engineers to prepare and seal construction documents.
- 5) Obtain all necessary permits required to complete the project, including SWPPP, dust control and all other permitting required to successfully complete the Delivery Order.

- 6) Show evidence of the appropriate Arizona State contractor license - Class B-01 General Commercial Contractor or equivalent prior to submitting RFQ.
- 7) Effectively managed on-site personnel meeting high quality and safety standards along with effective public relations
- 8) Provide rapid response to emergency work required. No minimum amount of work is guaranteed. The City anticipates pricing individual job orders by obtaining proposals from one or all Job Order Contractors, as outlined in the solicitation materials, as each unique project arises. Appropriate payment and performance bonding per project shall be required.

### **CATEGORY 3: Road Construction Services**

- 1) Ability to perform specific tasks associated with Road Construction to include: PCCP Paving, Asphalt paving, Box Culverts, ADA Ramps, Road Reconditioning, Slurry Seal, concrete Flatwork, Bank Protection, Retaining Walls, Turn Lanes, Utility Work, Bus Pullouts, neighborhood Rehabilitation, Curb and Gutter, Drainage Structures, Roadway excavation and Grading, Roadway widening, Guardrail fabrication and installation, Striping and signage, Chip Seal and Traffic Control
- 2) Design Services; Design services may be required for some work assignments. The contractor shall use Arizona registered professional engineers to prepare and seal construction documents.
- 3) Permitting; Obtain all necessary permits required to complete the project, including but not limited to; Engineering Off-site, haul route, stockpile, SWPPP, dust control, traffic control plans, MCESD approval to construct, approval of construction.
- 4) Maintaining traffic control according to the approved traffic control plans.
- 5) Simultaneous management of multiple projects with multiple disciplines.
- 6) Effectively managed on-site personnel meeting high quality and safety standards along with effective public relations
- 7) Provide rapid response to emergency work required.

### **CATEGORY 4: Steel Building/Structure Construction Services**

- 1) New steel building/structure constructions, renovations on existing buildings/structures, project management, cost estimating and miscellaneous improvements.

- 2) Knowledge of and compliance with current City of Buckeye adopted codes and inspection requirements.
- 3) Simultaneous management of Subcontractors, project schedule and budgets through all phases of construction.
- 4) Design Services; Design services may be required for some work assignments. The contractor shall use Arizona registered professional engineers to prepare and seal construction documents.
- 5) Obtain all necessary permits required to complete the project, including SWPPP, dust control and all other permitting required to successfully complete the Delivery Order.
- 6) Show evidence of the appropriate Arizona State contractor license - Class B-01 General Commercial Contractor or equivalent prior to submitting RFQ.
- 7) Effectively managed on-site personnel meeting high quality and safety standards along with effective public relations
- 8) Provide rapid response to emergency work required. No minimum amount of work is guaranteed. The City anticipates pricing individual job orders by obtaining proposals from one or all Job Order Contractors, as outlined in the solicitation materials, as each unique project arises. Appropriate payment and performance bonding per project shall be required.

# **ATTACHMENT A-3**

## **JOC SELECTION CHECKLIST**

## JOC Selection Checklist

\*Please include the checklist below with each SOQ packet to indicate the category your firm is wishing to be considered for.

<b>JOC Categories</b>		
<b>RFQ No.</b>	<b>Description</b>	<b>Category</b>
2024193.1	Street Maintenance Pave, Patch & Mill Projects / Sealing Application Projects	<input type="checkbox"/>
2024193.2	General Construction Services	<input type="checkbox"/>
2024193.3	Road Construction Services	<input type="checkbox"/>
2024193.4	Steel Building/Structure Construction Services	<input type="checkbox"/>

# **ATTACHMENT A-4**

## **STREET MAINTENANCE TECHNICAL SPECIFICATIONS MANUAL**



**CITY OF BUCKEYE**

**STREET MAINTENANCE  
TECHNICAL SPECIFICATIONS**

**ON CALL**

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## CITY OF BUCKEYE ON-CALL STREET MAINTENANCE

### 1.0 INTENT:

The intent of this Invitation for Bids is to source contractors to perform asphalt repairs, patching, crack filling, resurfacing, removal and replacement, seal coating, line striping, rpm placement for various roads owned by City of Buckeye.

—  
This contract is to be utilized for public roadways, parking lots, intersections, turn lanes, road v  
extensions, and other work deemed necessary by the City.

**All work shall be governed by the Uniform Standard Specifications for Public Works Construction prepared by the Maricopa Association of Governments (MAG Specs) and City of Buckeye standards. The Manual of Uniform Traffic Control Devices (MUTCD) will be a guide for Traffic Control setup.**

The City reserves the right to award in whole or in part, by item or group of items, by section or geographic area, or make multiple awards, where such action serves the City's best interest.

The City reserves the right to add additional contractors, at the City's sole discretion, in cases where the currently listed contractors are of an insufficient number or skill-set to satisfy the City's needs or to ensure adequate competition on any project or task order work.

### 2.0 SCOPE OF SERVICES:

#### 2.1 CONTRACTOR PERFORMANCE REQUIREMENTS:

Contractor to supply all labor, supervision, materials, supplies, equipment, transportation, and all effort necessary to perform the specifications herein.

#### 2.2 CRACK SEALING:

Crack Sealing shall consist of furnishing crack seal material and applying this material to cracks in asphalt concrete pavement, in accordance with these specifications.

##### 2.2.1 MATERIAL:

Material Specifications: The crack sealant material shall be a hot applied elastically polymer modified asphalt or single asphalt rubber component. The asphalt rubber sealant shall be a blend of asphalt cement, crumb rubber, virgin rubber, fillers, and plasticizers formulated for hot arid climates. The asphalt rubber modified compound shall:

- (A) Be formulated to cure as it cools;
- (B) Sufficiently cure after a twenty-minute set time to resist pick up and tracking by vehicular traffic; and
- (C) Not bleed or become tacky under traffic during summer temperatures.

The asphalt component shall be paving grade asphalt per MAG Specs Section 711.

The supplied sealant material shall be formulated for use during hot climatic conditions and meet the following specifications:

<b>PROPERTY</b>	<b>TEST METHOD</b>	<b>REQUIREMENT</b>
Ductility @ 77° F, cm	ASTM D113	15 Min.
Flash Point, Degrees F		450 Min.
Softening Point, Degrees F	ASTM D36	200 Min.
Cone Penetration @ 77° F, dmm	ASTM D5329	25-40
Resilience, %	ASTM D5329	30 Min.
Bitumen Content, %	ASTM D4	60 Min.
Brookfield Viscosity @ 375° F, Poise	ASTM D2196	40-90
Asphalt Compatibility	ASTM D5329	Pass
Material Unit Weight @ 60° F, lbs/gal		10 Max.
Pouring Consistency		Self-Leveling
Safe Heating Temperature, Degrees F		400
Recommended Pour Temperature, Degrees F		380

Additionally, the specific gravity of the crumb rubber shall be 1.15 +/- 0.02 and free from fabric, wire, and other contaminating materials. The material shall contain a minimum of 18 percent crumb rubber by weight of total asphaltic components. The material containing crumb rubber shall be reacted at the plant to provide a homogenous mix of components. A maximum of 4 percent calcium carbonate may be added to prevent particle clumping.

The crumb rubber shall comply with the following table:

<b>SIEVE (see Note)</b>	<b>PERCENT PASSING</b>

Note: The sieves shall comply with the requirements of AASHTO M-92

The Contractor shall not change the crack sealant material or supplier unless authorized by the Engineer.

The Contractor shall submit copies of all invoices for crack sealant material to the Engineer within 24 hours of material receipt.

#8

2.2.2 MATERIAL TESTING:

#20

Crack sealant material will be sampled and tested for compliance at a frequency of not less than one per month. The complete lot will be rejected if the material fails to comply. No payment will be made for pavement area in which the rejected material was used.

2.2.3 CONSTRUCTION METHODS:

2.2.3.1 EQUIPMENT:

The Engineer must approve all equipment designated for use by the Contractor. The equipment shall comply with all applicable OSHA, industry and local government safety

procedures, rules, and regulations. The Contractor must utilize safe and serviceable equipment capable of transporting required material and equipment to each job site.

#### 2.2.3.2 MELTER APPLICATOR:

The melter applicator unit shall be capable of heating and applying without any further equipment modification, all grades of asphalt rubber sealant, specification joint sealant, and fiber modified sealant. The machine shall be capable of starting at ambient temperature and bringing the sealing material up to application temperature in one hour or less. All qualified bidders must have and maintain a complete inventory of repair parts as well as having experienced service personnel for this equipment. The tank shall be well insulated and equipped with suitable heating devices (burners and flues) to assure a uniform specified application viscosity and temperature. It shall have an internal mixing device to keep asphalt rubber from separating from the compound. It shall have a double boiler type jacket to create a reservoir, which shall hold a minimum capacity of 200 gallons at ambient temperature. The machine, heating chamber and wand shall be so designed and constructed that under day-to-day operation no clean-out procedure is required. Diesel fuel or any other cleaning materials detrimental to the crack sealant product shall not be used to clean melter applicator equipment.

#### 2.2.3.3 WEATHER:

In no case shall sealant be placed during damp roadway conditions that exist such as wet roadway surfaces or damp material inside the cracks. Operations stopped by the Engineer, due to weather, shall be at no additional cost to the City.

#### 2.2.3.4 CLEANING CRACKS:

Immediately before applying the sealant, cracks shall be thoroughly cleaned of loose particles, grass, grass roots, weeds, dust, and other deleterious substances by means of high velocity compressed air or by other methods approved by the Engineer. Compressed air alone may not be sufficient to clean the cracks properly. Additional handwork may be required.

The compressor used shall be capable of a sustained pressure of 90 psi. The crack cleaning equipment shall be capable of cleaning cracks to a minimum depth of 1/2 inch. The equipment shall also be capable of dust containment by filtering particulate matter 10 micrometers or less in diameter with no dust clouds visible to the naked eye as determined by the Engineer (i.e. vacuum).

During the cleaning of cracks, the Contractor shall protect against damage to items such as, but not limited to, cars, people, driveways, walkways, landscape materials, etc. in the work area. During and after placement of the sealant, the Contractor shall protect against harm to persons or animals that may be exposed to the hot material.

#### 2.2.3.5 APPLICATION:

The Contractor shall protect all utilities from damage. The Contractor shall immediately contact the appropriate utility company if damage should occur and shall be responsible for all claims for damage due to their operations.

All cracks, including the space between the asphalt concrete pavement and the curb and gutter, which have an average clear opening 1/8 inch or greater, shall be sealed for the entire length of the visible crack. Sealant is to include portions of the crack sections smaller than 1/8 inch. The maximum crack width to be sealed shall be 1-1/2 inches. All cracks that have an average clear opening greater than 1-1/2 inches shall not be sealed unless directed to do so by the Engineer.

The sealant shall be placed in a manner that will completely fill the crack and not form a lap of greater than 1 inch on each side after forcing material into the crack with a squeegee. Immediately after the application, a rubber squeegee, or other acceptable method, shall be used to force the material into the crack, level the sealant with roadway surface, and form the lap.

The sealant shall be heated to the written manufacturer specifications, or as directed by the Engineer, before starting any crack sealant application. The sealant shall only be applied to clean dry cracks that have been approved by the Engineer.

#### 2.2.3.6 INSPECTION:

Inspection will include, but not be limited to, the quality of workmanship, width of cracks filled, cleanliness of cracks, and lapping.

The Contractor, at no additional cost to the City, will correct unacceptable work. Unacceptable work shall include, but not be limited to, unsealed cracks, material wastage on the sides of the roadway, and such quantities of material on the roadway that driving is affected.

Correction of unacceptable workmanship shall be accomplished within five working days after notification from the Engineer of the unacceptable work. The Contractor shall not progress to a new area until the unacceptable work is corrected to the satisfaction of the Engineer.

The Contractor shall meet with the Engineer on a daily basis and supply a signed daily report indicating the amount of crack sealant material applied for the day in total pounds and total square yards. In addition, the Contractor shall supply the Engineer with the dates of completion for each segment of road.

#### 2.2.4 MEASUREMENT:

Crack sealing shall be measured by the square yards of asphalt concrete pavement surface area sealed.

#### 2.2.5 PAYMENT:

Payment shall be made at the contract price per square yard of road area sealed and accepted with crack sealant material. This price shall be full compensation for furnishing, preparation, and placing of this material, all labor, equipment, tools, and incidentals including taxes, necessary to complete the item. Also included as incidental items are cleaning of cracks, application of blotter material, and all costs associated with any construction water and clean up.

#### 2.2.6 PREPARATION OF SURFACES:

This item shall consist of cleaning and patching existing transverse and longitudinal cracks wider than 1-1/2" to 6" in bituminous pavements in accordance with these specifications.

The quantity shown is for bidding purposes and has been approximated. Actual payment for the work will be determined by field measurements of the work completed. The Engineer will determine the cracks to be patched.

2.2.7 MATERIALS:

2.2.7.1 PATCHING MATERIAL:

Unique Paving Material or approved equivalent for patching shall conform to these requirements:

Limestone	91-97% by weight
Petroleum Asphalt Base	2-8% by weight
Petroleum Solvent	1-3% by weight
Additives	<1.0% by weight

2.2.7.2 MATERIAL ACCEPTANCE:

Prior to the use of the Patching material, the contractor shall submit to the Engineer, the appropriate material certification or laboratory test indicating that the material meets specification requirements. If the contractor applies the material prior to receipt of the test reports, payment for the material shall be withheld until they are received. If the material does not pass the specification it shall be replaced at the contractor's expense.

The Engineer may request samples for testing, prior to and during production, to verify the quality of the materials and to ensure conformance with the applicable specifications.

2.2.8 CONSTRUCTION METHODS:

2.2.8.1 WEATHER LIMITATIONS:

The material can be applied any time of the year due to different grades designed for optimum performance during various temperatures of application.

2.2.8.2 EQUIPMENT:

All machines, tools and equipment used in the performance of work required by these specifications will be subject to the approval of the Engineer and maintained in a satisfactory working condition at all times.

Hand tamper, vibratory plate compactor and rollers are acceptable for cracks as a final compaction. Depending on depth of crack a steel rod with a 1-1/2" diameter head shall be used to compact in lifts.

2.2.8.3 PREPARATION OF CRACKS:

No material shall be installed until all cracks have been cleaned free of all deleterious materials, including any dust, old sealant, incompressibles, and organic material.

When vegetation exists in the cracks and joints, it shall be removed and those cracks and joints shall be treated with a herbicide that sterilizes the soil subject to the approval of the Engineer. Cost for treatment is incidental.

2.2.8.4 APPLICATION OF PATCHING MATERIAL:

No patching material shall be installed until all cracks to be patched have been inspected and approved by the Engineer.

2.2.8.5 PAVEMENT CLEANING AND PROTECTION:

The pavement surface and all work areas shall be left in a clean condition.

2.2.9 METHOD OF MEASUREMENT:

Measurement for payment shall be by the pound of patching material used and accepted by the Engineer.

2.2.9.1 BASIS OF PAYMENT:

Payment shall be made at the contract unit price per pound of crack patching. This price shall be full compensation for furnishing all materials, for all preparation, and placing of the material, and for all labor, equipment, tools, and incidentals necessary to complete this item.

2.3 ASPHALT EMULSION SLURRY SEAL COAT.

2.3.1 DESCRIPTION:

The work covered by this specification consists of furnishing all labor, equipment, and materials necessary to perform all operations required for the application of an asphalt emulsion slurry surface.

2.3.2 MATERIALS:

The Engineer prior to their use must approve all material sources. Once approved, material sources shall not be changed without the approval of the Engineer. If requested by the Engineer, the Contractor shall submit material samples at least seven (7) days prior to start of construction. When requested, additional samples shall be furnished during the construction period at no cost to the City. Material sample submittal is a non-pay item.

The asphalt emulsion material, mineral aggregate and mineral filler shall be as specified in MAG Specs Section 715.

2.3.3 DETERMINATION OF JOB MIX:

The job mixture shall be designed to provide a suitable surface for traffic conditions, climate and curing. All materials shall be pre-tested in a qualified laboratory to determine their suitability for use in the slurry seal. The Wet Track Abrasion Test (W.T.A.T.) will be used for design purposes to establish the mix design to be used in the specified slurry seal.

The test will show a maximum wear loss of 50 grams per square foot. Samples of materials to be used on the job shall be used to run the W.T.A.T. The test will be performed in accordance with ASTM D-3910 Design Testing and Construction of Slurry Seal.

The Contractor shall submit a signed original mix design covering the specific materials to be used on the project, prior to commencement of the work. Any additives used shall be

When vegetation exists in the cracks and joints, it shall be removed and those cracks and crude source and asphalt type to be used on the project shall also be included in the submittal. The design shall be performed by an approved laboratory, experienced in slurry seal mix designs, with materials the Contractor will use on the project. After the mix design has been approved no substitution will be permitted, unless approved by the Engineer.

2.3.3.1 COMPOSITION OF SLURRY SEAL MIXTURES:

The job mixture shall conform to the requirements of the contract documents. The mixture shall attain an initial set in not less than 5 minutes nor more than one hour.

The mix design report shall show the test results performed on the materials and how the results of the materials tested compare to the required specifications. The mix design report shall include, as a minimum, the following information:

<b><u>SPECIFICATION</u></b>	<b><u>TEST METHOD</u></b>	<b><u>REQUIREMENT</u></b>
Slurry Seal Consistency	ISSA TB 106	2-3 cm.
W.T.A.T.	ASTM D-3910	50 grams/sf (max)
Compatibility	ISSA TB 115	Pass

The mixture shall be a Type II with the combined aggregates conforming to the gradation requirements of MAG Specs Table 715-1.

In cases where the surface is not critical to be open to traffic, a longer set time may be allowed, however not to exceed 12 hours. The setting time may be adjusted by the addition or removal of approved mineral fillers or chemical agents. The mixture shall be one of three types whose combined aggregates conform to the gradation requirements of MAG Specs Table 715-1. The mixture shall be sufficiently free flowing to fill cracks in the pavement. The mixture shall not segregate during or after laydown. The mixture shall produce a skid-resistant surface.

2.3.3.2 TRAIL APPLICATIONS:

The Contractor shall place a test strip of 1000 square yards in the area designated by the Engineer. The test strip shall be placed the day prior to construction with the area residents notified 48 hours prior to any test strip placement. The test section shall be placed using the same equipment and methods as will be used on the job. The slurry mixture placed in a test strip shall conform to the design mix as determined by the W.T.A.T. with minor variations to obtain crack filling, set time, pavement bond and a skid resistant texture. If the materials do not meet the requirements for fluidity, non-segregation, or surface texture, a new job mix shall be formulated and tested. Work shall not proceed before approval of design mix and acceptance following the placing of a test strip.

2.3.4 EQUIPMENT:

2.3.4.1 GENERAL:

When requested by the Engineer, descriptive information on the slurry seal mixing and applications equipment to be used will be submitted for approval no less than 7 days before the starts.

2.3.4.2 SELF CONTAINED SLURRY MACHINE(S):

The mixing machine shall be a self-propelled or truck mounted, able to accurately deliver and proportion aggregate, mineral filler, water, additive(s) and polymers modified emulsion to a revolving multi-blade mixer capable of minimum speeds of 200 rpm and discharge the

product on a continual flow basis. The machine shall have sufficient storage capacity for all materials to maintain an adequate supply to the proportioning controls.

The machine shall be equipped with mechanical and electronic counters to accurately measure and calibrate the revolutions of the conveyor delivering slurry aggregate to the pug mill. Each machine shall be equipped with a positive displacement pump and digital read-out counter to accurately measure and display in gallons, the quantity of emulsified asphalt delivered to the pug mill. Counters and meters shall be repaired or replaced immediately upon discovery of inaccuracy. The machine shall not be used until measuring devices are repaired.

The slurry machine shall have a clearly audible and functioning back-up horn.

A Certificate of Calibration, no more than three (3) months old, shall be submitted to the Engineer.

#### 2.3.4.3 SLURRY SEAL SPREADING EQUIPMENT:

Attached to the mixer machine shall be a mechanical type squeegee spreader equipped with flexible material in contact with the surface to prevent loss of slurry from the distributor. It shall be maintained to prevent loss of slurry on varying grades and crown by adjustments to assure uniform spread. There shall be a steering device and a flexible strike-off. The spreader box shall have an adjustable width. The box shall be kept clean. Build-up of asphalt and aggregate on the box shall not be permitted. The use of burlap drags or other drags shall be approved by the Engineer.

The paving mixture shall be spread uniformly by means of mechanical type lay-down box attached to the mixer, equipped with agitation, to spread the materials throughout the box without dead zones. Equipment shall be designed and operated so that all the fresh mix will be agitated. Flexible seals, front and rear, shall be in contact with the road surface to prevent loss of mixture from the box. The spreader box shall be equipped with an adjustable strike-off for controlling the thickness of the spread mixture and hydraulic cylinders to adjust the width of the lay-down box.

The spreading equipment shall be maintained free from buildup of the mixture on the paddles or sidewalls. Any skips, lumps, or tears in the finished product will not be allowed.

#### 2.3.4.4 ROLLERS:

Rollers shall be approved by the Engineer.

#### 2.3.4.5 CLEANING EQUIPMENT:

Pick-up brooms, water flushing equipment, and hand brooms shall be suitable for cleaning the surface and cracks of the old surface.

#### 2.3.4.6 AUXILIARY EQUIPMENT:

Hand squeegees, shovels, and other equipment shall be provided as necessary to perform the work.

### 2.3.5 PREPARATION OF THE SURFACE:

#### 2.3.5.1 CLEANING:

Immediately before applying the slurry, the area to be surfaced shall be cleaned of oil, grease, gasoline, dirt, loose material, and other objectionable material. The slurry seal shall

be applied the same day the pavement is cleaned. In urban areas, the surface shall be cleaned with a self-propelled pick-up sweeper. In rural areas, power brooms may be used. When necessary, cleaning shall be supplemented by hand brooms. When necessary, cleaning of the existing pavement surface shall be supplemented by hand brooms or other methods, approved by the Engineer, to assure a good bond between the asphalt emulsion slurry seal and the pavement surface. Power brooms or pick up brooms alone may not be adequate to thoroughly clean the surface. This also includes the removal of grass or weeds, which are growing in the joint between the street and the concrete gutter

The Contractor shall take all steps, procedures, and means to prevent dust pollution due to his construction practices in connection with this work. Dust prevention measures shall be maintained at all times during construction of the project to the satisfaction of the Engineer, in accordance with "Maricopa County Air Pollution Control Regulations".

Prior to the Pre-Construction meeting, the Contractor shall have a dust control plan, approved by the Maricopa County Division of Air Pollution Control. For information and requirements for the dust control plan, the Contractor shall contact:

Maricopa County Environmental Services Department  
Division of Air Pollution Control  
2406 South 24th Street, Suite E-214  
Phoenix, AZ 85034 (602) 506-6727

The Contractor shall remove and dispose of raised pavement markers (if any) prior to the placement of the slurry seal. Removal shall be by chipping, grinding, or any other method approved by the Engineer. The cost of raised pavement marker removal is incidental to pavement preparation.

Prior to striping removal, the Contractor shall document and detail the existing pavement striping and delineation. The details shall include as a minimum the type, size, color, dimensions, and specific detailed location of the delineation, acceptable to the Engineer, so that contractor or City Forces can replace the delineation, as it existed prior to the removal. The details shall be submitted to the Engineer a minimum three (3) working days prior to covering the striping with slurry.

The slurry shall not be applied until an inspection of the surface has been made by the Engineer and he has determined that it is suitable.

#### 2.3.5.2 WATER FOGGING:

When required by local conditions, the surface, directly ahead of the slurry box, shall be pre-wetted by fogging. The fogging shall be accomplished in such a manner that the entire surface is damp with no apparent flowing water or puddles.

Water Fogging is required and the rate of application of the fog spray shall be adjusted during the day to suit temperatures, surface texture, humidity, and dryness of the pavement. Water for construction is the responsibility of the Contractor. Any cost associated with water shall be incidental to the project. Sprayers shall be kept clean and operating at all times. The spray systems shall always be controlled by the slurry operator and not the driver of the vehicle. The system shall be a dual operated immediately in front of the truck and the spreader box. Slurry vehicles without the dual spray operator controlled system will not be permitted to work.

2.3.6 WEATHER LIMITATIONS:

The slurry seal shall not be applied during inclement weather, or weather determined unsuitable by the Engineer. The slurry seal shall not be applied if either the pavement or the air temperature is below 50 degrees F and falling, nor applied when the ambient temperature exceeds 105 degrees F, measured in the shade. No slurry seal shall be applied when the ambient temperature is expected to drop below 35 degrees F within 24 hours of application.

2.3.7 PROTECTION OF UNCURED SURFACE:

Adequate methods such as barricades, flagmen, pilot cars, etc. shall be used to protect the uncured slurry surface from all types of traffic.

The Contractor shall be responsible for the repair of all damage done within 24 hours of initial application.

2.3.8 MIXING AND APPLICATIONS:

The mixing time shall not exceed four minutes.

Excessive mixing will not be allowed. The resulting mixture shall have the desired consistency, when placed on the surface. If breaking, hardening, segregation, balling or lumping occurs during the mixing process, the batch will be discarded.

A sufficient amount of slurry shall be carried in all parts of the spreader at all times so that a complete coverage is obtained.

No streaks caused by oversized aggregate shall be left in the finished surface. Build-up on longitudinal and transverse joints will be kept to a minimum. Approved squeegees shall be used to spread slurry in areas non-accessible to the slurry mixer.

2.3.8.1 JOINTS:

No excess build up, uncovered areas, or unsightly appearance shall be permitted on longitudinal or transverse joints. When possible the longitudinal joints shall be placed on lane lines. Half passes and odd width passes will be used only when required. If half passes are used they shall not be the last passes of any paved area. A maximum of six inches (6") shall be allowed for overlap of longitudinal lane line joints.

2.3.8.2 LINES:

Care should be taken to insure straight lines along curbs and shoulders. No runoff shall be permitted at the above-mentioned area. Lines at intersections shall be kept straight to provide a neat appearance.

2.3.8.3 HAND WORK:

Areas that cannot be reached with the slurry seal machine shall be surfaced using hard squeegees to provide complete and uniform coverage. The area to be hand worked shall be lightly dampened prior to mix placement and the slurry placed in a time period so that the finish is the same as the finish achieved by use of the spreader box.

2.3.8.4 STOCKPILE AND CLEAN UP:

The Contractor shall locate and acquire areas to stockpile materials and equipment needed for construction. The cost of material stockpiling, equipment storage and clean up is incidental to the project.

Before final acceptance by the City, all private or public property and grounds occupied by the Contractor in connection with the work shall be cleaned of all rubbish, excess materials, temporary structures and equipment, and all parts of the work area shall be left in an acceptable condition. Clean-up shall also include the daily removal of slurry seal materials from manhole covers, valve covers, fire hydrant markers, gutters, curbs, sidewalks, survey monuments (brass caps), etc. in the project area.

#### 2.3.8.5 MATERIAL TESTING:

The Contractor is responsible for the quality control of all materials used. Testing performed by the Engineer will assure that materials conform to the specifications and shall not be considered a quality control measure.

**Asphalt Emulsion:** Provisions for properly sampling emulsion from distributor trucks or on-site bulk storage units shall be made by the Contractor. Emulsion sampling shall be performed by the Contractor and witnessed by the Engineer in accordance with the latest edition of ASTM D-140, "Standard Methods of Sampling Bituminous Materials." Testing will be performed by the Engineer in accordance with the latest edition of ASTM D-244, "Testing Emulsified Asphalts".

The minimum amount of sampling and testing shall be once for every 500 tons of emulsion. Material found in non-compliance will be rejected and shall be removed from the job site. No payment will be made for rejected material. The project shall not resume until the new material is tested and found in compliance. No lost time will be considered as a result of material being found in non-compliance.

**Fine Aggregate Material:** Material will be sampled and tested by the Engineer in accordance with the latest edition of ASTM C-136, "Sieve Analysis of Fine and Coarse Aggregates." The Engineer will sample aggregate cover material for acceptance at the stockpile location.

The minimum amount of sampling fine aggregate material and testing shall be once per day. Material found in non-compliance will be rejected. No payment will be made for rejected material. The area represented by the test shall be that area covered the day the sample was taken. No lost time will be considered as a result of material being found in non-compliance.

The Contractor shall permit the City to take samples of the materials and slurry used in the project at the City's discretion.

If any two successive tests of the stockpile material fail, the job shall be stopped. The Contractor shall, at his own expense, provide proof to the City that the conditions have been corrected.

If any two successive tests of the mix from the same machine fail, the use of the machine shall be suspended. The Contractor shall, at his own expense, provide proof to the City that the problems have been corrected and that the machine is working properly.

The Contractor shall check stockpile moisture content and set the machine accordingly to account for aggregate bulking. The City will use the following minimum sampling and testing guide for the contract.

**AGGREGATE:** Gradation, ASTM C-136, during production

<b>SAMPLE POINT</b>	<b>FREQUENCY</b>	<b>SIZE</b>	<b>ACCEPTANCE</b>
Stockpile or Unit Once per day on the job site (average of 2*)		3/8"	100% passing
		#4	± 5% of design
		#8	± 5% of design
	#16	± 5% of design	
	#30	± 5% of design	
	#50	± 4% of design	
	#100	± 3% of design	
	#200	± 2% of design	

Supplier Stockpile prior to start up

\* The percentage of aggregate passing shall not go from the high end to the low end of specified range on any two successive sieves.

**AGGREGATE:** Sand Equivalent, ASTM D-2419, during production

<b>SAMPLE POINT</b>	<b>FREQUENCY</b>	<b>ACCEPTANCE</b>
Stockpile or Unit	Weekly	50 min (any sample)
Supplier Stockpile	1 prior to start up	

**EMULSION:** Percent Residue, ASTM D-244, during production

<b>SAMPLE POINT</b>	<b>FREQUENCY</b>	<b>ACCEPTANCE</b>
		—

**SLURRY MIX:** Percent Emulsion Measured and Calculated, during production

<b>SAMPLE POINT</b>	<b>FREQUENCY</b>	<b>ACCEPTANCE</b>
Storage Tank or Unit	Monthly & at start up	+ 1% of design (60% min)
	—	

**SLURRY MIX:** Application Rate Measured and Calculated, during production

<b>SAMPLE POINT</b>	<b>FREQUENCY</b>	<b>ACCEPTANCE</b>
NA	Daily	18-24 lbs/sy

2.3.9 ROLLING:

As soon as the asphalt slurry has been set sufficiently to prevent any material from being picked up, it shall be rolled until all ridges have been ironed out and a uniform surface is obtained.

NA Daily + 1% of design

2.3.10 MEASUREMENT:

Quantities and materials for this work will be paid for at the contract price per unit of measurement for each of the following pay items as indicated in the proposal.

2.3.10.1 Bituminous tack coat if specified Ton (Diluted)

2.3.10.2 Emulsified asphalt for slurry Ton (Undiluted)

#### 2.3.10.3 Aggregate for slurry Ton (Surface Dry)

Payment for various bid items shall be compensation in full for furnishing all materials, labor, tools, equipment, and appurtenances necessary to complete the work in a satisfactory manner, as specified.

No additional payment will be made for work related to any item, unless specifically called for in the bid. No payment will be made for materials used to patch unacceptable work.

Price per ton of aggregate will include the price of the mineral filler. Total quantities indicated in the proposal are approximate and for bidding purposes only.

Only certified tickets of the bituminous tack coat, emulsion, and dry weight of aggregate delivered to a City representative will be accepted for payment. Overweight tickets shall not be accepted and material shall be partially unloaded, at no expense to the contracting agency, to a legal status for re-weighing. A new ticket will be required for the remaining load. No deliveries shall be accepted prior to 7:00 a.m., or after 4:30 p.m. Any deliveries before or after this time frame will not be compensated.

A daily tabulation of materials delivered, used, square yards covered, application rate, etc., shall be compared between the Contractor and the Engineer. Adjustments and agreements are final at the end of each stockpile. Materials placed without approval of the inspector, or materials rejected due to improper placing, improper proportions of materials, or materials found to be defective, will not be compensated.

#### 2.3.11 SAND BLOTTER:

Sand Blotter shall be in accordance with MAG Specs Sections 333.3.2 and 333.7, except as modified below.

The Contractor shall apply sand blotter prior to opening the roadway to traffic where there is an excess of asphalt emulsion, if requested by the Engineer. The Contractor shall also be responsible for sweeping the sand within 24 hours of opening the roadway to traffic.

There will be no payment for materials not placed in accordance with this specification. The cost associated with sand blotter, the material supplies, application, and clean-up shall be included in the unit price of related pay items. No direct payment or measurement for pay purposes will be made for sand blotter.

If the paved roadway must be sanded, the surface shall be sanded at approximately two pounds per square yard. No more sand shall be used than necessary, and the amount specified shall not be increased without prior approval of the Engineer.

After the treated area has been opened to traffic, the Contractor shall immediately cover any excess asphalt emulsion that comes to the surface with additional sand.

#### 2.4 ASPHALT MILLING.

The work under this section shall consist of milling existing asphalt concrete pavement where shown on the Plans or requested by the Engineer.

2.4.1 CONSTRUCTION REQUIREMENTS:

Contractor is responsible for locating all milling hazards on and below the surface within the areas to be milled including areas requiring special milling. Special milling is not a separate pay item and shall be paid for as Asphalt Milling.

The milling cut depth shall be the depth indicated on the Plans plus or minus 1/8 inch. The milling machine shall have electronic grade controls. Contractor shall remove the milled material and sweep the roadway clean with a power pick-up broom to the satisfaction of the Engineer.

Asphalt pavement adjacent to manholes, valve boxes, small radius curbs and other fixed objects that produce confined area shall be removed with milling equipment specifically designed to operate in constricted areas. The equipment shall be capable of removing asphalt concrete of the specified thickness without damage to, or displacement of, the adjacent object(s).

The Contractor shall be responsible for continually checking the milling operation to determine that the proper depth of milling has been achieved, that the proper profile and cross slope are achieved, and that the surface texture is (a) free from longitudinal ridges, and (b) has a uniform pattern.

The Contractor shall immediately notify the Engineer when:

The existing pavement thickness is found to be less than anticipated and breaking of the underlying material occurs.  
Delamination of underlying material occurs.

The work shall result in a clean milled surface to the specified depth for the area indicated by the construction documents including the areas immediately around and next to any individual hazard within the area to be milled. The edge of milled area shall form a straight clean cut line.

Road sections with curb and gutter shall be edge milled in accordance with Maricopa County Department of Transportation Standard Detail No.2013 "MILLING FOR OVERLAY", dated January 2, 2009, included in these special provisions or as directed by the Engineer.

Road sections without curb and gutter shall be milled at the road terminations.

Asphalt milling shall be performed for areas containing high points, rutting, shoving, seal coats, or other special circumstances as requested by the Engineer.

The Contractor shall not mill existing pavement until the Engineer approves the asphalt-rubber concrete mix design.

Pavement markings removed by the milling operation shall be replaced with temporary traffic control devices in order to provide continuous marking and control of the construction area, including delineation of traffic lanes.

Roadway without intersecting roads, curb and gutter, etc. will not require asphalt milling unless requested by the Engineer.

Any damage done to milled surfaces by traffic or other circumstances, prior to the placement of asphalt-rubber concrete, shall be repaired by Contractor as specified by the Engineer at no additional cost to the City.

2.4.2 MEASUREMENT AND PAYMENT:

Measurement for Asphalt Milling will be by the square yard and shall only include area milled to the required depth and cross section.

Payment for Asphalt Milling at the contract unit price shall be full compensation for the work, complete-in-place, including all asphalt milling, milling around structures, removal and disposal of milled materials, and sweeping.

2.5 ASPHALT CONCRETE PAVEMENT.

2.5.1 DESCRIPTION:

This section is to provide specifications for furnishing all materials, mixing at a plant, hauling and placing a mixture of aggregate materials, mineral admixture and asphalt binder to form a pavement course for placement upon a previously prepared base or sub base.

2.5.2 MATERIALS AND MANUFACTURE:

The materials shall conform to MAG Specs Section 710 for the type specified. The specific required mix type shall be called out in the contract documents or as directed by the Engineer.

2.5.3 WEATHER AND MOISTURE CONDITIONS:

Asphalt concrete shall be placed only when the surface is dry, and when the atmospheric temperature in the shade is 40 degrees F. (50 degrees F for Asphalt Concrete lift less than 2 inch thick) or above. No asphalt concrete shall be placed when the weather is foggy or rainy, or when the base or sub base on which the material is to be placed is unstable. Asphalt concrete shall be placed only when the Engineer determines that weather conditions are suitable.

2.5.4 APPLICATION OF TACK COAT:

A tack coat shall be applied to all existing and to each new course of asphalt concrete prior to the placing of a succeeding lift of asphalt concrete. The tack coat may be deleted when a succeeding layer of asphalt concrete is being applied over a freshly laid course that has been subjected to very little traffic when approved by the Engineer.

The application of the tack coat shall comply with MAG Specs Section 329. The grade of emulsified asphalt shall be SS-1 h or CSS-1 h as specified in MAG Specs Section 713.

The same material that is specified above for the tack coat shall be applied to the vertical surfaces of existing pavements, curbs, and gutters, against which asphalt concrete is to be placed.

The surface to be covered may require repair or patching as directed by the Engineer. This shall be addressed in the project specifications prior to the bidding of the project.

2.5.5 MIX DESIGN:

The mix design shall be submitted to the Engineer at least five working days prior to the start of asphalt concrete production. The Engineer will review and approve the mix design to assure it contains all of the required information as outlined in MAG Specs Section 710.3.1. The target values for gradations, binder contents, and air voids will be established as the accepted Job Mix Formula (JMF) based upon the mix design. Mix designs not containing all of the information will be returned within five working days of receipt of all mix design information, for action and resubmission by the contractor.

Once the mix design has been approved by the agency and the mixing plant selected, the Contractor and/or his supplier shall not change plants nor utilize additional mixing plants without prior approval of the Engineer.

If the contractor elects to change its source of material, the contractor shall furnish the Engineer with a new mix design, which meets the requirements of M A G S p e c s Section 710, as amended by the Project Specifications.

The contractor may make self-directed target changes to the approved mix design within the limits shown below. Requests for self-directed target changes shall be made in writing and acknowledged by the Engineer prior to the start of production of a lot and will remain in effect until such time as any additional changes are implemented.

The self-directed target changes must meet the contract requirements for mix design criteria and gradation limits.

ALLOWABLE SELF-DIRECTED TARGET CHANGES	
MEASURED CHARACTERISTICS	ALLOWABLE SELF-DIRECTED TARGET CHANGES
Gradation (Sieve Size)	
3/8 INCH	+ 2% from mix design target value
No 8	+ 2% from mix design target value
No 30	+ 1% from mix design target value
No 200	none
Binder Content	+ 0.2% from mix design target value
Effective Air Voids	None

The contractor may propose target changes, other than self-directed changes, to the approved mix design for the approval of the Engineer. The Engineer will determine if the proposed target change will result in mix production that meets the contract requirements for mix design criteria and gradation limits. The target changes will not be retroactive for the purpose of acceptance.

#### 2.5.6 MIX PRODUCTION:

All materials shall be proportioned by weight in a hot mix asphalt plant in the proportions required by the mix design to provide a homogeneous and workable mass. Each hot mix asphalt plant shall be inspected in accordance with the provisions contained in the 'Hot Mix Asphalt Production Facilities' by the Arizona Rock Products Association and shall have a current inspection certificate. All measuring devices shall be calibrated at least annually by a technician licensed by the Arizona Bureau of Weights & Measures. Mixing plants shall conform to the requirements of AASHTO M 156, except as modified herein.

In drum mix plants the mineral admixture shall be added and thoroughly mixed with the mineral aggregate by means of a mechanical mixing device prior to the mineral aggregate and mineral admixture entering the dryer. The moisture content of the combined mineral

Once the mix design has been approved by the agency and the mixing plant selected, the mixing process.

For drum-mix plants, the mineral admixture shall be weighed across a weight belt, or other approved alternative weighing system, with a weight totalizer prior to entry into the mechanical mixing device. The mechanical mixing device shall be a pugmill type mixer that is in good working condition. The rate of the aggregate feed shall not exceed the mixing device's capacity in ton per hour. The mixer shall be constructed to minimize the loss of mineral admixture and shall be located in the aggregate delivery system at a location where the mixed material can be readily inspected. The mixing device shall be capable of effective mixing in the full range of the asphalt concrete production rates.

The hot plant and equipment shall be constructed and operated to prevent loss of mineral admixture through the dust collection system of the plant.

A positive signal system shall be provided and utilized during production whereby the mixing shall automatically be stopped if the mineral admixture is not introduced into the mineral aggregate. The plant will not be permitted to operate unless the signal system is in good working condition.

The introduction of bituminous material shall be controlled by an automated system fully integrated with the controls of the mineral aggregate and mineral admixture. The production of the plant shall be controlled by the rate required to obtain a uniform mixture of all components. Drying and heating shall be accomplished in such a manner as to preclude the mineral admixture from becoming coated with un-spent fuel. The completed asphalt concrete may be held in storage for up to 12 hours in insulated or heated silos, providing the minimum temperature noted herein for placement and compaction is met behind the placement device. If the Engineer determines that there is an excessive amount of heat, heat loss, drain down, segregation and/or oxidation of the mixture due to temporary storage, use of surge bins or storage bins will be discontinued.

The temperature of the asphalt concrete, with unmodified binders, upon discharge from the mixer shall not exceed 335 degrees F. The discharge temperature may be increased on the recommendation of the binder supplier, when approved by the Engineer. If the asphalt concrete is discharged from the mixer into a hopper, the hopper shall be constructed so that segregation of the asphalt concrete will be minimized.

#### 2.5.7 PAVEMENT SMOOTHNESS (RIDEABILITY):

Pavement smoothness payment adjustments shall only apply to roadways with new asphalt pavement surfacing length greater than 0.25 miles, a functional classification of collector or higher, and a posted speed limit of 40 mph or greater. When the new asphalt pavement has a minimum of two courses of hot mix asphalt, each layer being 1.0 inch or greater; or the pavement has a new overlay of at least 1.5 inches the final pavement surface shall be evaluated for smoothness by the Engineer.

The Engineer shall determine if the rideability shall be applied to road segments, where a single lift overlay of 1.5" or greater is applied to existing pavement with a before overlay IRI of greater than 220 "International Roughness Index" (IRI). The "Before IRI Overlay" is defined as the average IRI of the existing pavement for a road section from starting to end termini. The before overlay IRI shall be provided by the Engineer. If the pavement structure is determined to be of sufficient thickness, a bid item shall be included for mandatory profile milling as a pay item. All applicable road segments shall be identified in the pre-bid documents. For road segments with a before overlay IRI between 120 and 220 profile milling is optional and will not be a pay item. Road segments with a before overlay

IRI of less than 120 shall follow the new construction portion of the smoothness specification.

Prior to the placement of the final course of pavement, the Engineer will furnish the Contractor with an International Roughness Index (IRI) value that results from the Engineer's evaluation of the material placed to date. The actual time of this "preliminary" evaluation will be coordinated between the Engineer, the Contractor, and the City. This evaluation will be limited to one (1) test run in a single lane in each direction of travel. The IRI value will serve as a guide to the Contractor in evaluating his current level of conformance with the smoothness specification. Preliminary IRI evaluations shall **NOT** be performed on road segments with profile milling, due to the extreme rough texture created by the profiler. The IRI value for the final course of pavement will be the basis for determining payment adjustments for smoothness. The smoothness adjustment will be in accordance with the New Construction Rideability Adjustment Schedule (Table 1) or the Overlay Rideability Adjustment Schedule (Figure I).

#### 2.5.7.1 EVALUATION METHOD:

The City shall evaluate the final pavement surface for smoothness, using the City IRI vehicle equipped with an International Cybernetics Corp. Laser Road Profiler. The IRI value is the calculated measurement of the deviation of a pavement surface from a true planar surface. The IRI data is typically collected at the posted speed limit, however speeds may range from 20-60mph. A zero IRI value would indicate a perfectly smooth pavement surface, while increasing IRI values would correspond to an increasingly rough pavement surface. IRI values will be calculated in inches of vertical displacement for every 0.10 mile lane segment and normalized to inches/mile. [Example: a 0.10-mile section yielding an actual vertical displacement of ten (10) inches would be normalized to an IRI value of 100 inches/mile.]

The final pavement surface being evaluated will be divided into 0.10-mile road segments and individual lanes. The final road segment will include any remaining portion of a segment not equaling 0.10 miles. [Example: 1.52 miles of pavement divides into 15 segments with the last one measuring 0.12 miles.] The IRI is calculated for each 0.10-mile segment and shall be averaged (three runs per lane) to determine the IRI value for that segment. All values obtained from the RMS IRI vehicle shall be final.

The following shall be subject to smoothness testing:

1. Roadway lanes that are 0.25 miles or greater in length.
2. Smoothness data will not be computed for the following project sections;

Lanes less than 0.25 miles in length.

Shoulders.

Pavement on horizontal curves that require the test vehicle to travel at speeds less than 20 mph.

Test segments with an irregularity such as bridge joints, cattle guards, drainage swales, railroad tracks, valley gutters, or other irregularity item as identified by the Engineer shall have a reduction in length of the test section by a minimum of 0.01 mile (53'), to exclude the irregularity from the data set.

3. Bridge decks shall be included only if paved as part of the project. If bridge decks are not included as part of the construction project, profile testing will be suspended before the first joint between the asphalt surfacing and the bridge/approach slab and restarted after the last joint between the bridge/approach slab and the asphalt surfacing.

4. Smoothness measurement testing will start and stop at the transverse joints of the project limits.

When requested by the Engineer, the Contractor shall provide traffic control for smoothness testing to allow the test vehicle to safely travel through signalized intersections and/or stop controls oriented in the test direction of travel.

The Contractor shall notify the Engineer within ten (10) working days after completion of all pavement repairs that the pavement is ready for smoothness testing. The Engineer will have the testing conducted within twenty (20) working days after notification by the Contractor. All Asphalt concrete pavements shall conform to MAG Specs Section 321 and 325 prior to smoothness testing.

When the smoothness measurements indicate corrective work is required, the Engineer shall notify the Contractor in writing within ten (10) working days after the completion of the smoothness testing. The Contractor shall have twenty (20) working days following such notification to make repairs to the pavement.

The Contractor shall notify the Engineer within ten (10) working days after completion of all pavement repairs that the pavement is ready for smoothness re-testing. The Engineer will conduct the testing within twenty (20) working days after notification by the Contractor.

No testing shall be conducted during rain or under other conditions deemed inclement by the Engineer. During testing the roadway must be free of moisture and other materials that might affect the evaluation. Any work associated with preparing the roadway for the

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#### 2.5.7.2 PAYMENT ADJUSTMENT FOR RIDEABILITY:

All Asphalt concrete shall conform to MAG Specs Section 321 and 325 prior to final payment adjustment for smoothness. Positive adjustments for rideability \_\_\_\_\_ for those areas subsequently reviewed and determined by the Engineer to be otherwise defective. The Area shall be considered defective if it does not conform to MAG Specs Section 321 and 325 requirements for Air Voids, Binder Content, Gradation, Density, and/or Pavement Thickness.

Payment adjustments shall be made under the contract item Rideability. When a project is considered to be new construction or re-construction with grade control from the sub-grade material and up, the payment to the Contractor shall be based on the IRI value according to the New Construction Rideability Adjustment Schedule (Table 1). In the case of single lift 1.5" or greater overlays the payment to the contractor shall be based on the IRI value according to the Overlay Rideability Adjustment Schedule (Figure 1). The adjustment will be applied to each one tenth mile (0.10 mi.) segment of each lane subject to smoothness testing. The rideability payment will be the indicated percent adjustment multiplied times the adjusted contract price for the surface course quantities of the hot mixed asphalt, asphalt overlay, or rubber asphalt overlay incorporated into the final construction.

Payment for Rideability will be distributed based on segment areas; the area of each lane segment will be the segment length times the segment width. The segment width shall be the striped traffic lane width or modified lane width. The width for exterior lanes will be the striped traffic lane width modified to include the asphalt area of adjacent bicycle lanes, paved shoulders, and short auxiliary lanes. The width of the innermost traffic lanes will be the striped traffic lane width modified to include the asphalt area of adjacent asphalt paved medians and left turn bays. evaluation, such as but not limited to sweeping, will not be measured for

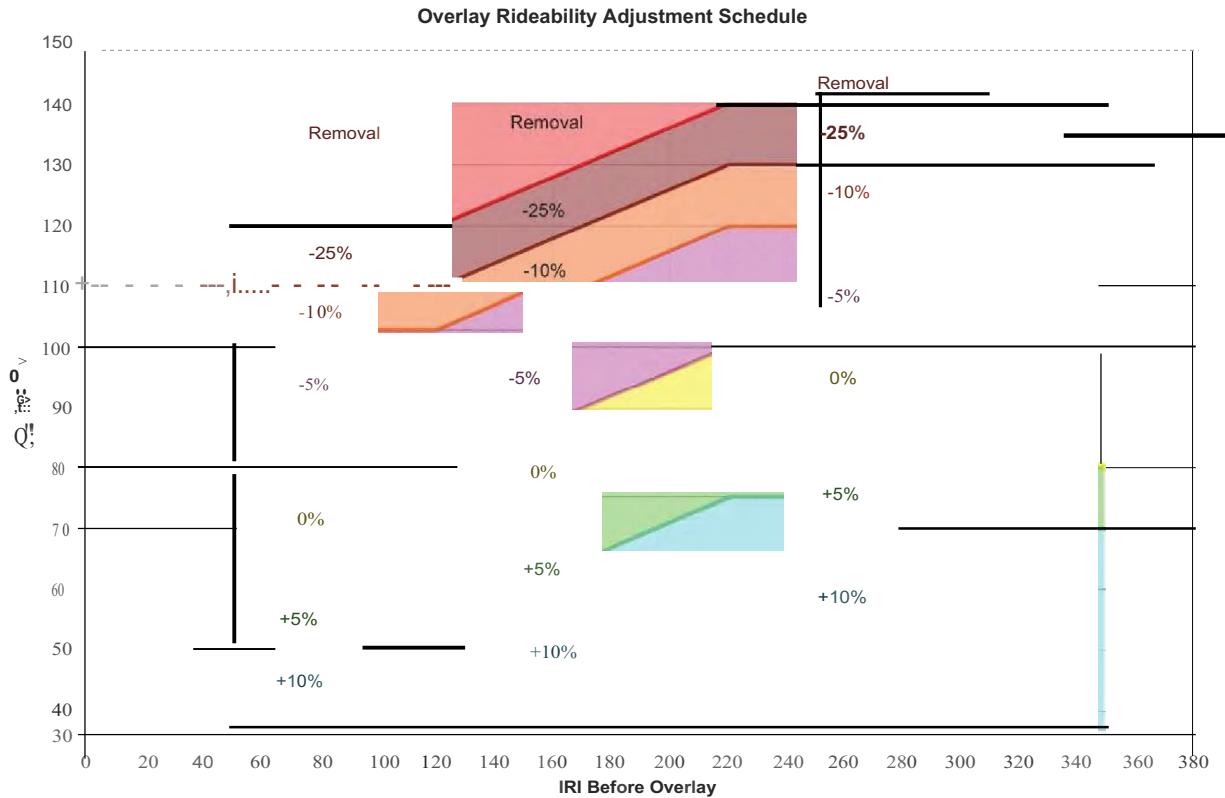
**Table 1: New Construction Rideability Adjustment Schedule**

IRI (inches per mile)	PERCENT ADJUSTMENT
≤ 50	+10
51 - 60	+05
61 - 80	0
81 - 100	-05
101 - 110	-10
111 - 120	-25
>120	RxR Required

**NOTES:**

All IRI values will be rounded to the nearest whole number. (Example: 75.5 shall be rounded to 76.) "RxR Required" is the Removal and Replacement of the defective area.

**Figure:**



2.5.8 TRANSPORTATION:

Petroleum distillates or other substances that will have a detrimental effect on the asphalt concrete shall not be used as a release agent.

The beds of all transportation units shall be clean and smooth to allow the free flow of material into the paving machine's hopper.

Tarpaulins shall be furnished on all trucks and used when weather condition warrant, or if directed by the Engineer.

2.5.9 PLACEMENT:

2.5.9.1 PLACING:

All courses of asphalt concrete shall be placed and finished by means of a self-propelled paving machine equipped with an automatically actuated control system, except under certain conditions or at locations where the Engineer deems the use of a self-propelled paving machine impracticable.

The control system shall control the elevation of the screed at each end by controlling the elevation of one end directly and the other end indirectly either through controlling the transverse slope or alternatively when directed, by controlling the elevation of each end independently.

The control system shall be capable of working with one of the following devices:

- (A) Ski or non-contact device of not less than 30 feet in length, supported throughout its entire length
- (B) Taut stringline or wire set to grade
- (C) Short ski or sonar sensing units from curb control
- (D) Joint matching shoe

Failure of the control system to function properly shall be cause for the suspension of asphalt concrete production. In order to achieve a continuous operation, the speed of the paving machine shall be coordinated with the hot mix plant and transport units.

If the asphalt concrete is dumped from the hauling vehicles directly into the paving machine, care shall be taken to avoid jarring the machine or moving it out of alignment. No vertical load shall be exerted on the paving machine by the truck.

If asphalt concrete is dumped upon the surface being paved and subsequently loaded in the paving machine, the loading equipment shall be self-supporting and shall not exert any vertical load on the paving machine. Substantially all of the asphalt concrete shall be picked up and loaded into the paving machine.

Self-propelled paving machines shall spread the mixture without segregation or tearing, true to line, grade and crown indicated on the Project plans. Pavers shall be equipped with hoppers and augers that will distribute the mixture uniformly in front of an adjustable floating screed. The raising of the hopper wings must be minimized and the paving machine will not be operated when in an empty condition.

Screeds shall include any strike-off device operated by tamping or vibrating action which is effective, without tearing, shoving or gouging the mixture and which produces a course with a uniform texture and density for the full width being paved. Screeds shall be adjustable as to height and crown and shall be equipped with a controlled heating device for use when required. In the case of the screed, auger extensions and vibrators shall be

installed wherever the screed is extended more than one (1) foot beyond the end of the base auger or auger extension. However, when placing material against an extremely uneven curb or edge over a short distance, the Engineer may waive the auger extensions and vibrators.

At any place not accessible to the roller, the mixture shall be thoroughly compacted with tampers to provide a uniform and smooth layer over the entire area compacted in this manner.

#### 2.5.9.2 JOINTS:

Transverse joints: before a surface course is placed in contact with a cold transverse construction joint, the cold existing asphalt concrete shall be trimmed to a vertical face for its full depth and exposing a fresh face. After placement and finishing the new asphalt concrete, both sides of the joint shall be dense and the joint shall be smooth and tight. The surface in the area of the joint shall not deviate more than ¼ inch from a 12-foot straightedge, when tested with the straightedge placed across the joint, parallel to the centerline.

Longitudinal Joints of each course shall be staggered a minimum of 6 inches with relation to the longitudinal joint of the immediate underlying course cold transverse construction joint, the cold existing asphalt concrete shall be trimmed to a vertical face for its full depth and exposing a fresh face. The fresh face shall be tacked prior to placement of the adjacent course. After placement and finishing the new asphalt concrete, both sides of the joint shall be dense and the joint shall be smooth and tight. The surface in the area of the joint shall not deviate more than ¼ inch from a 12-foot straightedge, when tested with the straightedge placed across the joint, parallel to the centerline. The joint will be tack coated if required by the Engineer.

#### 2.5.9.3 LEVELING COURSE:

A leveling course shall be used when specified, or as directed in writing by the Engineer, to bring existing pavement to a uniform grade prior to placing an overlay or other course. If a leveling course is being applied on an Asphalt surface, a tack coat shall be applied. The compaction requirements contained in MAG Specs Section 321.10 do not apply to leveling courses.

#### 2.5.9.4 COMPACTION BASE AND SURFACE:

It is the contractor's responsibility to perform any desired Quality Control monitoring and/or testing during compaction operations to achieve the required compaction. Asphalt concrete immediately behind the laydown machine shall be referenced to MAG Specs Table 321.3. The probe type thermocouple thermometer shall have a current calibration sticker attached. When measuring the temperature of the mat, the probe shall be inserted at mid-depth and as horizontal as possible to the mat.

Asphalt compaction equipment shall be of sufficient size and weight to accomplish the required compaction. All compaction equipment shall be operated and maintained in accordance with the manufacturer's recommendations and the project requirements. During the rolling operation, the speed of the roller shall not exceed 3 miles per hour, unless otherwise approved by the Engineer.

Pneumatic tired compactors shall be equipped with skirt-type devices mounted around the tires so that the temperature of the tires will be maintained during the compaction process.

The Engineer will determine the acceptability of the pavement compaction in accordance with Section 2.5.11

#### 2.5.9.5 SMOOTHNESS:

The completed surfacing shall be thoroughly compacted, smooth and true to grade and cross-section and free from ruts, humps, depressions or irregularities. An acceptable surface shall not vary more than one-fourth (1/4) inch from the lower edge of a 12-foot straightedge when the straightedge is placed parallel to the centerline of the roadway.

#### 2.5.9.6 ASPHALT CONCRETE OVERLAY:

Asphalt concrete overlay consists of the placing and compacting plant mix asphalt concrete over existing asphalt concrete paving. The thickness of the overlay shall be as shown on the plans or as specified in the special provisions. Preliminary preparation of existing surfaces will be required except when accomplished by the Contracting Agency, and it is so stipulated in the special provisions. With the exception of those which have been preheated and remixed only, existing surfaces shall receive a tack coat.

Asphalt concrete mix aggregate gradation and percentage of asphalt binder shall be in accordance with MAG Specs Section 710 using a 1/2-inch Marshall-Low Traffic asphalt concrete mix designation for overlay more than one and one-half inch in thickness and a 3/8-inch Marshall-Low Traffic asphalt concrete mix designation for overlay one and one-half inch or less in thickness, unless otherwise shown or specified in the special provisions.

Except when they have been preheated and remixed, pavement surfaces shall be prepared as follows:

- (a) Before placing asphalt concrete overlay, severely raveled areas or cracked areas that are depressed more than 3/4-inch from the adjoining pavement shall be cut out and patched at least 48 hours prior to the resurfacing operation. Over-asphalted areas or rough high spots shall be either milled or cut out and patched. Large shrinkage cracks shall be filled with asphalt sealing compound acceptable to the Engineer. The entire surface shall be cleaned with a power broom. Raveled areas that do not require removing shall be cleaned by hand brooming. The above are incidental, and the cost thereof shall be included in the bid items.
- (b) Before placing asphalt concrete overlay, milling shall be done as shown on the plans or specified in the special provisions and shall be in accordance with MAG Specs Section 317.
- (c) After surfaces have been prepared to the satisfaction of the Engineer, they shall receive a tack coat per MAG Specs Section 321.4. Traffic will not be permitted over surfaces which have received a tack coat. When the overlay is to extend onto the concrete gutter, the gutter shall be thoroughly cleaned of loose dust and cement particles and shall be tack coated.

Asphalt concrete overlay shall be placed as specified in MAG Specs Section 321.8.1 and compacted as specified in MAG Specs Section 321.8.4. The surface smoothness shall meet the tolerances specified in MAG Specs Section 321.8.5.

Manholes shall be built up and the frames set flush with the finished surface of the new paving, and tops of valve boxes, clean-outs and other existing structures shall be adjusted to finish grade. In the event the base course and original paving have been removed or disturbed in order to build up the manhole, they shall be replaced with approved materials which shall be thoroughly compacted. The asphalt concrete around the manhole frame shall be completed and made flush with the adjacent overlay.

#### 2.5.9.7 PAVEMENT FABRIC INTERLAYER:

Pavement fabric interlayer shall be used only when specified on the plans or in the specifications.

Pavement fabric interlayer shall be in accordance with MAG Specs Table 796-1 and be the class designated on the plans or in the specifications.

Asphalt binder coat used to bond the fabric to the pavement shall be paving asphalt PG 70-10 asphalt cement conforming to the requirements of MAG Specs Section 711. The application and distributing equipment for the asphalt binder shall conform to the requirements of MAG Specs Section 330. The asphalt binder coat shall be uniformly spray applied to the prepared pavement surface at the rate of 0.20 gallons per square yard for Class B fabric or at the rate of 0.25 gallons per square yard for Class A fabric. Some underlying surfaces may require a higher or lower application rate. A test strip may be necessary to determine the proper application rate. The width of liquid asphalt cement application shall be the fabric width, plus six inches.

Neither the asphalt binder coat or fabric interlayer shall be placed when weather conditions, in the opinion of the Engineer, are not suitable. The asphalt binder and fabric interlayer shall only be placed when the pavement is dry, the ambient air temperature is 50 degrees F and rising, and pavement temperature is 40 degrees F and rising.

Equipment for placing the fabric shall be mechanized and capable of handling full rolls of fabric. The equipment shall be able to lay the fabric smoothly to maximize pavement contact and remove air bubbles. Stiff bristle brooms shall be used to smooth the fabric. The equipment used to place the fabric shall be in good working order and is subject to approval by the Engineer.

Pavement fabric interlayer shall not be placed if the in-place binder is hotter than 325 degrees F or has cooled to 180 degrees F or below (as determined by non-contact thermometer).

Pavement fabric interlayer shall be placed onto the asphaltic binder with the heat bonded side up with a minimum amount of wrinkling or folding. Remaining wrinkles or folds 1-inch and larger shall be removed or slit and shingle-lapped in the direction of paving. Burning or torching of wrinkles is not allowed. Fabric shall overlap three to six inches to insure full closure of the joint. Transverse joints shall be shingle-lapped in the direction of paving to prevent edge pickup by the paver. A second application of hand-placed asphalt binder may be required at laps and repairs as determined by the Engineer to ensure proper binding of the narrow double fabric layer.

All areas where fabric has been placed shall be paved with asphaltic concrete during the same work shift. Placement of the asphaltic concrete shall closely follow fabric lay down. The temperature of the asphaltic concrete immediately behind the laydown machine shall not exceed 325 degrees F. In the event that the asphalt binder coat bleeds through the fabric causing construction problems before the overlay is placed, the affected areas shall be sanded with a sand blotter in compliance with MAG Specs Section 333. Excess sand shall be removed before beginning the paving operation. In the event of rainfall prior to the placement of the asphaltic concrete, the fabric shall be allowed to dry before the asphalt concrete is placed.

Turning of the paving machine or of other vehicles on the fabric shall be gradual and kept to a minimum to avoid damage to the fabric. Should equipment tires stick to the fabric during pavement operations, small quantities of paving asphalt concrete shall be broadcast

on the fabric to prevent pick-up. Decrease of binder rate in order to minimize pick-up on tires is not allowed.

<b>TABLE 321.2</b>						
<b>MINIMUM ASPHALT CONCRETE PLACEMENT TEMPERATURE</b>						
Base (1) Temp (/F)	Mat Thickness (inches)					
	½	¾	1	1 ½	2	3 and greater
40 – 50	--	--	310	300	285	275
50 – 60	--	310	300	295	280	270
60 – 70	310	300	290	285	275	265
70 – 80	300	290	285	280	270	265
80 – 90	290	280	270	270	265	260
+ 90	280	275	265	265	260	255

(1) Base on which mix is to be placed

#### 2.5.10 QUALITY CONTROL:

It is the contractor's responsibility to perform Quality Control monitoring and/or testing during asphalt concrete production to achieve the required compaction and to perform Quality Control monitoring and/ or testing during asphalt concrete production to achieve the required mix properties. The Engineer may obtain samples of any portion of any material at any point of the operations for his own use. Also, the Engineer may order the use of any drying, proportioning and mixing equipment or the handling of any material discontinued which, in his/her opinion, fails to produce a satisfactory mixture.

The asphalt concrete produced shall conform to the properties of the mix design. When the asphalt concrete does not conform to the approved mix design properties, it shall be reported to the Engineer, and corrective quality control measures shall be implemented, or production shall cease immediately at no additional cost to the contracting Agency or Engineer.

#### 2.5.11 ACCEPTANCE:

##### 2.5.11.1 ACCEPTANCE CRITERIA:

Unless otherwise specified, asphalt concrete will be divided into lots for the purpose of acceptance. A lot shall be considered to be one day's production. When the quantity of asphalt concrete placed in a day exceeds 500 tons but is less than 2000 tons, the lot shall be divided into 500 ton sub-lots or fraction thereof. Where the quantity of asphalt concrete placed in a day exceeds 2000 tons, the day's production will be divided into four (4) approximately equal sub-lots. A minimum of one sample will be obtained from each lot. Tests used to determine acceptance will be performed by the Engineer or a laboratory employed by the Engineer. In either case the laboratory shall be accredited by the AASHTO Accreditation Program (AAP), for the tests being performed. The acceptance laboratory will take representative samples of the asphalt concrete from each sub-lot to allow for gradation, binder content, air voids, pavement thickness and compaction of base and surface course. Each sub-lot will be accepted based upon the test data from the sample(s) from that sub-lot. All acceptance samples shall be taken using random locations or times designated by the Engineer in accordance with ASTM D 3665.

##### 2.5.11.2 GRADATION, BINDER CONTENT AND AIR VOIDS:

The acceptance laboratory will take a sample of the asphalt concrete in accordance with the requirements of Section 2 or 4 of Arizona Test Methods 104 or AASHTO T168 from each sub-lot. The minimum weight of the sample shall be 45 pounds. Asphalt

on the fabric to prevent pick-up. Decrease of binder rate in order to minimize pick-up on using the ignition furnace for each sub-lot. The acceptance laboratory is responsible for obtaining the necessary materials and performing an ignition furnace calibration as outlined in AASHTO T308 for each asphalt concrete mixture utilized on the project. The correction factor used for each test shall be clearly indicated on the report. The bulk density for Marshall Mix designs shall be tested in accordance with AASHTO T245. The bulk density for Gyratory mix designs shall be tested in accordance with AASHTO T312. The maximum theoretical density shall be tested in accordance with the requirements of AASHTO T209. Effective voids determined on the laboratory compacted specimens will be determined at a minimum of once per lot in accordance with the requirements of AASHTO T269. Should the testing for effective air voids not meet the “Full Payment” or “No Corrective Action” requirements of Table 321-5, additional testing for laboratory air voids on the remaining sub-lots will be performed as necessary to determine the extent of the deficiency.

Acceptance testing results will be furnished to the contractor within five working days of receipt of samples by the acceptance laboratory.

The allowable deviations for acceptable production of each measured characteristic from the values established in the JMF for each sub-lot are as follows:

<b>TABLE 321-3</b>	
<b>ACCEPTANCE LIMITS FOR ASPHALT CONCRETE</b>	
Maximum Aggregate Size	100% passing
Nominal Maximum Aggregate Size	±7%
No. 8 Sieve to the Nominal Maximum Aggregate Size	±6%
No. 100 and No. 30 Sieves	±4%
No. 200 Sieve	±2%

If the results from a single acceptance sample fall outside of the acceptance limits in Table 321-3 a second sample shall be taken and if the second acceptance sample is also outside of the acceptance limits in Table 321-3 the Contractor shall cease production of asphalt concrete. Production shall not begin again until calibration test results verify that adjustments made to materials or proportions yield a gradation that falls within acceptance limits in Table 321-3.

The asphalt binder content shall be considered acceptable if it is within ± 0.40% of the mix design target value.

<b>TABLE 321-4</b>		
<b>ASPHALT BINDER CONTENT CORRECTIVE ACTION FOR DEVIATIONS</b>		
Deviation from that permitted	When the contracting agency is the owner:  Payment Reduction (\$ per ton of asphalt concrete)	When the contracting agency is not the owner (i.e. permits):  Corrective Action
0.0 to 0.1% points	\$2.00	EA (see 2.5.11.6)
Over 0.1 to 0.2% points	\$6.00	EA (see 2.5.11.6)
Over 0.2% points	Removal*	Removal*

TABLE 321-5		
LABORATORY VOIDS ACCEPTANCE AND PENALTIES		
Laboratory Air Voids (Measured at $N_{des}$ or 75 blows as applicable)	When the contracting agency is the owner:  Payment Reduction (\$ per ton of asphalt concrete)	When the contracting agency is not the owner (i.e. permits):  Corrective Action
Less than 1.5%	Removal*	Removal*
1.5-2.0%	\$2.50	EA (see 2.5.11.6)
2.1-2.7%	\$1.00	EA (see 2.5.11.6)
2.8-6.2%	Full Payment	No corrective action
6.3-6.9%	\$1.00	EA (see 2.5.11.6)
7.0-8.0%	\$2.50	EA (see 2.5.11.6)
Greater than 8.0%	Removal*	Removal*

Note: Removal\* refers to Section 2.5.11.6

If an agency or Engineer is purchasing asphalt concrete directly from a commercial material supplier, the agency or Engineer will use MAG Specs Section 321.10 and specifically Tables 321-3, 321-4 and 321-5 from MAG Specs Section 321.10 when determining the acceptance of the asphalt concrete with the material supplier.

#### 2.5.11.3 SURFACE TESTING:

If directed by the Engineer surface drainage test shall be performed. The completed surfacing shall be thoroughly compacted, smooth and true to grade and cross-section and free from ruts, humps, depressions or irregularities. An acceptable surface shall not vary more than 1/4 inch from the lower edge of a 12-foot straightedge when the straightedge is placed parallel to the centerline of the roadway. The straightedge shall be furnished by the contractor and shall be acceptable to the Engineer.

All streets shall be water tested for drainage in the presence of the Engineer or designated representative before final acceptance. Any areas not draining properly shall be corrected to the Engineer's satisfaction at the Contractor's expense. Water for this testing shall be provided and paid for by the Contractor.

When deviations in excess of the above tolerance are found, humps or depressions shall be corrected to meet the specified tolerance, or shall be cut out along neat straight lines and replaced with fresh hot mixture and thoroughly compacted to conform with and bond to the surrounding area. Materials and work necessary to correct such deviations shall be at no additional cost to the Contracting Agency.

#### 2.5.11.4 ASPHALT PAVEMENT THICKNESS:

Asphalt Pavement thickness will be determined from cores secured from each sub-lot for this purpose. Such cores will be taken and measured by the Asphalt Concrete Coring Method. This method can be found at in MAG Specs Section 321.14. Each core location will be patched by the party responsible for the testing.

If the pavement thickness is deficient from the target thickness by 0.25 inches or less, it will be paid for at the contract unit price

If the thickness deficiency of the pavement exceeds 0.25 inch, the limits of the deficient area will be isolated by coring at maximum intervals of 100 feet from the deficient core. The thicknesses of the original deficient core will be averaged with the

thicknesses of the cores taken from 100 feet on each side of it to determine compliance with the acceptance requirements.

- (1) If the pavement thickness from step one above deviates from the target thickness by more than 0.25 inch but not more than 0.50 inch, corrective action will be required. This corrective action will consist of application of a Type II slurry seal coat in accordance to MAG Specs Section 715. The Contractor may present an engineering analysis outlining other proposed remedial measures for the consideration of the Engineer. The Engineer will review the engineering analysis and decide within 30 working days whether to accept the proposed remedial measures.
- (2) If the pavement thickness from step one above deviates from the target thickness by more than 0.50 inch, corrective action will be required. The deficient area will be overlaid with no less than 1 inch thick lift, for the full width of the pavement to meet or exceed the designed thickness, with the appropriate end and edge milling, with a mixture approved by the Engineer. The Contractor may present an engineering analysis outlining other proposed remedial measures for the Engineer's consideration. The Engineer will review the engineering analysis and decide within 10 working days whether to accept the proposed remedial measures. If the Engineer chooses to reject the engineering analysis, the indicated overlay will be constructed by the Contractor at no additional cost to the Owner.

If the pavement thickness deficiency is greater than 0.25 inches and the contracting agency is the owner, Table 321-6 will apply.

TABLE 321-6	
<b>ASPHALT PAVEMENT THICKNESS PAYMENT REDUCTION</b>	
<b>For Thickness Deficiency of More Than 0.25 inches and less than 0.50 inches</b>	
<b>Specified Mat Thickness</b>	<b>Reduction in Payment or Corrective Action</b>
Less than 1.5 inches	50%
1.50 inches to 1.99 inches	33%
2.00 inches to 2.49 inches	25%
2.50 inches to 2.99 inches	20%
3.00 inches and over	17%

2.5.11.5 DENSITY:

Achieving the required compaction is the responsibility of the contractor. The number and types of rollers is the contractor's responsibility and shall be sufficient to meet these requirements.

In-place air voids shall be determined in accordance with AASHTO T269 utilizing cores taken from the finished pavement. The maximum theoretical density used in the determination of in-place air voids will be the average value from the acceptance samples determined for the Lot as outlined in 2.5.11.1

The Engineer will designate two random test locations for each sub-lot and the acceptance laboratory will obtain two cores from each location. The two cores will be averaged for acceptance. The outside one foot of each pass of the pavement course or any unconfined edge will be excluded from testing. The Engineer may exclude areas from the compaction lot that are not accessible by normal compaction equipment.

The Contractor will provide the traffic control to facilitate any coring operations necessary for compaction acceptance.

Cores will be taken per the Asphalt Concrete Coring Method. This method can be found in MAG Specs Section 321.14. The acceptance laboratory will furnish test results within three working days of receipt of the cores.

If the pavement density has in-place voids of 8.0% or less, the asphalt concrete will be paid for at the contract unit price. If the pavement density has in-place voids greater than 8.0%, the limits of the deficient area will be isolated within the sub-lot by coring at maximum intervals of 100 feet from the deficient core. The in-place voids of the original deficient core will be averaged with the in-place voids of the cores taken from 100 feet on each side of it to determine compliance with the acceptance requirements. If the average of the in-place voids is greater than 8.0% then Table 321-7 shall apply to the sub-lot.

TABLE 321-7		
PAVEMENT DENSITY PENALTIES		
Limits of In-place Air voids	When the contracting agency is the owner: Payment Reduction (\$ per ton of asphalt concrete)	When the contracting agency is not the owner (i.e. permits): Corrective Action
Less than 1.5 inches		
8.1% to 9.0%	\$4.00	EA
9.1% to 10.0%	\$6.00	EA and Type II Surry Seal
10.1% to 11.0%	Removal*	Removal*
Greater than 11.0%	Removal	Removal

\*Notes: Removal\* refers to Section 2.5.11.6. The Contractor shall remove and replace the entire sub-lot that is deficient. Removal for In-place Air Voids greater than 11.0% is not eligible for Section 2.5.11.6.

2.5.11.6 ENGINEERING ANALYSIS (EA):

Within 10 working days after receiving notice that a sub-lot of asphalt concrete is deficient for “Removal” by the Engineer, the contractor may submit a written proposal (Engineering Analysis) to accept the material in place at the applicable penalties listed in the “Removal” category.

The Engineering Analysis shall contain an analysis of the anticipated performance of the asphalt concrete if left in place. The Engineering Analysis shall also detail the effect of any proposed corrective action on the performance. The Engineering Analysis shall be performed by a professional engineer experienced in asphalt concrete testing and mix designs. If the sub-lot is submitted for referee testing by the contractor, the ten working days allowed to prepare an engineering analysis will begin upon notification of referee test results.

When an Engineering Analysis recommends that a specific lot or sub-lot not be removed, the Engineering Analysis will recommend that the following penalties (Table 321-8) be paid.

TABLE 321-8		
ENGINEERING ANALYSIS PENALTIES for REMOVAL* LOTS/SUBLOTS LEFT IN-PLACE		
Acceptance Criteria	Acceptance Limits	Penalty When Contracting Agency is the Owner (\$/Ton)
Asphalt Binder Content	Over 0.2% points from that Permitted	
Laboratory Air Voids (Measured at N <sub>des</sub> or 75 blows as applicable)	Less than 1.5% or Greater Than 8.0%	\$3.75
Limits of In-place Air Voids	10.1% to 11.0%	\$9.00

2.5.12 REFEREE:

In the event the contractor elects to question the acceptance test results for a sub-lot, the Contractor may make a written request for additional testing of that sub-lot. The Contractor will engage an independent laboratory (at the Contractors own expense) who is accredited by AAP in all of the acceptance tests. The independent laboratory shall be acceptable to the Engineer and shall perform a complete new set of acceptance tests (as required by Section 2.5.11 representing the area or set of tests in question).

These tests shall include asphalt binder content, aggregate gradation, Marshall or Gyratory unit weight, and maximum theoretical unit weight. Samples for referee testing shall come from representative samples obtained from the completed pavement, as directed by the Engineer.

The number of samples taken will be the same as specified in Section 2.5.11. The independent laboratory shall compile the test results and transmit them to both the Engineer and the Contractor. The independent laboratory shall include a letter signed by an Engineer registered in the State of Arizona, who is experienced in asphalt concrete testing and mix designs. The signed letter shall give an opinion that the material evaluated either does or does not comply with project specifications, and shall clearly describe any deficiencies, and the results will be binding between all parties.

2.5.13 MEASUREMENT:

Asphalt concrete pavement will be measured by the ton, or by the square yard, for the mixture actually used as allowed above, which shall include the required quantities of mineral aggregates, asphalt binder, and mineral admixture. Measurement shall include any tonnage used to construct intersections, roadways, streets, or other miscellaneous surfaces indicated on the plans or as directed by the Engineer.

2.5.14 PAYMENT:

The asphalt concrete measured as provided above will be paid for at the contract price per ton or square yard, as adjusted per Section 2.5.11, which price shall be full compensation for the item complete, as herein described and specified. Payment for tack coat will be by the ton diluted, based on the rate of application, as directed by the Engineer.

No payment will be made for any overrun in quantity of asphalt concrete in excess of 10 percent based on actual field measurement of area covered, design thickness, and the mix design unit weight. The calculations and payment for overrun will be by individual pay

item. To compensate or adjust for a thickness deficiency in an underlying asphalt concrete course, the Engineer may authorize a quantity increase in excess of 10 percent for a subsequent asphalt concrete course. In such cases, the quantity in excess of 10 percent will be paid for at the lowest unit price.

Except as otherwise specified in the special provisions, no separate payment will be made for work necessary to construct miscellaneous items or surfaces of asphalt concrete.

#### 2.5.15 ASPHALT CORE METHOD:

Core Drilling of Hot Mix Asphalt (HMA) for Specimens of 4" or 6" diameter

##### 2.5.15.1 SCOPE:

This method is to establish a consistent method of the use of a diamond bit core to recover specimens of 4 or 6 inch diameter for laboratory analysis and testing. The method will require the use of: water, ice (bagged or other suitable type), dry ice, and a water-soap solution to be utilized when coring asphalt rubber concrete. Individuals doing the specimen recovery should be observing all safety regulations from the equipment manufacturer as well as the required job site safety requirements for actions, and required personal protective equipment.

##### 2.5.15.2 CORE DRILLING DEVICE:

The core drilling device will be powered by an electrical motor, or by an acceptable gasoline engine. Either device used shall be capable of applying enough effective rotational velocity to secure a drilled specimen. The specimen shall be cored perpendicularly to the surface of pavement, and that the sides of the core are cut in a manner to minimize sample distortion or damage. The machinery utilized for the procedure shall be on a mounted base, have a geared column and carriage that will permit the application of variable pressure to the core head and carriage throughout the entire drilling operation. The carriage and column apparatus shall be securely attached to the base of the apparatus; and the base will be secured with a mechanical fastener or held in place by the body weight of the operator. The core drilling apparatus shall be equipped with a water spindle to allow water to be introduced inside of the drill stem while operating. The cutting edge of the core drill bit shall be of hardened steel or other suitable material with embedded diamond chips in the cutting surface. The core barrel shall be of sufficient diameter to secure a specimen that is a minimum of four or six inches or whichever is prescribed for necessary testing. The core barrel shall not be missing more than one of the teeth used for cutting; if so it shall be discarded and another barrel shall be used. The core barrel shall also be a minimum of two inches longer than the anticipated depth of pavement in accordance with project paving plans.

##### 2.5.15.3 ACCESSORY EQUIPMENT:

A sufficient supply of ice and dry ice shall be provided to sufficiently cool the pavement prior to securing the samples from the designated areas in the pavement. The ice should also be used to adjust the temperature of the water used to cool the core bit. A water supply (usually a plastic 35 – 55 gal drum) with sufficient hose to introduce the water into and through the spindle of the coring device by gravity feed. The drum should be white or light in color to minimize excessive thermal heating of the water (*for coring of asphalt rubber cores see Note 1*). At no time shall the water utilized in the coring operation exceed 65° F during the coring operation. Ice shall be utilized to ensure the temperature control of the water being introduced during the cutting operation. An ice chest or other suitably insulated container that can maintain a temperature of less than 70° F shall be used to secure the specimens during transport. The container will be equipped with flat

shelving that will support the drilled cores throughout the entire specimen dimension during transport back to the testing facility.

Miscellaneous hand tools to remove the drilled specimen from the drill hole or the core barrel taking great care in not disturbing the specimen more than necessary (refer to fig. 1 in ASTM D 5361-05).

#### 2.5.15.4 PROCESS:

The pavement surface at the time of coring shall not exceed a temperature of 90° F, the pavement shall be conditioned with ice or dry ice to ensure that this requirement is met. Immediately after it has been ensured that the pavement has dropped to the required temperature, core drilling shall begin. The operator will then apply an even and continuous pressure (Note 2) to penetrate through the full depth of the pavement. The operator will concurrently ensure that enough water is moving over the core surface as to adequately remove any and all cuttings that could damage the drilled core. After the pavement thickness has been penetrated the core shall be carefully removed from either the drill hole or the core barrel and be immediately transferred to an ice chest or other suitable container. Each individual core shall be placed on a shelf in the cooler with the exposed side of the specimen facing down, or the “top side” down. If the specimen is a two lift core, the only acceptable means of separating lifts is with a power or other acceptable wet saw type of equipment (conforming to ASTM D 5361-05); however, at no time shall cores be split using a mallet and screwdriver or metal straight edge when being tested for bulk density. Perpendicularity of the specimen shall be checked in the field after the specimen has been extracted from the surface. The core operator shall hold the core up to eye level and place the core top side down in a “speed square” or small carpenters square. The specimen placed in the square shall not depart from perpendicular to the axis more than 0.5° (approximately equivalent to 1/16 of an inch in 6 inches). If the specimen is outside of this distance from square it shall be discarded in the field and another sample cored that falls within tolerance. The cores upon arriving at the laboratory for testing shall be carefully cleaned and measured for thickness in accordance with ASTM D 3549. A speed square shall be utilized to measure squareness as compared to a 90° degree angle and shall not depart from perpendicular to the axis more than 0.5° (approximately equivalent to 1/16 of an inch in 6 inches). All remaining testing shall be done within the parameters of the current project and / or agency required specification.

– It should be noted that when the material to be cored is a rubberized asphalt mixture a wetting agent such as liquid dish soap shall be added to the water barrel to hinder the material from sticking or allowing the binder to spread during coring.

**Note 2** – This refers to pressure exerted on the core barrel and machine during the coring process. Too much pressure can cause damage to the core barrel and the motor; and too little pressure can cause a glazing of the diamonds, reducing cutting efficiency and premature wear of the barrel.

## 2.6 ASPHALT-RUBBER CONCRETE, GAP GRADED.

### 2.6.1 DESCRIPTION:

Asphalt-rubber concrete consists of supplying, placing and compaction of plant mixed gap graded asphalt-rubber concrete over asphalt surfaces. The thickness of the finished asphalt-rubber concrete overlay shall be within the range of one to two inches as shown on the plans or as specified in the special provisions. The City will make any repairs needed to roadway prior to overlay.

### 2.6.2 MATERIALS:

Asphalt-rubber concrete shall consist of a mixture of aggregate and asphalt-rubber binder. Tack coat, asphalt-rubber concrete mix and transportation thereof shall be as specified in Sections 710 and 321, except as modified below:

2.6.2.1 AGGREGATE:

The aggregate shall meet the following gradation:

<u>3/8 inch</u>		<u>78-92</u>	
#4	Sieve Size	28-42	Percent Passing
#8		15-25	
#30	1/2 inch	5-15	100
#200		3-7	
*Type II Portland Cement		1.5%	
Or			
*Hydrated Lime		1.0%	

**\*By total weight of the mineral aggregate.**

The aggregate shall conform to the requirements of Sections 701 and 710 for asphalt concrete, except as modified below:

Sand Equivalent	65% minimum
Crushed Aggregate retained on #8 sieve (at least one crushed face, produced by crushing)	85% minimum

2.6.2.2 ASPHALT-RUBBER BINDER:

The asphalt-rubber binder shall conform to M A G S p e c s Section 717.

2.6.2.3 MIX DESIGNS:

At the Pre-Construction Meeting, the Contractor shall submit the name of the asphalt-rubber concrete supplier, a description of the materials, and the job mix design(s). The design method used shall be in accordance with the Marshall Mix procedure, 75 blows, as described in "Design Methods for Hot-Mixed Asphalt-Rubber Concrete Paving Materials" by James G. Chahovits, October 1989. The job mix designs are subject to approval by the Engineer.

The asphalt-rubber concrete job mix design shall be for High Traffic conditions.

Asphalt Rubber Binder Content:

The percent of asphalt-rubber binder in the mix(es) shall be within the following range:

Traffic Condition	Asphalt Rubber Binder
Low Traffic	8.4% to 8.8%
High Traffic	8.0% to 8.4%

The amount of asphalt-rubber binder in each mix shall be provided in the design subject to approval by the Engineer. Low traffic areas include residential streets. High traffic areas include arterial streets.

Air Voids:

The percent of air voids in the mix(es) shall be within the following range:

Traffic Condition	Air Voids
Low Traffic	3.0% to 5.0%
High Traffic	4.0% to 6.0%

The amount of air voids in each mix shall be provided in the design subject to approval by the Engineer.

Mix designs shall include the following information as a minimum:

- (1) Aggregate  
Source and identification (for each material used)  
Gradation (for each material used) Blend percentage  
Mixture gradation
- (2) Asphalt - Rubber Binder (No extender oil allowed)  
Source and PG grade of asphalt cement  
Source and identification of ground rubber  
Ground rubber gradation  
Ground rubber percentage of the asphalt - rubber binder  
Type and amount of additive(s), if required  
Temperature when added to aggregate
- (3) Recommended asphalt - rubber binder content by both weight of total mix and by weight of dry aggregate.
- (4) Recommendations for maximum / minimum temperatures during material production and lay down; and the allowable ambient air and existing pavement surface temperatures during lay down.

The mix design shall include sufficient test results and documentation to assure that all requirements for rubber, aggregate and the asphalt-rubber binder are fulfilled.

2.6.2.4 CALIBRATION FACTORS:

A minimum of one week prior to the production of asphalt rubber hot mix, the Contractor shall submit to the Engineer samples of all hot mix materials that will be used on the project. The materials shall be used to determine the calibration factors using the acceptance laboratory and the Contractor supplied ignition furnaces and related quality control test equipment. Calibration factors shall be recalculated whenever a change in the asphalt rubber hot mix materials occurs and when requested by the Engineer.

2.6.3 SURFACE PREPARATION:

Before placing asphalt-rubber concrete on existing pavements, severely raveled areas or cracked areas that are depressed more than 3/4" from the adjoining pavement shall be cut out and patched at least 48 hours prior to the resurfacing operation. Over-asphalted (bleeding or flushing) areas or rough high spots shall be removed by burning or blading. Large shrinkage cracks shall be filled with asphalt sealing compound acceptable to the Engineer. The entire surface shall be cleaned with a power broom. Raveled areas that do not require removing shall be cleaned by hand brooming. The above surface cleaning requirements are included as part of the Asphalt- Rubber Concrete paving operations, and the cost thereof shall be included in the Asphalt- Rubber Concrete pay item.

Pavement repairs and crack sealing when required are to be compensated for by other appropriate contract pay items.

Prior to placing the asphalt-rubber concrete on milled surfaces, pot-holes left by the milling operation shall be repaired by the Contractor, as a related non-pay item and as required by the Engineer. The milled area shall be swept.

After surfaces have been prepared to the satisfaction of the Engineer, they shall receive a tack coat as specified in MAG Specs Section 321. Traffic will not be permitted over surfaces which have received a tack coat. When the overlay is to extend onto a concrete surface, the concrete surface shall be thoroughly cleaned of loose dust and cement particles and shall be tack coated.

Surface preparation shall include removal by the Contractor existing raised pavement markers prior to sweeping and application of the tack coat.

#### 2.6.4 CONSTRUCTION METHODS:

Asphalt-rubber concrete shall be placed only when the surface is dry, and when the atmospheric temperature in the shade is 55°F or above. No asphalt-rubber concrete shall be placed when the weather is foggy or rainy. Asphalt-rubber concrete shall be placed only when the Engineer determines that weather conditions are suitable.

Except as otherwise noted, placing and rolling of the asphalt-rubber concrete and the smoothness of the surface shall be as specified in MAG Specs Section 321 for asphalt concrete. The spreading equipment shall be equipped with a mat reference ski-type control device of not less than 30 feet in length, or other method of control approved by the Engineer.

The density of the compacted mixture shall not be less than 95% of the laboratory unit weight composed of the same mixture compacted by the 75 blow method of ASTM D-1559 at 290°F ± 5°F, or at the job mix design specified compaction temperature. Pneumatic rollers shall not be used.

Placement and compaction temperature shall be specified with the submitted mix design data but in no case less than 275°F at the point of placement. The temperature of the material in the truck shall be measured by inserting a thermometer, or other approved measuring device, to a point at least 6" below the surface of material.

If asphalt-rubber concrete is placed in a windrow during paving, the windrow shall not exceed a distance greater than 150 feet in front of the paving machine.

Rideability shall be tested in accordance with the provisions of MAG Specs Section 321.6.7 Pavement Smoothness.

##### 2.6.4.1 LIME WATER:

An application of lime water shall be applied by the Contractor to the compacted asphalt rubber concrete surface after final compaction, prior to opening the roadway to traffic, or when requested by the Engineer to cool the pavement to prevent tracking and pick-up. The lime water solution shall be applied at the rate of approximately ½ gallon/square yard. The lime shall be mixed using a minimum of (1) one 50-pound bag per 3,000 gallons of water.

#### 2.6.4.2 QUALITY CONTROL AND ACCEPTANCE:

Production requirements for asphalt-rubber concrete shall be as specified in MAG Specs Section 321.9 Quality Control and MAG Specs Section 321.10 Acceptance. The production tolerances and corrective action will be enforced for asphalt-rubber concrete.

#### 2.6.4.3 ADJUSTMENTS:

After installation of an overlay course all necessary frame and cover adjustments for manholes, valve boxes, survey monuments, sewer clean-outs, etc., shall be completed by the Contractor within the given segments being surfaced. On roads without curb and gutter, the existing shoulder elevation shall be adjusted by the Contractor to match the elevation at the edge of new overlay and slope away from the new pavement surface at a rate that the existing quantity of shoulder material will allow. Shoulder material includes the existing shoulder, millings, untreated base materials, or a granular material approved by the Engineer. Shoulder material shall be compacted to a minimum of 95% of maximum density, determined in accordance with MAG Specs Section 301.3.

#### 2.6.5 MEASUREMENT:

Asphalt-Rubber Concrete shall be measured by the ton, for the mixture actually used, which shall include the required quantities of mineral aggregates, filler material, rubberized asphalt binder and anti-strip agent.

Application of Lime Water shall be measured by the square yard. The measured area shall be the area of asphalt-rubber pavement to which the lime water is applied. The measured area shall only be counted one time regardless of the number of applications applied to the asphalt-rubber pavement section.

Shoulder adjustment to match the new pavement surface elevation shall not be measured. The cost of this work shall be included in the price paid for Asphalt-Rubber Concrete or other related pay items.

### 2.7 TACK COAT.

#### 2.7.1 DESCRIPTION:

Tack coat for bituminous paved surfaces shall consist of the application of emulsified asphalt as specified in MAG Specs Section 713. A tack coat shall be applied to all asphalt concrete surfaces prior to the application of the asphalt-rubber concrete.

#### 2.7.2 PREPARATION OF SURFACE:

Surfaces to be treated shall be cleaned of all loose material as specified in MAG Specs Section 330.

#### 2.7.3 APPLICATION:

Tack coat shall be diluted in the proportion of 50 percent water and 50 percent emulsion and applied at the rate of 0.05 to 0.10 gallons per square yard. Application shall be made in advance of subsequent construction as ordered by the Engineer.

#### 2.7.4 EQUIPMENT:

Tack coat shall be applied by distributor trucks designed, equipped, maintained and operated in accordance with MAG Specs Section 330. Hand spray by means of hose or bar through a gear pump or air tank shall be acceptable for resurface work, corners or tacking of vertical edges. Care shall be taken to provide uniform coverage. Equipment that performs unsatisfactory shall be removed from the job.

- 2.7.5 PROTECTION FOR ADJACENT PROPERTY:  
According to MAG Specs Section 333.
- 2.7.6 MEASUREMENT:  
Bituminous emulsion that is diluted prior to application will be measured by the ton of diluted material. Any conversion from volumetric quantities shall be in accordance with Section 713.
- 2.7.7 PAYMENT:  
Payment for the emulsified bituminous tack coat will be by the ton, diluted.
- 2.7.8 ADJUSTING FRAMES, COVERS:  
Adjust manhole cover in accordance with MAG Uniform Standard Detail 422.
- 2.8. ASPHALT CHIP SEAL.
- 2.8.1 DESCRIPTION:  
This work shall consist of the application of a bituminous material followed by the application of a cover material.
- 2.8.2 MATERIALS:  
The Engineer must approve all material sources prior to their use. Once approved, material sources shall not be changed without the approval of the Engineer. If required by the Engineer, the Contractor shall submit material samples at least seven days prior to start of construction. When requested, additional samples shall be furnished during the construction period at no cost to the City. Material sample submittal is a non-pay item.
- 2.8.3 RUBBER ASPHALT BINDER (RAB):  
The asphalt binder shall consist of asphalt cement, Granulated Reclaimed Tire Rubber (CRM), and SBS Polymer. This material is designated as Rubber Asphalt Binder (RAB). The RAB may be manufactured by terminal blending or field blending.
- The ground tire rubber shall be any crumb rubber, derived from processing whole scrap tires or shredded tire materials taken from automobiles, trucks, or other equipment owned and operated in the United States. The processing shall not produce, as a waste, casings, or other ground material that can hold water when stored or disposed above ground. Rubber tire buffing produced by the re-treading process qualifies as a source of crumb rubber.
- The Contractor shall determine RAB/stone chip compatibility. Proposed aggregate samples shall be submitted to the RAB supplier prior to the preparation of the mix design to test the aggregate for stripping characteristics. All test results shall be submitted to the Engineer.
- 2.8.3.1 RUBBER ASPHALT BINDER (RAB) - TERMINAL BLEND:  
The terminal blended binder shall be smooth, homogeneous and comply with the following requirements:

TABLE 330-1		
RUBBER ASPHALT BINDER (RAB) - TERMINAL BLEND		
Property	Test Method	Requirement
Ground Tire Rubber Content, % of weight of total RAB	Certificate of Compliance	5 Min.
SBS Polymer, % of weight of total RAB	Certificate of Compliance	2-3
Penetration @ 77°F, 100g/5 sec., DMM	ASTM D-5	55-75
Kinematic Viscosity @ 275°F, -cSt	ASTM D-2170	2000 Max.
Softening Point, °F	ASTM D-36	140 Min.
Solubility, %	ASTM D-2042	97.5 Min.
Elastic Recovery @ 77°F, 5cm/min., % Recovery After 1 Hour	ASTM D-6084 Modified (Modify 10cm to 20cm)	55 Min.
Separation of Polymer, 325°F, %	TEX 540-C (see Note below)	Report
Retained Penetration Ratio RTFO Pen. @ 77°F, 100g/5 sec. Original Pen. @ 77°F	ASTM D-5	0.6-1.0

A 350-gram sample of the RAB is poured into a friction-top pint can (approximately 3-1/2 inch diameter by 4 inch height) and stored for 48 hours at 325°F. Upon completion of storage time the sample is visually examined for separation of polymer from the asphalt (smoothness and homogeneity). If after visual evaluation a question still exists about the separation of polymer, samples will be taken from the top and bottom for softening point determination. A difference between the softening points of top and bottom samples of 4 percent or more, based on the average of the top and bottom softening points, constitutes separation (Tex 540-C).

Application and storage temperatures shall comply with the following requirements:

Type-Grade	Recommended Range, °F	Max. Allowable, °F	Max. Heating and Storage, °F
RAB	340-360	375	375 (see Note below)

Maximum temperature for storage by the Asphalt Supplier or the Contractor shall be 360°F. For RAB designated for surface treatment work, the temperature of the modified asphalt binder may be increased to a maximum of 375°F by the supplier loading through an in-line heater, or by the Contractor just prior to application. In any case, the heating, storage, and application temperatures used shall be the lowest temperatures practical.

#### 2.8.3.2 RUBBER ASPHALT BINDER (RAB) - FIELD BLEND:

The field blended binder shall be smooth, homogeneous and comply with the following requirements:

**Note:**

##### 2.8.3.2.1 BASE ASPHALT:

The recommended type and grade of asphalt cement utilized to manufacture the RAB shall be PG 64-16. The actual grade used may be changed, as long as the end product complies with these specifications.

##### 2.8.3.2.2 GRANULATED RECLAIMED TIRE RUBBER (CRM) AND SBS POLYMER:

The CRM used shall be produced primarily from the processing of automobile and truck tires. The rubber shall be produced by ambient temperature grinding processes only. The SBS Polymer shall be a pelletized or granulated thermoplastic elastomer

type linear styrene- butadiene block copolymer. It shall have a high enough molecular weight to provide excellent mechanical and elastic properties to compound. The gradation of the SBS modifier shall meet the RAB provider's need to produce homogeneous concentrate and final RAB product. The gradation for CRM modifier when tested in accordance with ASTM C-136 (dry sieve only) and using a 50-gram sample, shall comply with the following requirements.

TABLE 330-2		
GRANULATED RECLAIMED TIRE RUBBER (CRM)		
Sieve Size	CRM, % Passing	
No. 30	98-100	
No. 50	Open	No. 8
No. 200	Open	No. 10

The use of CRM from multiple sources is acceptable provided that the overall blend of rubber meets the gradation requirements. The CRM shall have a specific gravity of 1.15 +/- 0.05 and shall be free of loose fabric, wire and other contaminants except that up to 4 percent (by weight of rubber) calcium carbonate or talc may be added to prevent the rubber particles from sticking together. The rubber shall be sufficiently dry so as to be free flowing and not produce a foaming problem when blended with the hot asphalt cement. The CRM shall be accepted by certification from the rubber supplier.

2.8.3.2.3 RUBBER ASPHALT BINDER (RAB):

The final RAB product shall be a result of two homogenous blends of CRM concentrate and SBS Polymer concentrate and shall comply with the following requirements.

TABLE 330-3		
RUBBER ASPHALT BINDER (RAB) - FIELD BLEND		
Property	Test Method	Requirement
Ground Tire Rubber Content, % of weight of total RAB	Certificate of Compliance	5-10
SBS Polymer, % of weight of total RAB	Certificate of Compliance	1-4
Penetration @ 77°F, 100g/5 sec., DMM	ASTM D-5	30-65
Rotational Viscosity @ 400°F, Spindle 1 @ 12 rpm, cps	ASTM D-2669	300-900
Softening Point, °F	ASTM D-36	140 Min.
Elastic Recovery @ 77°F, 5cm/min., % Recovery After 2 Hours	ASTM D-6084 Modified (Modify 10cm to 20cm)	50 Min.
Separation of Polymer, 325°F, %	TEX 540-C (see Note, top of page 5 of 16)	Report
Solubility, %	ASTM D-2042	92.5 Min.
Dynamic Shear, G*/sinδ @76°C kPa	AASHTO T315	1.00 Min.
Resilience %	ASTM D-5329	20 Min.

The exact CRM and SBS Polymer content for final RAB shall be determined by the rubber asphalt binder design submitted by the RAB supplier. The viscosity shall be conducted by using a hand held RYAN VISCOMETER, Model VT-02 with rotor 1, or equivalent.

#### 2.8.3.2.4 RUBBER ASPHALT BINDER (RAB) FORMULATION:

The RAB supplier shall furnish to the Engineer within 15 days of the notice to proceed the RAB formulation, which shall contain the following information:

- (A) Asphalt Cement
  - 1) Source of Asphalt Cement
  - 2) Grade of Asphalt Cement
  - 3) Percentage of Asphalt Cement by total weight of RAB mixture
- (B) Granulated Reclaimed Tire Rubber (CRM)
  - 1) Source of CRM
  - 2) Grade of CRM
  - 3) Percentage of CRM by total weight of the RAB mixture
- (C) SBS Polymer
  - 1) Source of SBS Polymer
  - 2) Grade of SBS Polymer
  - 3) Percentage of SBS Polymer by total weight of the RAB mixture
- (D) Test results of specified properties listed in Section 2.8.3.2.3

If CRM from more than one source is to be utilized, then the above information will be required for each type of CRM used.

#### 2.8.3.2.5 RUBBER ASPHALT BINDER (RAB) MIXING AND REACTION:

The final RAB product shall be a result of two step blending. During the first step of blending, homogenous blends of CRM and SBS concentrates with elevated concentration, as determined by RAB design, are produced separately at different specified temperatures. During the second step, the two concentrates are blended to form a homogenous binder.

The temperature of the asphalt cement shall be between 375° F and 450° F at the addition of the CRM to produce CRM concentrate; and the temperature of the asphalt cement shall be between 350° F and 400° F at the addition of the SBS Polymer to produce SBS concentrate. The concentrates then shall be combined and mixed together, at the proper ratio as determined in the rubber asphalt binder design, in an agitated interaction tank and reacted for a minimum period of 60 minutes.

The temperature of the RAB mixture shall be at or above 375° F during the reaction period, but shall not exceed 400° F and any time. Completely mixed and reacted RAB shall be stored within a temperature range of 350° F and 400° F just prior to application. Exceeding the 400° F limit will be grounds for rejection of the affected rubber asphalt binder.

When a job delay occurs after full reaction and a batch of RAB is not used within six hours, the RAB may be allowed to cool. When the temperature of RAB cools below 350°F and is then reheated, the process is considered a reheating cycle. The total number of reheating cycle shall not exceed two. The RAB shall be re-heated slowly to a uniform temperature not less than 375°F, and agitated.

#### 2.8.3.2.6 RUBBER ASPHALT BINDER (RAB) EQUIPMENT:

All equipment utilized in the production and application of RAB materials shall be described as follows:

- (A) An asphalt cement heating tank with a hot oil heat transfer system or a retort heating system capable of heating the asphalt cement to the proper temperature for blending with the CRM and SBS Polymer.
- (B) The mechanical blender shall have a two stage continuous mixing process capable of producing a homogenous blend of asphalt cement, CRM, and SBS Polymer at the mix design specified ratios, as directed by the Engineer. This unit shall be equipped with a two compartment granulated materials feed system capable of supplying the asphalt cement feed system, as not to interrupt the continuity of the blending process.

The maximum capacity of the primary blending vessel shall be 500 gallons. Both the primary and secondary blenders shall be equipped with an agitation device orientated horizontally in the blending vessel. The blending unit shall be capable of fully blending the individual CRM and rubber particles with the asphalt cement. Separate asphalt cement feed pump and finished product pump are required. This unit shall have an asphalt cement/totalizing meter in gallons and a flow rate meter in gallons per minute.

An approved "Siefer style" mill, or equivalent shall be capable of producing a homogenous blend of SBS Polymer concentrate at the binder design specified ratio. The interaction storage tank shall be mechanically agitated.

- (C) A distributor truck equipped with a heating unit, and an internal mixing device capable of maintaining a uniform mixture of asphalt cement, CRM, and SBS Polymer. It shall be equipped with a full circulating spreader bar and pumping system capable of applying RAB material within +/- 0.05 gallons per square yard tolerance of the specified application rate, and must achieve a uniform covering of the surface to be treated. The distributor shall have a boot board on the rear of the vehicle and a bootman shall accompany the distributor. The bootman shall ride in a position so that all the spray bar tips are in full view and readily assessable for unplugging, if a plugged tip should occur. The distributor shall also include a tachometer, pressure gauge, a volume-measuring device, and thermometer and shall also have a computer rate control (CRC) installed.

#### 2.8.4 MATERIAL TESTING:

The Contractor is responsible for the quality control of the materials used. Testing done by the Engineer will be for acceptance and assurance that materials used conform to the specifications and not considered quality control.

##### 2.8.4.1 ASPHALT BINDER:

Provisions for properly sampling from distributor trucks or on-site bulk storage units shall be made by the Contractor. Sampling shall be done by the Contractor and witnessed by the Engineer in accordance with the latest edition of ASTM D-140, "Standard Methods of Sampling Bituminous Materials". The Engineer will test in accordance with the latest edition of ASTM or AASHTO.

The minimum amount of assurance sampling and testing shall be once per 500 tons of asphalt binder. Material found in non-compliance will be rejected and removed from the job site. No payment will be made for rejected material. The project shall not resume until the new material is tested by the Contractor's ASSHTO asphalt accredited, independent, materials laboratory, and found in compliance. The Contractor's test results shall be

submitted to the Engineer for compliance verification. No lost time will be considered as a result of material being found in non-compliance.

#### 2.8.4.2 STONE CHIPS:

The stone chips will be sampled and tested by the Engineer in accordance with the latest edition of ASTM C-136, "Sieve Analysis of Fine and Coarse Aggregates." The Engineer will sample and test the stone chips, for approval, from the completed stockpile.

#### 2.8.5 TIME OF APPLICATION AND WEATHER CONDITIONS:

Chip seal shall not be applied for at least 7 days after completion of new bituminous paving.

The chip seal shall be placed only when the roadway surface is dry and there is no imminent threat of rain or if wind deflects the asphalt binder spray from vertical. The surface treatment shall not be applied unless the pavement temperature is at least 60 F and rising (measured in a shaded area).

Caution should be exercised in the placement of asphalt chip seal between the dates of Oct. 1 and April 1.

#### 2.8.5.1 CONSTRUCTION METHODS:

##### 2.8.5.1.1 PREPARATION OF SURFACES:

Immediately before applying the bituminous material, the area to be surfaced shall be cleaned of oil, grease, gasoline, dirt and other objectionable material. In urban areas, the surface shall be cleaned with a self-propelled pickup sweeper. In rural areas, power brooms may be used. When necessary, cleaning shall be supplemented by hand brooms.

The bituminous material shall not be applied until an inspection of the surface has been made by the Engineer and he has determined that it is suitable.

For chip seals using paving grade asphalt as the binder, a bituminous tack coat shall be applied prior to sealing. The tack coat shall comply with MAG Specs Section 329. The exact rate shall be determined by the Engineer.

##### 2.8.5.1.1.1 DOCUMENT PAVEMENT MARKINGS:

The Contractor shall document and detail the existing pavement markings, traffic signal detection loops, and fire hydrant locations as required in MAG Specs Section 401.2.4

Pavement Markings and place temporary chip seal pavement markers.

##### 2.8.5.1.1.2 REMOVE PAVEMENT MARKINGS:

The Contractor shall remove and dispose of raised pavement markers (if any) and non-paint (thermoplastic) symbols/legends prior to the placement of the chip seal. Removal shall be by chipping, grinding, or any other method approved by the Engineer. The cost of raised pavement marker removal shall be considered as incidental to pavement preparation.

#### 2.8.5.1.1.3 CHIP SEAL PAVEMENT MARKERS (TEMPORARY):

Prior to applying the surface treatment, the Contractor shall purchase and install chip seal pavement markers in accordance with Arizona Department of Transportation Standard Specifications, Section 701-2.05. The cost for this item is considered incidental to striping.

Markers shall be placed at all tangent points and installed every 100 feet, following the existing pavement centerline and lane line striping, except that edge line striping need not be marked. These markers shall be used as a guide for the Contractor's striping crews.

Temporary pavement markers shall be placed with the reflective side facing on-coming traffic. After the surface treatment is applied to the pavement, the Contractor shall remove the plastic cover to expose the reflective tape.

#### 2.8.5.1.1.4 SURFACE CLEANING:

Immediately before applying the bituminous material, the area to be surfaced shall be cleaned of dirt and other objectionable material. The surface shall be cleaned with a self-propelled pickup sweeper. When necessary, cleaning of the existing pavement surface shall be supplemented by hand brooms or other methods, approved by the Engineer, to assure a good bond between the surface treatment and the pavement surface. Pick up brooms alone may not be adequate to thoroughly clean the surface. If water is used, the pavement shall be dry before applying the asphalt binder. The Contractor shall conduct all sweeping operations in the same direction as traffic flow.

The Contractor shall take all steps, procedures, and means to prevent dust pollution due to his construction practices in connection with this work. Dust prevention measures shall be maintained at all times during construction of the project to the satisfaction of the Engineer, in accordance with Maricopa County Air Pollution Control Regulations

#### 2.8.5.2 APPLICATION OF BITUMINOUS MATERIAL:

The bituminous material shall be applied the same day the surface is prepared. Asphalt binder containing particulate modifiers may be susceptible to separation of the modifier. Appropriate circulation or agitation in storage shall be provided if separation of the modifier is expected, suspected, or if the modified asphalt binder will be stored at elevated temperature for more than one day before use.

The quantity of liquid or emulsified asphalts will be between the range of 0.20 and 0.40 gals./sq. yd. The quantity of paving grade asphalt will be between the range of 0.17 and 0.31 gals./sq. yd. The exact rate of application will be determined by the Engineer.

The Engineer will determine the precise application rate of the asphalt binder. For bidding purposes the application rate shall be 0.50 gal/sy for low volume, and 0.60 gal/sy for high volume at 60 F. At application temperature, the rate could be .05 gal/sy higher. At all times, application rate shall be kept to a minimum.

The chips shall be spread before the bituminous material sets. The maximum distance that the bituminous material is applied in advance of the chips will be determined by the Engineer.

The asphalt binder shall be applied only to asphalt pavement surfaces. The spraying of asphalt binder on concrete curb and gutter, on concrete valley gutters, or on the concrete aprons around catch basins, shall be removed by the Contractor.

#### 2.8.5.3 APPLICATION OF COVER MATERIAL:

At an appropriate time, as determined by the Contractor following the application of the bituminous material, the chips shall be spread with a self-propelled mechanical spreader. The spreader shall be a self-propelled machine with an aggregate receiving hopper in the rear, belt conveyors to carry the aggregate to the front, and a spreading hopper equipped with a full width distribution auger and spread roll. The spreader shall be in good mechanical condition and be capable of applying the cover material uniformly across the spread at the specified rate. The minimum width of the spreader shall be twelve feet.

At the time of application, precoated aggregate shall be within the temperature range of 200 degrees F. and 300 degrees F. measured at a point 6 to 12 inches below the top of the load.

At the time of application, uncoated chips shall not contain moisture in excess of a saturated, surface dry condition when liquid or paving grade asphalt are used as the seal coat binder.

At the time of application, chips shall be surface wet but free from running water when emulsified asphalt is used as the seal coat binder.

The Engineer will determine the application rate of the cover material. For bidding purposes assume a maximum application rate of 20 lbs/sy for low volume, and 28 lbs /sy for high volume. At all times, application rate shall be kept to a minimum.

Trucks for hauling stone chips shall be tailgate discharge and shall be equipped with a device to lock onto the hitch at the rear of the stone chip spreader. Haul trucks shall also be compatible with the stone chip spreader so that the dump bed will not push down on the spreader when fully raised or have too short a bed, which results in stone chip spillage while dumping into the receiving hopper.

#### 2.8.5.4 ROLLING:

Immediately following the application of the cover material, the surface shall be rolled with self-propelled pneumatic-tired rollers. Three coverages shall be made with a pneumatic roller. Each roller shall carry a minimum of 2,000 pounds on each wheel and a minimum of 60 psi in each tire. The roller shall not travel in excess of 12 miles per hour. A minimum of 3 self-propelled pneumatic rollers shall be required for projects over 10,000 sq. yds. On projects under 10,000 sq. yds., one roller may be used provided it performs the same number of coverages.

In residential areas, rollers shall be completely skirted.

Three operational pneumatic-tired rollers, with operators shall be provided to accomplish the required embedment of the stone chips. If the Contractor is working at more than one location, there shall be a minimum of three rollers, with operators at each location.

Sufficient rollers shall be used for the initial rolling to cover the width of the stone chip spread with one pass. The first pass shall be made immediately behind the stone chip spreader. Three complete passes with pneumatic-tired rollers shall be made and one final pass with a 12 to 14 ton steel wheel roller. The inspector may require extra rolling on Cul-de-Sacs. All rolling completed within one hour after the application of the stone chips.

The asphalt binder shall be applied only to asphalt pavement surfaces. The spraying of ahead or off to the side so that all stone chips can be immediately rolled.

#### 2.8.5.5 JOINTS:

All joints shall be constructed as approved by the Engineer such that there be a uniform application of cover material and bituminous material.

Paper, or other material approved by the Engineer, shall be used at the beginning and end of the surface treatment section to make a smooth, straight, clean transition. Paper shall also be used at concrete bridge decks. Overlap of asphalt binder at transverse stopping points, creating a bump, is not allowed.

#### 2.8.5.6 SURPLUS AGGREGATE REMOVAL:

Surplus aggregate shall be removed from the surface using methods specified in M A G S p e c s Section 330.4.1 and stockpiled in the location indicated on the plans or as approved by the Engineer. In no event shall surplus aggregate be left on the pavement for more than 1 day (24 hours).

The Contractor shall keep all driveways and sidewalks clean of any loose stone chips on a daily basis during construction. Air powered blowers are not allowed. Cleanup shall also include the daily removal of surface treatment materials from manhole covers, valve covers, survey monuments, fire hydrant markers, gutters, curbs, sidewalks, etc. in the project area.

The Contractor shall conduct all sweeping operations in the same direction of traffic flow. Pick-up brooms shall be used on subdivision roads, and roads with curb and gutter.

#### 2.8.5.7 DISTRIBUTING EQUIPMENT:

Distributor trucks shall be of the pressure type with insulated tanks. Gravity distributors will not be permitted.

Spray bars and extensions shall be of the full circulating type. The spray bar shall be adjustable to permit varying height above the surface to be treated.

The nozzle spacings, center to center, shall not exceed 6 inches. The valves shall be operated so that one or all valves may be quickly opened or closed in one operation. The valves which control the flow from the nozzles shall be of a positive acting design so as to provide a uniform, unbroken spread of bituminous material on the surface.

The distributor shall be equipped with devices and charts to provide for accurate, rapid determination and control of the amount of bituminous material being applied. The distributor shall be equipped with a tachometer of the auxiliary wheel type registering speed in feet per minute. The distributor shall also be equipped with pressure gauges and an accurate thermometer for determination of the temperature of bituminous material. The spreading equipment shall be designed so that uniform application of a bituminous material can be applied in controlled amounts ranging from 0.05 to 2.0 gallons per square yard. Transverse variation rate shall not exceed ten (10) percent of the specified application rate. The distributor shall be equipped with a hose and nozzle attachment to be used for spotting skipped areas and areas inaccessible to the distributor. Distributor and booster tanks shall be maintained as to prevent dripping of bituminous material from any part of the equipment.

Equipment that fails to perform satisfactorily shall be removed from the job.

Distributor trucks shall comply with the requirements of Section 404-3.02 (A) of the Arizona Department of Transportation Standard Specifications for Road and Bridge Constructions, 2008 edition. For each distributor truck proposed to be used on the project, an Arizona Test Method 411 Report shall be submitted to the Engineer. If the reports are over 12 months old, the Contractor's AASHTO Accredited Testing Laboratory will test the trucks, with the results submitted to the Engineer.

2.8.5.8 SAND BLOTTER:

Sand blotter shall be in accordance with MAG Specs Section 333.3.2.

The Contractor shall apply sand blotter, as many times as necessary, prior to opening the roadway to traffic where there is an excess of asphalt, or as requested by the Engineer. The Contractor shall be responsible for sweeping the sand within 24 hours of opening the roadway to traffic.

There will be no payment for materials not placed in accordance with this specification. The cost associated with sand blotter, the material supplies, application, and clean-up shall be included in the unit price of related pay items. No direct payment or measurement for pay purposes will be made for sand blotter.

If the paved roadway is to be sanded, the surface shall be sanded at approximately two pounds per square yard. No more sand shall be used than necessary, and the amount specified shall not be increased without prior approval of the Engineer.

2.8.5.9 PERFORMANCE:

The completed surface treatment shall leave a homogeneous mat, adhere firmly to the prepared surface, and have a skid resistant surface texture.

2.8.5.10 CLEANUP:

Before final acceptance by the City, all private or public property and grounds occupied by the Contractor in connection with the work shall be cleaned of all rubbish, excess materials, temporary structures, and equipment. All parts of the work area shall be left in a condition equal to, or better than, it was prior to the start of the project.

Before final acceptance by the City, the Contractor shall sweep the completed project area and repeat the surface treatment where the old road surface is exposed, or where binder lies uncovered by stone chips

2.8.6 MEASUREMENT:

Certified weight slips of all material shall be delivered to the Engineer before the materials are applied. Certified weight slips of any material being weighed back in for credit shall be delivered to the Engineer the next day. Certified weight slips are required for all asphalt binder.

2.8.7 PAYMENT:

Quantities of materials for this work will be paid for at the contract unit price.

- |  |     |
|--|-----|
| (A) Binder Material:   | Ton |
| (B) Asphalt Cement, Liquid Asphalt, Emulsion, Diluted Emulsion | Ton |
| (C) Chips  | Ton |

There will be no payment for materials not placed in accordance with this specification. The cost associated with sand blotter, the material supplies, application, and clean-up shall be included in the unit price of related pay items. No direct payment or measurement for pay purposes will be made for sand blotter.

2.9 FOG SEAL COAT:

2.9.1 DESCRIPTION:

The work covered by this specification consists of furnishing all labor, equipment, and materials necessary to perform all operations required for the application of fog seal to bituminous paved surfaces.

2.9.2 MATERIALS:

The Engineer must approve all material sources prior to their use. Once approved, material sources shall not be changed without the approval of the Engineer. If requested by the Engineer, the Contractor shall submit material samples at least seven (7) days prior to start of construction. When requested, additional samples shall be furnished during the construction period at no cost to the City. Material sample submittal is a non-pay item.

The emulsified asphalt shall be a grade SS-1h, CSS-1h, or CQSH, as specified in MAG Specs Section 713. The emulsified asphalt shall be diluted in proportions of 50% water and 50% emulsified asphalt.

If needed, the sand blotter shall be as specified in MAG Specs Section 701.3 and shall be graded in accordance with MAG Specs Table 333-1

2.9.3 APPLICATION:

Fog seal shall be applied by a distributor truck equipped with fog nozzles at the approximate rate of 0.10 gallon per square yard. The exact rate shall be as directed by the Engineer. The distributor truck shall be as specified in Section 2.9.4.

2.9.4 EQUIPMENT:

2.9.4.1 GENERAL:

When requested by the Engineer, descriptive information on the fog seal application equipment to be used will be submitted for approval no less than 7 days before the starts.

2.9.4.2 DISTRIBUTING EQUIPMENT:

Distributor trucks shall be of the pressure type with insulated tanks. Gravity distributors will not be permitted.

Spray bars and extensions shall be of the full circulating type. The spray bar shall be adjustable to permit varying height above the surface to be treated.

The nozzle spacings, center to center, shall not exceed 6 inches. The valves shall be operated so that one or all valves may be quickly opened or closed in one operation. The valves which control the flow from the nozzles shall be of a positive acting design so as to provide a uniform, unbroken spread of bituminous material on the surface.

The distributor shall be equipped with devices and charts to provide for accurate, rapid determination and control of the amount of bituminous material being applied. The distributor shall be equipped with a tachometer of the auxiliary wheel type registering speed in feet per minute. The distributor shall also be equipped with pressure gauges and an accurate thermometer for determination of the temperature of bituminous material. The spreading equipment shall be designed so that uniform application of a bituminous material can be applied in controlled amounts ranging from 0.05 to 2.0 gallons per square yard. Transverse variation rate shall not exceed ten (10) percent of the specified application rate. The distributor shall be equipped with a hose and nozzle attachment to be used for spotting skipped areas and areas inaccessible to the distributor. Distributor and booster tanks shall be maintained as to prevent dripping of bituminous material from any part of the equipment.

Equipment that fails to perform satisfactorily shall be removed from the job.

#### 2.9.5 PREPARATION OF THE SURFACE:

Immediately before applying the fog seal, the area to be surfaced shall be cleaned of oil, grease, gasoline, dirt, loose material, and other objectionable material. The fog seal shall be applied the same day the pavement is cleaned. In urban areas, the surface shall be cleaned with a self-propelled pick-up sweeper. In rural areas, power brooms may be used. When necessary, cleaning shall be supplemented by hand brooms. When necessary, cleaning of the existing pavement surface shall be supplemented by hand brooms or other methods, approved by the Engineer, to assure a good bond between the fog seal and the pavement surface. Power brooms or pick up brooms alone may not be adequate to thoroughly clean the surface. This also includes the removal of grass or weeds, which are growing in the joint between the street and the concrete gutter

The Contractor shall take all steps, procedures, and means to prevent dust pollution due to his construction practices in connection with this work. Dust prevention measures shall be maintained at all times during construction of the project to the satisfaction of the Engineer, in accordance with "Maricopa County Air Pollution Control Regulations".

Prior to the Pre-Construction meeting, the Contractor shall have a dust control plan, approved by the Maricopa County Division of Air Pollution Control. For information and requirements for the dust control plan, the Contractor shall contact:

Maricopa County Environmental Services Department  
Division of Air Pollution Control  
2406 South 24th Street, Suite E-214  
Phoenix, AZ 85034 (602) 506-6727

The Contractor shall remove and dispose of raised pavement markers (if any) prior to the placement of the fog seal. Removal shall be by chipping, grinding, or any other method approved by the Engineer. The cost of raised pavement marker removal is incidental to pavement preparation.

Prior to striping removal, the Contractor shall document and detail the existing pavement striping and delineation. The details shall include as a minimum the type, size, color, dimensions, and specific detailed location of the delineation, acceptable to the Engineer, so that contractor or City Forces can replace the delineation, as it existed prior to the removal. The details shall be submitted to the Engineer a minimum three (3) working days prior to covering the striping with fog seal.

The fog seal shall not be applied until an inspection of the surface has been made by the Engineer and he has determined that it is suitable.

2.9.6 WEATHER LIMITATIONS:

The fog seal shall not be applied if the surface is wet, during inclement weather, or weather determined unsuitable by the Engineer. The ambient temperature shall be at least 50 degrees F. and rising and the application shall cease when the temperature is 55 degrees F and falling.

2.9.7 PROTECTION OF UNCURED SURFACE:

Adequate methods such as barricades, flagmen, pilot cars, etc. shall be used to protect the treated surface from all types of traffic until the asphalt emulsion will not be picked up by traffic.

The Contractor shall be responsible for the repair of all damage done within 24 hours of initial application.

2.9.8 PROTECTION FOR ADJACENT PROPERTY:

Care shall be taken to prevent the spraying of asphalt emulsion on adjacent pavements, including that portion of the pavement being used for traffic, on structures, curb, gutter, sidewalks, guard rails, guide posts, markers, trees, shrubs, and property of all kinds

2.9.9 MATERIALS TESTING:

The Contractor is responsible for the quality control of all materials used. Testing performed by the Engineer will assure that materials conform to the specifications and shall not be considered a quality control measure.

Provisions for properly sampling emulsion from distributor trucks or on-site bulk storage units shall be made by the Contractor. Emulsion sampling shall be performed by the Contractor and witnessed by the Engineer in accordance with the latest edition of ASTM D-140, "Standard Methods of Sampling Bituminous Materials." Testing will be performed by the Engineer in accordance with the latest edition of ASTM D-244, "Testing Emulsified Asphalts".

The minimum amount of sampling and testing shall be once for every 500 tons of emulsion. Material found in non-compliance will be rejected and shall be removed from the job site. No payment will be made for rejected material. The project shall not resume until the new material is tested and found in compliance. No lost time will be considered as a result of material being found in non-compliance.

2.9.10 MEASUREMENT:

Quantities and materials for this work will be paid for at the contract price per unit of measurement for each of the following pay items as indicated in the proposal.

Emulsified asphalt for fog seal - Ton (Undiluted)

Payment for various bid items shall be compensation in full for furnishing all materials, labor, tools, equipment, and appurtenances necessary to complete the work in a satisfactory manner, as specified.

There will be no payment for materials not placed in accordance with this specification. The cost associated with sand blotter, the material supplies, application, and clean-up shall be

included in the unit price of related pay items. No direct payment or measurement for pay purposes will be made for sand blotter.

No additional payment will be made for work related to any item, unless specifically called for in the bid. No payment will be made for materials used to patch unacceptable work.

Only certified tickets of the emulsion delivered to a City representative will be accepted for payment. Overweight tickets shall not be accepted and material shall be partially unloaded, at no expense to the contracting agency, to a legal status for re-weighing. A new ticket will be required for the remaining load. No deliveries shall be accepted prior to 7:00 a.m., or after 4:30 p.m. Any deliveries before or after this time frame will not be compensated.

A daily tabulation of materials delivered, used, square yards covered, application rate, etc., shall be compared between the Contractor and the Engineer. Adjustments and agreements are final at the end of each stockpile. Materials placed without approval of the inspector, or materials rejected due to improper placing, improper proportions of materials, or materials found to be defective, will not be compensated.

#### 2.9.11 SAND BLOTTER:

Sand Blotter shall be in accordance with MAG Specs Sections 333.3.2 and 333.7, except as modified below.

The Contractor shall apply sand blotter prior to opening the roadway to traffic where there is an excess of asphalt emulsion, if requested by the Engineer. The Contractor shall also be responsible for sweeping the sand within 24 hours of opening the roadway to traffic.

There will be no payment for materials not placed in accordance with this specification. The cost associated with sand blotter, the material supplies, application, and clean-up shall be included in the unit price of related pay items. No direct payment or measurement for pay purposes will be made for sand blotter.

If the paved roadway must be sanded, the surface shall be sanded at approximately two pounds per square yard. No more sand shall be used than necessary, and the amount specified shall not be increased without prior approval of the Engineer.

After the treated area has been opened to traffic, the Contractor shall immediately cover any excess asphalt emulsion that comes to the

#### 2.10 HIGH DENSITY MINERAL BOND:

##### 2.10.1 DESCRIPTION:

The work covered by this specification consists of furnishing all labor, equipment, and materials necessary to perform all operations required for the application of high density mineral bond slurry seal (HDMB) to bituminous paved surfaces.

##### 2.10.2 MATERIALS:

The Engineer must approve all material sources prior to their use. Once approved, material sources shall not be changed without the approval of the Engineer. If requested by the Engineer, the Contractor shall submit material samples at least seven (7) days prior to start of construction. When requested, additional samples shall be furnished

during the construction period at no cost to the City. Material sample submittal is a non-pay item.

The material, ready to place, shall be as specified in the American Public Works Association (APWA) standard specifications Section 32 01 13.68 with modification to Section 2.3 Table 4 as follows:

Table 4** – Selection Guide			
Criterion	ASTM	Target	Unit
Asphalt content by weight	D 2172	17 min.	percent
Residual asphalt by weight	D 2939	30	percent
Cone penetration viscosity	D 217	350-450	cST/sec
Weight per gallon	D 2939	11.2 minimum	pounds
VOC	D 3960	<10	gram/liter
Sand or other round aggregate	--	6 percent maximum	by weight
Maximum VOC:	--	<10 g/l	g/l
Pinholes on glass	--	No grazing on film	--
Resistance to re-emulsification	--	Very good	--
Wear resistance (70 mils wet)	D 2486 *Modified	<6.5 percent @ 12,000 cycles	by weight
* Wear resistance scrubs @ 48 Wet Mills ASTM D2486 Modified Brass Brush 1000 Grams Glass Substrate Panels air dried three days then soaked 24 hours prior to testing. Report in Percentage of Dry Film Loss at 12,000 Scrub Cycles			

\*\*American Public Works Association (APWA) standard specifications Section 32 01 13.68 modified Table 4 of Section 2.3.

2.10.3 APPLICATION:

The HDMB shall be applied by distributing equipment that meets the requirements of Section 2.10.4. Two separate applications coats are required. The first application must be thoroughly dry and free of any damp areas before the second application begins. Application rates: 0.20 gallons per square yard maximum and 0.16 gallons per square yard minimum. The material per square yard of surface delivery rate shall be kept constant, even if the forward speed of the machine varies. Application rates shall not be reduced along edges or around manhole covers. Both applications shall be applied right to the edge of the pavement. Do not back away from curbs, manhole covers, and edges on either application.

2.10.4 EQUIPMENT:

2.10.4.1 GENERAL:

When requested by the Engineer, descriptive information on the HDMB application equipment to be used will be submitted for approval no less than 7 days before the starts.

#### 2.10.4.2 DISTRIBUTING EQUIPMENT:

A Continuous flow mixing unit paver shall be capable of applying at least 15,000 square yards of material per day. It shall be equipped with full sweep helical mixer to assure proper suspension of fine aggregates. The machine shall have two separate filters. The primary filter should be at least 200 square inches with a filter face of 3/8 inch. The secondary filter needs to be at least 1500 square inches with a filter face of 1/8 inch. It shall have a retractable spray bar with spacing of 16 inches between each discharge orifice. The bar should be positioned minimum of 20 inches from the surface, and no more than 23 inches from the surface.

#### 2.10.5 PREPARATION OF THE SURFACE:

Immediately before applying the HDMB, the area to be surfaced shall be cleaned of oil, grease, gasoline, dirt, loose material, and other objectionable material. The HDMB shall be applied the same day the pavement is cleaned. In urban areas, the surface shall be cleaned with a self-propelled pick-up sweeper. In rural areas, power brooms may be used. When necessary, cleaning shall be supplemented by hand brooms. When necessary, cleaning of the existing pavement surface shall be supplemented by hand brooms or other methods, approved by the Engineer, to assure a good bond between the HDMB and the pavement surface. Power brooms or pick up brooms alone may not be adequate to thoroughly clean the surface. This also includes the removal of grass or weeds, which are growing in the joint between the street and the concrete gutter

The Contractor shall take all steps, procedures, and means to prevent dust pollution due to his construction practices in connection with this work. Dust prevention measures shall be maintained at all times during construction of the project to the satisfaction of the Engineer, in accordance with "Maricopa County Air Pollution Control Regulations".

Prior to the Pre-Construction meeting, the Contractor shall have a dust control plan, approved by the Maricopa County Division of Air Pollution Control. For information and requirements for the dust control plan, the Contractor shall contact:

Maricopa County Environmental Services Department  
Division of Air Pollution Control  
2406 South 24th Street, Suite E-214  
Phoenix, AZ 85034 (602) 506-6727

The Contractor shall remove and dispose of raised pavement markers (if any) prior to the placement of the HDMB. Removal shall be by chipping, grinding, or any other method approved by the Engineer. The cost of raised pavement marker removal is incidental to pavement preparation.

Prior to striping removal, the Contractor shall document and detail the existing pavement striping and delineation. The details shall include as a minimum the type, size, color, dimensions, and specific detailed location of the delineation, acceptable to the Engineer, so that contractor or City Forces can replace the delineation, as it existed prior to the removal. The details shall be submitted to the Engineer a minimum three (3) working days prior to covering the striping with HDMB.

The HDMB shall not be applied until an inspection of the surface has been made by the Engineer and he has determined that it is suitable.

A tack coat shall be applied to high absorbent, polished, oxidized, or raveled asphalt surfaces or to concrete or brick surfaces. The tack coat should consist of one part emulsified asphalt, three parts water and should be SS or CSS grade.

2.10.6 WEATHER LIMITATIONS:

HDMB shall not be applied during inclement weather, or weather determined unsuitable by the Engineer. The air and roadbed temperatures in the shade shall be 55 deg F. and rising and the application shall cease when the temperature is below 60 deg F. and falling or if the finished product will freeze before 48 hours.

2.10.7 PROTECTION OF UNCURED SURFACE:

Adequate methods such as barricades, flagmen, pilot cars, etc. shall be used to protect the treated surface from all types of traffic until the asphalt emulsion will not be picked up by traffic.

The Contractor shall be responsible for the repair of all damage done within 24 hours of initial application.

2.10.8 PROTECTION FOR ADJACENT PROPERTY:

Care shall be taken to prevent the spraying of asphalt emulsion on adjacent pavements, including that portion of the pavement being used for traffic, on structures, guard rails, guide posts, markers, trees, shrubs, and property of all kinds.

The Contractor shall mask off end of streets and intersections to provide straight lines:

1. Make straight lines along lip of gutters and shoulders. Keep same thickness in these areas. No runoff on these areas will be permitted.
2. Vary edge lines no more than 1/2 inch per 100 feet.
3. Protect curb, gutter, and sidewalk from spatter, mar, or overcoat.

2.10.9 MATERIALS TESTING:

The Contractor is responsible for the quality control of all materials used. Testing performed by the Engineer will assure that materials conform to the specifications and shall not be considered a quality control measure.

Provisions for properly sampling the mixture, ready to install, from distributing equipment or on-site bulk storage units shall be made by the Contractor. Sampling shall be performed by the Contractor and witnessed by the Engineer in accordance with the latest edition of ASTM D-2939, "Standard Test Methods for Emulsified Bitumens Used as Protective Coatings."

The minimum amount of sampling and testing shall be once for every 500 tons of materials ready to use. Material found in non-compliance will be rejected and shall be removed from the job site. No payment will be made for rejected material. The project shall not resume until the new material is tested and found in compliance. No lost time will be considered as a result of material being found in non-compliance.

2.10.10 MEASUREMENT:

Quantities and materials for this work will be paid for at the contract price per unit of measurement for each of the following pay items as indicated in the proposal.

HDMB mixture, ready to install - Ton

Bituminous tack coat if specified – Ton (Diluted)

Payment for various bid items shall be compensation in full for furnishing all materials, labor, tools, equipment, and appurtenances necessary to complete the work in a satisfactory manner, as specified.

No additional payment will be made for work related to any item, unless specifically called for in the bid. No payment will be made for materials used to patch unacceptable work.

There will be no payment for materials not placed in accordance with this specification. The cost associated with sand blotter, the material supplies, application, and clean-up shall be included in the unit price of related pay items. No direct payment or measurement for pay purposes will be made for sand blotter.

Only certified tickets of the HDMB mixture, ready to install, delivered to a City representative will be accepted for payment. Overweight tickets shall not be accepted and material shall be partially unloaded, at no expense to the contracting agency, to a legal status for re-weighing. A new ticket will be required for the remaining load. No deliveries shall be accepted prior to 7:00 a.m., or after 4:30 p.m. Any deliveries before or after this time frame will not be compensated.

A daily tabulation of materials delivered, used, square yards covered, application rate, etc., shall be compared between the Contractor and the Engineer. Adjustments and agreements are final at the end of each stockpile. Materials placed without approval of the inspector, or materials rejected due to improper placing, improper proportions of materials, or materials found to be defective, will not be compensated.

#### 2.10.11 SAND BLOTTER:

Sand Blotter shall be in accordance with MAG Specs Sections 333.3.2 and 333.7, except as modified below.

The Contractor shall apply sand blotter prior to opening the roadway to traffic where there is an excess of asphalt emulsion, if requested by the Engineer. The Contractor shall also be responsible for sweeping the sand within 24 hours of opening the roadway to traffic.

There will be no payment for materials not placed in accordance with this specification. The cost associated with sand blotter, the material supplies, application, and clean-up shall be included in the unit price of related pay items. No direct payment or measurement for pay purposes will be made for sand blotter.

If the paved roadway must be sanded, the surface shall be sanded at approximately two pounds per square yard. No more sand shall be used than necessary, and the amount specified shall not be increased without prior approval of the Engineer.

After the treated area has been opened to traffic, the Contractor shall immediately cover any excess asphalt emulsion that comes to the surface with additional sand.

#### 2.11 MTR (TIRE RUBBER MODIFIED SEALCOAT):

##### 2.11.1 DESCRIPTION:

The work covered by this specification consists of furnishing all labor, equipment, and materials necessary to perform all operations required for the application of MTR (tire rubber modified sealcoat) to bituminous paved surfaces.

2.11.2 MATERIALS:

The Engineer must approve all material sources prior to their use. Once approved, material sources shall not be changed without the approval of the Engineer. If requested by the Engineer, the Contractor shall submit material samples at least seven (7) days prior to start of construction. When requested, additional samples shall be furnished during the construction period at no cost to the City. Material sample submittal is a non-pay item.

The material, ready to place, shall be per the manufacturers recommendations. In areas where additional aggregate is required based on job specific conditions, the additional aggregate shall be added in accordance with the manufacturer's recommendations.

2.11.3 APPLICATION:

The MTR shall be applied by distributing equipment that meets the requirements of Section 2.11.4. Two separate applications coats are required. The first application must be thoroughly dry and free of any damp areas before the second application begins. Application rates of properly mixed MTR shall be 50 to 60 square feet per gallon/per coat or .15 -.18 gallons per square yard. At the direction of the Engineer, a third coat of MTR might be required in heavy traffic areas.

Pavement surfaces should be misted with water during application in extremely hot temperatures (90 degrees and above).

2.11.4 EQUIPMENT:

2.11.4.1 GENERAL:

When requested by the Engineer, descriptive information on the MTR application equipment to be used will be submitted for approval no less than 7 days before the starts.

2.11.4.2 DISTRIBUTING EQUIPMENT:

Application equipment shall meet the requirements of the manufacturer. Per the manufacturer, MTR can be applied by hand spray/squeegee, mechanical spray tankers or squeegee machines. Application units shall be equipped with mechanical agitators to maintain consistency of the mixed material during application.

2.11.5 PREPARATION OF THE SURFACE:

Immediately before applying the MTR, the area to be surfaced shall be cleaned of oil, grease, gasoline, dirt, loose material, and other objectionable material. The MTR shall be applied the same day the pavement is cleaned. In urban areas, the surface shall be cleaned with a self-propelled pick-up sweeper. In rural areas, power brooms may be used. When necessary, cleaning shall be supplemented by hand brooms. When necessary, cleaning of the existing pavement surface shall be supplemented by hand brooms or other methods, approved by the Engineer, to assure a good bond between the MTR and the pavement surface. Power brooms or pick up brooms alone may not be adequate to thoroughly clean the surface. This also includes the removal of grass or weeds, which are growing in the joint between the street and the concrete gutter

The Contractor shall take all steps, procedures, and means to prevent dust pollution due to his construction practices in connection with this work. Dust prevention measures shall be maintained at all times during construction of the project to the satisfaction of the Engineer, in accordance with "Maricopa County Air Pollution Control Regulations".

Prior to the Pre-Construction meeting, the Contractor shall have a dust control plan, approved by the Maricopa County Division of Air Pollution Control. For information and requirements for the dust control plan, the Contractor shall contact:

Maricopa County Environmental Services Department  
Division of Air Pollution Control  
2406 South 24th Street, Suite E-214  
Phoenix, AZ 85034 (602) 506-6727

The Contractor shall remove and dispose of raised pavement markers (if any) prior to the placement of the MTR. Removal shall be by chipping, grinding, or any other method approved by the Engineer. The cost of raised pavement marker removal is incidental to pavement preparation.

Prior to striping removal, the Contractor shall document and detail the existing pavement striping and delineation. The details shall include as a minimum the type, size, color, dimensions, and specific detailed location of the delineation, acceptable to the Engineer, so that contractor or City Forces can replace the delineation, as it existed prior to the removal. The details shall be submitted to the Engineer a minimum three (3) working days prior to covering the striping with MTR.

The MTR shall not be applied until an inspection of the surface has been made by the Engineer and he has determined that it is suitable.

A tack coat shall be applied to high absorbent, polished, oxidized, or raveled asphalt surfaces. The tack coat should consist of one part emulsified asphalt, three parts water and should be SS-1h grade.

#### 2.11.6 WEATHER LIMITATIONS:

MTR shall not be applied during inclement weather, or weather determined unsuitable by the Engineer. The air and roadbed temperatures in the shade shall be 55 deg F and rising. MTR should not be applied if raining or rain is forecasted within 24 hours of application.

#### 2.11.7 PROTECTION OF UNCURED SURFACE:

Adequate methods such as barricades, flagmen, pilot cars, etc. shall be used to protect the treated surface from all types of traffic until the asphalt emulsion will not be picked up by traffic.

The Contractor shall be responsible for the repair of all damage done within 24 hours of initial application.

#### 2.11.8 PROTECTION FOR ADJACENT PROPERTY:

Care shall be taken to prevent the spraying of asphalt emulsion on adjacent pavements, including that portion of the pavement being used for traffic, on structures, guard rails, guide posts, markers, trees, shrubs, and property of all kinds.

The Contractor shall mask off end of streets and intersections to provide straight lines:

4. Make straight lines along lip of gutters and shoulders. Keep same thickness in these areas. No runoff on these areas will be permitted.
5. Vary edge lines no more than 1/2 inch per 100 feet.
6. Protect curb, gutter, and sidewalk from spatter, mar, or overcoat.

2.11.9 MATERIALS TESTING:

The Contractor is responsible for the quality control of all materials used. Testing performed by the Engineer will assure that materials conform to the specifications and shall not be considered a quality control measure.

Provisions for properly sampling the mixture, ready to install, from distributing equipment or on-site bulk storage units shall be made by the Contractor. Sampling shall be performed by the Contractor and witnessed by the Engineer in accordance with the latest edition of ASTM D-2939, "Standard Test Methods for Emulsified Bitumens Used as Protective Coatings."

The minimum amount of sampling and testing shall be once for every 500 gallons of materials ready to use. Material found in non-compliance will be rejected and shall be removed from the job site. No payment will be made for rejected material. The project shall not resume until the new material is tested and found in compliance. No lost time will be considered as a result of material being found in non-compliance.

2.11.10 MEASUREMENT:

Quantities and materials for this work will be paid for at the contract price per unit of measurement for each of the following pay items as indicated in the proposal.

MTR mixture, ready to install - Gallon  
Bituminous tack coat if specified – Ton (Diluted)

Payment for various bid items shall be compensation in full for furnishing all materials, labor, tools, equipment, and appurtenances necessary to complete the work in a satisfactory manner, as specified.

No additional payment will be made for work related to any item, unless specifically called for in the bid. No payment will be made for materials used to patch unacceptable work.

Only certified tickets of the MTR mixture, ready to install, delivered to a City representative will be accepted for payment. Overweight tickets shall not be accepted and material shall be partially unloaded, at no expense to the contracting agency, to a legal status for re-weighing. A new ticket will be required for the remaining load. No deliveries shall be accepted prior to 7:00 a.m., or after 4:30 p.m. Any deliveries before or after this time frame will not be compensated.

A daily tabulation of materials delivered, used, square yards covered, application rate, etc., shall be compared between the Contractor and the Engineer. Adjustments and agreements are final at the end of each stockpile. Materials placed without approval of the inspector, or materials rejected due to improper placing, improper proportions of materials, or materials found to be defective, will not be compensated.

2.12 PMM RTU (POLYMER-MODIFIED MASTERSEAL ASPHALT EMULSION SEALCOAT):

2.12.1 DESCRIPTION:

The work covered by this specification consists of furnishing all labor, equipment, and materials necessary to perform all operations required for the application of PMM RTU polymer-modified MasterSeal ready to use asphalt emulsion sealcoat (PMM RTU) to bituminous paved surfaces.

2.12.2 MATERIALS:

The Engineer must approve all material sources prior to their use. Once approved, material sources shall not be changed without the approval of the Engineer. If requested by the Engineer, the Contractor shall submit material samples at least seven (7) days prior to start of construction. When requested, additional samples shall be furnished during the construction period at no cost to the City. Material sample submittal is a non-pay item.

The material, ready to place, shall be per the manufacturers recommendations. In areas where additional aggregate is required based on job specific conditions, the additional aggregate shall be added in accordance with the manufacturer's recommendations.

2.12.3 APPLICATION:

The PMM RTU shall be applied by distributing equipment that meets the requirements of Section 2.12.4. Two separate applications coats are required. The first application must be thoroughly dry and free of any damp areas before the second application begins. Application rates of properly mixed PMM RTU shall be 45 to 60 square feet per gallon/per coat or .15 - .20 gallons per square yard. At the direction of the Engineer, a third coat of PMM RTU might be required in heavy traffic areas or on severely distressed pavements.

Pavement surfaces should be misted with water during application in extremely hot temperatures (90 degrees and above).

2.12.4 EQUIPMENT:

2.12.4.1 GENERAL:

When requested by the Engineer, descriptive information on the PMM RTU application equipment to be used will be submitted for approval no less than 7 days before the starts.

2.12.4.2 DISTRIBUTING EQUIPMENT:

Application equipment shall meet the requirements of the manufacturer. Per the manufacturer, PMM RTU can be applied by hand spray/squeegee, mechanical spray units or squeegee machines. Application units shall be equipped with mechanical agitators to maintain consistency of the mixed material during application, or to mix additional aggregate if needed.

2.12.5 PREPARATION OF THE SURFACE:

Immediately before applying the PMM RTU, the area to be surfaced shall be cleaned of oil, grease, gasoline, dirt, loose material, and other objectionable material. The PMM RTU shall be applied the same day the pavement is cleaned. In urban areas, the surface shall be cleaned with a self-propelled pick-up sweeper. In rural areas, power brooms may be used. When necessary, cleaning shall be supplemented by hand brooms. When necessary, cleaning of the existing pavement surface shall be supplemented by hand brooms or other methods, approved by the Engineer, to assure a good bond between the PMM RTU and the pavement surface. Power brooms or pick up brooms alone may not be adequate to thoroughly clean the surface. This also includes the removal of grass or weeds, which are growing in the joint between the street and the concrete gutter

The Contractor shall take all steps, procedures, and means to prevent dust pollution due to his construction practices in connection with this work. Dust prevention measures shall be maintained at all times during construction of the project to the satisfaction of the Engineer, in accordance with "Maricopa County Air Pollution Control Regulations".

Prior to the Pre-Construction meeting, the Contractor shall have a dust control plan, approved by the Maricopa County Division of Air Pollution Control. For information and requirements for the dust control plan, the Contractor shall contact:

Maricopa County Environmental Services Department  
Division of Air Pollution Control  
2406 South 24th Street, Suite E-214  
Phoenix, AZ 85034 (602) 506-6727

The Contractor shall remove and dispose of raised pavement markers (if any) prior to the placement of the PMM RTU. Removal shall be by chipping, grinding, or any other method approved by the Engineer. The cost of raised pavement marker removal is incidental to pavement preparation.

Prior to striping removal, the Contractor shall document and detail the existing pavement striping and delineation. The details shall include as a minimum the type, size, color, dimensions, and specific detailed location of the delineation, acceptable to the Engineer, so that contractor or City Forces can replace the delineation, as it existed prior to the removal. The details shall be submitted to the Engineer a minimum three (3) working days prior to covering the striping with PMM RTU.

The PMM RTU shall not be applied until an inspection of the surface has been made by the Engineer and he has determined that it is suitable.

#### 2.12.6 WEATHER LIMITATIONS:

PMM RTU shall not be applied during inclement weather, or weather determined unsuitable by the Engineer. The air and roadbed temperatures in the shade shall be 55 deg F and rising. PMM RTU should not be applied if raining or rain is forecasted within 24 hours of application.

#### 2.12.7 PROTECTION OF UNCURED SURFACE:

Adequate methods such as barricades, flagmen, pilot cars, etc. shall be used to protect the treated surface from all types of traffic until the asphalt emulsion will not be picked up by traffic.

The Contractor shall be responsible for the repair of all damage done within 24 hours of initial application.

#### 2.12.8 PROTECTION FOR ADJACENT PROPERTY:

Care shall be taken to prevent the spraying of asphalt emulsion on adjacent pavements, including that portion of the pavement being used for traffic, on structures, guard rails, guide posts, markers, trees, shrubs, and property of all kinds.

The Contractor shall mask off end of streets and intersections to provide straight lines:

1. Make straight lines along lip of gutters and shoulders. Keep same thickness in these areas. No runoff on these areas will be permitted.
2. Vary edge lines no more than 1/2 inch per 100 feet.
3. Protect curb, gutter, and sidewalk from spatter, mar, or overcoat.

2.12.9 MATERIALS TESTING:

The Contractor is responsible for the quality control of all materials used. Testing performed by the Engineer will assure that materials conform to the specifications and shall not be considered a quality control measure.

Provisions for properly sampling the mixture, ready to install, from distributing equipment or on-site bulk storage units shall be made by the Contractor. Sampling shall be performed by the Contractor and witnessed by the Engineer in accordance with the latest edition of ASTM D-2939, "Standard Test Methods for Emulsified Bitumens Used as Protective Coatings."

The minimum amount of sampling and testing shall be once for every 500 gallons of materials ready to use. Material found in non-compliance will be rejected and shall be removed from the job site. No payment will be made for rejected material. The project shall not resume until the new material is tested and found in compliance. No lost time will be considered as a result of material being found in non-compliance.

2.12.10 MEASUREMENT:

Quantities and materials for this work will be paid for at the contract price per unit of measurement for each of the following pay items as indicated in the proposal.

PMM RTU mixture, ready to install - Gallon

Payment for various bid items shall be compensation in full for furnishing all materials, labor, tools, equipment, and appurtenances necessary to complete the work in a satisfactory manner, as specified.

No additional payment will be made for work related to any item, unless specifically called for in the bid. No payment will be made for materials used to patch unacceptable work.

Only certified tickets of the PMM RTU mixture, ready to install, delivered to a City representative will be accepted for payment. Overweight tickets shall not be accepted and material shall be partially unloaded, at no expense to the contracting agency, to a legal status for re-weighing. A new ticket will be required for the remaining load. No deliveries shall be accepted prior to 7:00 a.m., or after 4:30 p.m. Any deliveries before or after this time frame will not be compensated.

A daily tabulation of materials delivered, used, square yards covered, application rate, etc., shall be compared between the Contractor and the Engineer. Adjustments and agreements are final at the end of each stockpile. Materials placed without approval of the inspector, or materials rejected due to improper placing, improper proportions of materials, or materials found to be defective, will not be compensated.

2.13 TRMSS (TIRE RUBBER MODIFIED SURFACE SEAL):

2.13.1 DESCRIPTION:

The work covered by this specification consists of furnishing all labor, equipment, and materials necessary to perform all operations required for the application of TRMSS tire modified surface seal (TRMSS) to bituminous paved surfaces.

2.13.2 MATERIALS:

The Engineer must approve all material sources prior to their use. Once approved, material sources shall not be changed without the approval of the Engineer. If

requested by the Engineer, the Contractor shall submit material samples at least seven (7) days prior to start of construction. When requested, additional samples shall be furnished during the construction period at no cost to the City. Material sample submittal is a non-pay item.

The material, ready to place, shall be per the manufacturers recommendations.

2.13.3 APPLICATION:

The TRMSS shall be applied by distributing equipment that meets the requirements of Section 2.13.4. Application rates of properly mixed TRMSS shall be per the manufacturer's recommendations.

2.13.4 EQUIPMENT:

2.13.4.1 GENERAL:

When requested by the Engineer, descriptive information on the TRMSS application equipment to be used will be submitted for approval no less than 7 days before the starts.

2.13.4.2 DISTRIBUTING EQUIPMENT:

Application equipment shall meet the requirements of the manufacturer. Per the manufacturer, TRMSS can be applied with computer rate controlled asphalt spreader or standard sealcoat spray distributor trucks. Hand spray wands and squeegees are to be used for small areas and trim.

2.13.5 PREPARATION OF THE SURFACE:

Immediately before applying the TRMSS, the area to be surfaced shall be cleaned of oil, grease, gasoline, dirt, loose material, and other objectionable material. The TRMSS shall be applied the same day the pavement is cleaned. In urban areas, the surface shall be cleaned with a self-propelled pick-up sweeper. In rural areas, power brooms may be used. When necessary, cleaning shall be supplemented by hand brooms. When necessary, cleaning of the existing pavement surface shall be supplemented by hand brooms or other methods, approved by the Engineer, to assure a good bond between the TRMSS and the pavement surface. Power brooms or pick up brooms alone may not be adequate to thoroughly clean the surface. This also includes the removal of grass or weeds, which are growing in the joint between the street and the concrete gutter

The Contractor shall take all steps, procedures, and means to prevent dust pollution due to his construction practices in connection with this work. Dust prevention measures shall be maintained at all times during construction of the project to the satisfaction of the Engineer, in accordance with "Maricopa County Air Pollution Control Regulations".

Prior to the Pre-Construction meeting, the Contractor shall have a dust control plan, approved by the Maricopa County Division of Air Pollution Control. For information and requirements for the dust control plan, the Contractor shall contact:

Maricopa County Environmental Services Department  
Division of Air Pollution Control  
2406 South 24th Street, Suite E-214  
Phoenix, AZ 85034 (602) 506-6727

The Contractor shall remove and dispose of raised pavement markers (if any) prior to the placement of the TRMSS. Removal shall be by chipping, grinding, or any other method

approved by the Engineer. The cost of raised pavement marker removal is incidental to pavement preparation.

Prior to striping removal, the Contractor shall document and detail the existing pavement striping and delineation. The details shall include as a minimum the type, size, color, dimensions, and specific detailed location of the delineation, acceptable to the Engineer, so that contractor or City Forces can replace the delineation, as it existed prior to the removal. The details shall be submitted to the Engineer a minimum three (3) working days prior to covering the striping with TRMSS.

The TRMSS shall not be applied until an inspection of the surface has been made by the Engineer and he has determined that it is suitable.

#### 2.13.6 WEATHER LIMITATIONS:

TRMSS shall not be applied during inclement weather, or weather determined unsuitable by the Engineer. The air and roadbed temperatures in the shade shall be 55 deg F and rising. TRMSS should not be applied if raining or rain is forecasted within 24 hours of application.

#### 2.13.7 PROTECTION OF UNCURED SURFACE:

Adequate methods such as barricades, flagmen, pilot cars, etc. shall be used to protect the treated surface from all types of traffic until the asphalt emulsion will not be picked up by traffic.

The Contractor shall be responsible for the repair of all damage done within 24 hours of initial application.

#### 2.13.8 PROTECTION FOR ADJACENT PROPERTY:

Care shall be taken to prevent the spraying of asphalt emulsion on adjacent pavements, including that portion of the pavement being used for traffic, on structures, guard rails, guide posts, markers, trees, shrubs, and property of all kinds.

The Contractor shall mask off end of streets and intersections to provide straight lines:

1. Make straight lines along lip of gutters and shoulders. Keep same thickness in these areas. No runoff on these areas will be permitted.
2. Vary edge lines no more than 1/2 inch per 100 feet.
3. Protect curb, gutter, and sidewalk from spatter, mar, or overcoat.

#### 2.13.9 MATERIALS TESTING:

The Contractor is responsible for the quality control of all materials used. Testing performed by the Engineer will assure that materials conform to the specifications and shall not be considered a quality control measure.

Provisions for properly sampling the mixture, ready to install, from distributing equipment or on-site bulk storage units shall be made by the Contractor. Sampling shall be performed by the Contractor and witnessed by the Engineer in accordance with the latest edition of ASTM D-2939, "Standard Test Methods for Emulsified Bitumens Used as Protective Coatings."

The minimum amount of sampling and testing shall be once for every 500 gallons of materials ready to use. Material found in non-compliance will be rejected and shall be removed from the job site. No payment will be made for rejected material. The project shall

approved by the Engineer. The cost of raised pavement marker removal is incidental to considered as a result of material being found in non-compliance.

#### 2.13.10 MEASUREMENT:

Quantities and materials for this work will be paid for at the contract price per unit of measurement for each of the following pay items as indicated in the proposal.

TRMSS mixture, ready to install - Ton

Payment for various bid items shall be compensation in full for furnishing all materials, labor, tools, equipment, and appurtenances necessary to complete the work in a satisfactory manner, as specified.

No additional payment will be made for work related to any item, unless specifically called for in the bid. No payment will be made for materials used to patch unacceptable work.

Only certified tickets of the TRMSS mixture, ready to install, delivered to a City representative will be accepted for payment. Overweight tickets shall not be accepted and material shall be partially unloaded, at no expense to the contracting agency, to a legal status for re-weighing. A new ticket will be required for the remaining load. No deliveries shall be accepted prior to 7:00 a.m., or after 4:30 p.m. Any deliveries before or after this time frame will not be compensated.

A daily tabulation of materials delivered, used, square yards covered, application rate, etc., shall be compared between the Contractor and the Engineer. Adjustments and agreements are final at the end of each stockpile. Materials placed without approval of the inspector, or materials rejected due to improper placing, improper proportions of materials, or materials found to be defective, will not be compensated.

#### 2.14 PAINTED PAVEMENT MARKINGS:

##### 2.14.1 DESCRIPTION:

The work covered by this specification consists of furnishing all labor, equipment, and materials necessary to perform all operations required for the construction of painted pavement markings

##### 2.14.2 MATERIALS:

The Engineer must approve all material sources prior to their use. Once approved, material sources shall not be changed without the approval of the Engineer. If requested by the Engineer, the Contractor shall submit technical material/manufacturer data for all materials and appurtenances used on the project at least seven (7) days prior to start of construction.

##### 2.14.2.1 STRIPING:

All striping shall conform to the latest edition of the MUTCD and any ADOT supplement.

##### 2.14.2.2 PAINT:

Paint shall be ready mixed, conventional and fast drying waterborne traffic paints. It shall be lead-free, non-toxic, NASSHTO Test Deck, with a minimum retroreflectance of 100 mcfs, and a durability rating of 6 or more after being in place for 9 months. The paint material shall fall within following limits:

- a) Pigment, percent by weight: 60 (plus or minus 2);
- b) Vehicle, percent by weight: 40 (plus or minus 2);
- c) Non-Volatile, percent by weight of paint: 76.0;
- d) Weight per gallon: minimum 13.0 lbs;
- e) Viscosity: 80-95 Kreb Units at 77 degrees F;
- f) Grind (Hegeman Guage) minimum Field Tested no tracking time under ambient conditions: 20-90 seconds;
- g) Dry Through Time, 15 mils wet at 90 percent relative humidity, 72 degrees F, ASTM D1640: 125 minutes maximum; and
- h) VOC (Volatile Organic Content): One lbs/gal maximum (Do not exceed State or Environmental Protection Agency maximum VOC on traffic paint).

Glass Beads shall be AASHTO M247, Type 1, coated to enhance embedment and adherence with paint.

#### 2.14.3 APPLICATION:

Striping shall be applied by a continuous longitudinal line application machine. The application machine shall be as specified in Section 2.14.4.

Paint will be agitated for 1-15 minutes prior to application to ensure even distribution of paint pigment. The paint shall be dispensed at a maximum ambient temperature of 150 degrees F to wet film thickness of 15 mils except at edge markings where it will be dispensed to a wet film thickness of 12 mils. Glass beads shall be applied at a rate of 6 pounds per gallon of paint. Contractor will prevent the paint for splattering and over spray when applying markings.

Markings shall be applied to indicated dimensions at indicated locations.

Unless material is track free at the end of the paint application convoy, the Contractor shall use traffic cones to protect markings from traffic until track free. The Contractor shall eradicate affected marking and resultant tracking and apply new markings when vehicle crosses a marking and tracks it or when splattering or over spray occurs.

Contractor shall collect and legally dispose of all residues from painting operations.

##### 2.14.3.1 APPLICATION TOLERANCES:

The Contractor shall observe the following tolerances:

- a) Maximum Variation from Wet Film Thickness: 1 mil.
- b) Maximum Variation from Wet Paint Line Width: Plus or minus 1/8 inch.
- c) Maintain cycle length for skip lines at tolerance of plus or minus 6 inches per 40 feet and line length of plus or minus 3 inches per 10 feet.
- d) Maximum Variation from Specified Application Temperature: Plus or minus 5 degrees F.

Pavement markings that do not conform to these tolerances shall be removed and reapplied. No payment shall be made for pavement markings that do not meet tolerances. No lost time will be considered as a result of pavement markings not meeting tolerances.

#### 2.14.4 EQUIPMENT:

##### 2.14.4.1 GENERAL:

When requested by the Engineer, descriptive information on the continuous longitudinal line application equipment to be used will be submitted for approval no less than 7 days before the starts.

##### 2.14.4.2 STRIPING EQUIPMENT:

Continuous Longitudinal Line Application Machine must have the following capabilities.

- a) Dual nozzle paint gun to simultaneously apply parallel lines of indicated width in solid or broken patterns or various combinations of those patterns.
- b) Pressurized bead-gun to automatically dispense glass beads onto painted surface, at required application rate.
- c) Measuring device to automatically and continuously measure length of each line placed, to nearest foot.
- d) Device to heat paint to manufacturers recommendations for fast dry applications.

##### Machine Calibration:

- a) Paint Line Measuring Device: Calibrate automatic line length gauges to maintain tolerance of plus or minus 25 feet per mile.
- b) Cycle Length/Paint Line Length Timer: Calibrate cycle length to maintain tolerance of plus or minus 6 inches per 40feet; calibrate paint line length to maintain tolerance to plus or minus 3 inches per 10 feet.
- c) Paint Guns: Calibrate to simultaneously apply paint binder at uniform rates as specified with an allowable tolerance of plus or minus 1 mil.
- d) Bead Guns: Calibrate to dispense glass beads simultaneously at specified rate. Check guns by dispensing glass beads into gallon container for predetermined fixed period of time. Verify weight of glass beads.

##### 2.14.4.3 OTHER EQUIPMENT:

For application of crosswalks, intersections, stop lines, legends and other miscellaneous items by walk behind strippers, hand spray or stencil trucks, apply with equipment meeting requirements of this section. Do not use hand brushes or rollers. Optionally apply glass beads by hand.

##### 2.14.5 PREPARATION OF THE SURFACE:

Prior to painting the area shall be clean and dry. The surface shall be cleaned of dirt, loose material, oil, grease, gasoline, and other objectionable material. In urban areas, the surface shall be cleaned with a self-propelled pick-up sweeper. In rural areas, power brooms may be used. When necessary, cleaning shall be supplemented by hand brooms. When necessary, cleaning of the existing pavement surface shall be supplemented by hand brooms or other methods, approved by the Engineer. Power brooms or pick up brooms alone may not be adequate to thoroughly clean the surface.

The Contractor shall remove existing markings in an acceptable manner. Existing pavement markings shall not be removed by painting over with blank paint. Existing markings shall be removed only by water blasting. The Contractor shall satisfactorily repair any pavement or surface damage caused by the removal of the markings.

The Contractor shall take all steps, procedures, and means to prevent dust pollution due to his construction practices in connection with this work. Dust prevention measures shall be maintained at all times during construction of the project to the satisfaction of the Engineer, in accordance with "Maricopa County Air Pollution Control Regulations".

Prior to the Pre-Construction meeting, the Contractor shall have a dust control plan, approved by the Maricopa County Division of Air Pollution Control. For information and requirements for the dust control plan, the Contractor shall contact:

Maricopa County Environmental Services Department  
Division of Air Pollution Control  
2406 South 24th Street, Suite E-214  
Phoenix, AZ 85034 (602) 506-6727

Prior to applying the traffic lines the contractor shall spot locate the final pavement markings as specified and as indicated on the drawings by applying pavement spots 25 feet on center. The Contractor shall notify the Engineer after placing the pavement spots a minimum of 3 days prior to applying traffic lines.

2.14.6 WEATHER LIMITATIONS:

Do not apply materials when surface and ambient temperatures are outside temperature ranges required by paint product manufacturer.

Do not apply exterior coatings during rain or snow when relative humidity is outside humidity ranges, or moisture content of surfaces exceed those required by paint product manufacturer.

Do not apply paint when temperatures are expected to fall below 50 degrees F for 24 hours after application.

2.14.7 PROTECTION OF FINISHED WORK:

The Contractor shall protect painted pavement markings from vehicular and pedestrian traffic until paint is dry and track free. Follow manufacturer's recommendations or use minimum of 30 minutes. Consider barrier cones as satisfactory protection for materials requiring more than 2 minutes dry time

2.14.8 QUALITY CONTROL:

The Contractor is responsible for the quality control of all materials used. Testing performed by the Engineer will assure that materials conform to the specifications and shall not be considered a quality control measure.

Traffic Paints shall be tested and analyzed traffic paints in accordance with [ASTM D34] [ASTM D126] [ASTM D562] [ASTM D711] [ASTM D713] [ASTM D969] [ASTM D1301] [ASTM D1394] [ASTM D1475] [ASTM D2202] [ASTM D2371] [ASTM D2621] [ASTM D2743].

Paints and glass beads shall be made available for inspection at manufacturer's factory prior to packaging for shipment. The contractor shall notify the Engineer at least seven days prior to inspection.

The Contractor shall allow witnessing of factory inspections and test at manufacturer's test facility. Contractor shall notify the Engineer at least seven days before inspections and tests are scheduled.

#### 2.14.9 FIELD QUALITY CONTROL:

After the installation of the pavement marking, the Engineer will inspect for incorrect location, insufficient thickness, line width, coverage, retention, uncured or discolored material, and insufficient bonding.

The Contractor shall repair all lines and markings, which after application and curing do not meet following criteria:

- a) Incorrect Location: Remove and replace incorrectly placed patterns.
- b) Insufficient Thickness, Line Width, Paint Coverage, Glass Bead Coverage or Retention: Prepare defective material by acceptably grinding or blast cleaning to remove substantial amount of beads and to roughen marking surface. Remove loose particles and debris. Apply new markings on cleaned surface in accordance with this Section.
- c) Uncured or Discolored Material, Insufficient Bonding: Remove defective markings in accordance with this Section and clean pavement surface one foot beyond affected area. Apply new markings on cleaned surface in accordance with this Section.

The contractor shall replace defective pavement markings as specified throughout the 2 year warranted period. The Contractor shall replace markings damaged by anti-skid materials, studded tires, tire chains, chemical deicers, snow plowing or other loss of marking material regardless of cause. Contractor shall be released from warranty requirements for damaged work when markings are damaged by pavement failure or by the City's painting, crack sealing, or pavement repair operations,.

A three member team will evaluate warranty provisions. The team will consist of one member from the City, one member from the Contractor, and third person who is mutually acceptable to the City and the Contractor. Any costs for a third person will be equally shared between the City and the Contractor. At least once each year, beginning with year after acceptance, the team shall:

- a) Observe the City taking readings by retroreflectometer, or review the City's records of such evaluation. The number of readings will be as large as necessary to ensure that minimum criteria are satisfied. Readings will be during period from March 15 through October, when pavement is clean and dry.
- b) Determine color fade, discoloration or pigment loss based on visual color comparison between original sample plates with glass beads and in-place pavement markings.
- c) Determine magnitude of material loss.

The Engineer shall prepare list of defective areas and areas requiring additional inspection and evaluation to decide where material may need replaced. The Contractor shall provide traffic control as necessary if markings require more detailed evaluation.

The Contractor shall replace failed or defective markings in entire section of defective markings within 30 days after notification when any of the following exists during warranty period:

- a) Average retroreflectivity within any 528 foot section is less than 1225 mcd/m<sup>2</sup>/lx for white pavement markings and 100 mcd/m<sup>2</sup>/lx for yellow pavement markings.
- b) Marking is discolored or exhibits pigment loss, and is determined to be unacceptable by three member team based on visual comparison with beaded color plates.
- c) More than 15 percent of area of continuous line, or more than 15 percent of combined area of skip lines, within any 528 foot section of roadway is missing.

The Contractor shall replace pavement marking material under warranty using original or better type material. The warranty shall continue to the end of original 2 year period even when replacement materials have been installed as specified.

When eradication of existing paint lines is necessary, the Contractor shall eradicate it by shot blast or water blast method. The pavement shall not have a gouge or groove of more than 1/16 inch during removal. The area of removal shall be limited to area of marking plus 1 inch on all sides. Damage shall be prevented to transverse and longitudinal joint sealers.

The Contractor shall maintain a daily log showing work completed, results of the above inspections or tests, pavement and air temperatures, relative humidity, presence of any moisture on pavement, and any material or equipment problems. The log entries shall be legible, in ink, sign and submitted by the end of each work day. Environmental data shall be entered into the log prior to starting work each day and at two additional times during day.

#### 2.14.10 PERFORMANCE REQUIREMENTS:

The Contractor is responsible for the quality control of all materials used. Testing performed by the Engineer will assure that materials conform to the specifications and shall not be considered a quality control measure.

Paint Adhesion: Adhere to road surface forming smooth continuous film one minute after application.

Paint Drying: Tack free by touch so as not to require coning or other traffic control devices to prevent transfer by vehicle tires within two minutes after application.

#### 2.14.11 MEASUREMENT:

Quantities and materials for this work will be paid for at the contract price per unit of measurement for each of the following pay items as indicated in the proposal.

Painted pavement longitudinal and transverse markings, such as edge lines, lane lines, gore lines, cross-walks and stop bars, will be measured by the linear foot along the center line of the pavement marking line and will be based on a four-inch-wide line. Measurement for striping with a plan width greater or less than the basic four inches as shown on the plans or directed by the Engineer will be made by the same method and then adjusted by the following factor:

$$\frac{\text{Plan Width of Striping (inches)} \times \text{Linear Feet}}{4 \text{ (inches)}}$$

No measurement will be made of the number of linear feet of gaps in dashed lines.

Double marking lines, consisting of two four- inch-wide stripes, will be measured as two individual marking lines. Crosswalk lines, stop bars, stop lines, gore lines, cross hatch lines, chevron lines and rail road marking transverse lines will be measured for center line length and adjusted for widths other than four inches, as defined above.

Painted pavement marking symbols, such as diamonds; bike lane symbol, handicap symbol, or single, double, or triple arrows, will be measured by each unit applied. Each pavement symbol, as shown on the plans, will be considered a unit.

Painted pavement marking legends, defined as a complete letter grouping such as "SCHOOL," "XING," "STOP," "RR," or "ONLY." , will be measured by each unit applied. Each pavement legend, as shown on the plans, will be considered a unit.

No separate measurement or payment will be made for cleaning and preparing the pavement surface, including abrasive sweeping, high-pressure air spray, water blasting of existing markings, and for disposal of excess materials, cleaning fluids, and empty material containers, the cost being considered as included in contract items.

Removal of curing compound from new Portland cement concrete pavement and the application of primer-sealer, which is to be applied to both old and new Portland cement concrete pavement prior to application of thermoplastic marking, shall be measured by the linear foot for striping lines regardless of width, or unit each for symbols and legends, and in accordance with the items of work established in the bid schedule.

No separate measurement or payment will be made for cleaning and preparing the pavement surface, including abrasive sweeping, high-pressure air spray, water blasting of existing markings, and for disposal of excess materials, cleaning fluids, and empty material containers, the cost being considered as included in contract items.

No additional payment will be made for work related to any item, unless specifically called for in the bid. No payment will be made for materials used to patch unacceptable work.

## 2.15 THERMOPLASTIC PAVEMENT MARKINGS:

### 2.15.1 DESCRIPTION:

The work covered by this specification consists of furnishing all labor, equipment, and materials necessary to perform all operations required for the construction of thermoplastic pavement markings

### 2.15.2 MATERIALS:

The Engineer must approve all material sources prior to their use. Once approved, material sources shall not be changed without the approval of the Engineer. If requested by the Engineer, the Contractor shall submit technical material/manufacturer data for all materials and appurtenances used on the project at least seven (7) days prior to start of construction.

All permanent longitudinal pavement striping (centerlines, lane lines, bay lines) shall be 60 mil sprayed thermoplastic. Thermoplastic material shall be applied in accordance with section 704 of ADOT's standard Specifications for Road and Bridge Construction.

Reflective beads shall be applied in accordance with section 704 of ADOT's Standard Specifications for Road and Bridge Construction on all striping.

All stop bars, crosswalks, (lines and rails), holding bars, ladder lines, and channelization lines shall be 90 mil extruded thermoplastic. Reflective beads shall be applied as pursuant to ADOT's Standard Specifications for Road and Bridge Construction, Section 704

All letters, arrows and symbols and legends shall be in conformance with the "Standard Alphabets for Highway Signs and Pavement Markings" adopted by the Federal Highway Administration and shall be 3M Stamark L270ES Pavement Marking Tape.

All striping shall conform to the latest edition of the MUTCD and any ADOT supplement.

2.15.3 APPLICATION:

Application shall be in accordance with section 704 of ADOT's Standard Specifications for Road and Bridge Construction.

2.15.4 PREPARATION OF THE SURFACE:

Preparation shall be in accordance with section 704 of ADOT's Standard Specifications for Road and Bridge Construction. Prior to application the area shall be clean and dry. The surface shall be cleaned of dirt, loose material, oil, grease, gasoline, and other objectionable material. In urban areas, the surface shall be cleaned with a self-propelled pick-up sweeper. In rural areas, power brooms may be used. When necessary, cleaning shall be supplemented by hand brooms. When necessary, cleaning of the existing pavement surface shall be supplemented by hand brooms or other methods, approved by the Engineer. Power brooms or pick up brooms alone may not be adequate to thoroughly clean the surface.

The Contractor shall remove existing markings in an acceptable manner. Existing pavement markings shall not be removed by painting over with blank paint. Existing markings shall be removed only by water blasting. The Contractor shall satisfactorily repair any pavement or surface damage caused by the removal of the markings.

The Contractor shall take all steps, procedures, and means to prevent dust pollution due to his construction practices in connection with this work. Dust prevention measures shall be maintained at all times during construction of the project to the satisfaction of the Engineer, in accordance with "Maricopa County Air Pollution Control Regulations".

Prior to the Pre-Construction meeting, the Contractor shall have a dust control plan, approved by the Maricopa County Division of Air Pollution Control. For information and requirements for the dust control plan, the Contractor shall contact:

Maricopa County Environmental Services Department  
Division of Air Pollution Control  
2406 South 24th Street, Suite E-214  
Phoenix, AZ 85034 (602) 506-6727

Prior to applying the traffic lines the contractor shall spot locate the final pavement markings as specified and as indicated on the drawings by applying pavement spots 25 feet on center. The Contractor shall notify the Engineer after placing the pavement spots a minimum of 3 days prior to applying traffic lines.

2.15.5 QUALITY CONTROL:

The Contractor is responsible for the quality control of all materials used. Testing performed by the Engineer will assure that materials conform to the specifications and

shall not be considered a quality control measure. Quality Control shall be in accordance with section 704 of ADOT's Standard Specifications for Road and Bridge Construction.

2.15.6 MEASUREMENT:

Quantities and materials for this work will be paid for at the contract price per unit of measurement for each of the following pay items as indicated in the proposal.

Thermoplastic pavement longitudinal and transverse markings, such as edge lines, lane lines, gore lines, cross-walks and stop bars, will be measured by the linear foot along the center line of the pavement marking line and will be based on a four-inch-wide line. Measurement for striping with a plan width greater or less than the basic four inches as shown on the plans or directed by the Engineer will be made by the same method and then adjusted by the following factor:

$$\frac{\text{Plan Width of Striping (inches) x Linear Feet}}{4 \text{ (inches)}}$$

No measurement will be made of the number of linear feet of gaps in dashed lines.

Double marking lines, consisting of two four- inch-wide stripes, will be measured as two individual marking lines. Crosswalk lines, stop bars, stop lines, gore lines, cross hatch lines, chevron lines and rail road marking transverse lines will be measured for center line length and adjusted for widths other than four inches, as defined above.

Thermoplastic pavement marking symbols, such as diamonds; bike lane symbol, handicap symbol, or single, double, or triple arrows, will be measured by each unit applied. Each pavement symbol, as shown on the plans, will be considered a unit.

Thermoplastic pavement marking legends, defined as a complete letter grouping such as "SCHOOL," "XING," "STOP," "RR," or "ONLY." , will be measured by each unit applied. Each pavement legend, as shown on the plans, will be considered a unit.

No separate measurement or payment will be made for cleaning and preparing the pavement surface, including abrasive sweeping, high-pressure air spray, water blasting of existing markings, and for disposal of excess materials, cleaning fluids, and empty material containers, the cost being considered as included in contract items.

Removal of curing compound from new Port land cement concrete pavement and the application of primer-sealer, which is to be applied to both old and new Port land cement concrete pavement prior to application of thermoplastic marking, shall be measured by the linear foot for striping lines regardless of width, or unit each for symbols and legends, and in accordance with the items of work established in the bid schedule.

No separate measurement or payment will be made for cleaning and preparing the pavement surface, including abrasive sweeping, high-pressure air spray, water blasting of existing markings, and for disposal of excess materials, cleaning fluids, and empty material containers, the cost being considered as included in contract items.

No additional payment will be made for work related to any item, unless specifically called for in the bid. No payment will be made for materials used to patch unacceptable work.

2.16 REFLECTIVE PAVEMENT MARKERS:

2.16.1 DESCRIPTION:

The work covered by this specification consists of furnishing all labor, equipment, and materials necessary to perform all operations required for the installation of reflective pavement markers.

2.16.2 MATERIALS:

The Engineer must approve all material sources prior to their use. Once approved, material sources shall not be changed without the approval of the Engineer. If requested by the Engineer, the Contractor shall submit technical material/manufacture data for all materials and appurtenances used on the project at least seven (7) days prior to start of construction.

Reflective pavement markers shall be Type D (yellow, two-way) and Type G (clear, one-way). They shall meet the requirements of section 706 of ADOT's Standard Specifications for Road and Bridge Construction.

2.16.3 INSTALLATION:

Installation shall be in accordance with section 706 of ADOT's Standard Specifications for Road and Bridge Construction.

2.16.4 PREPARATION OF THE SURFACE:

Preparation shall be in accordance with section 706 of ADOT's Standard Specifications for Road and Bridge Construction. Prior to application the area shall be clean and dry. The surface shall be cleaned of dirt, loose material, oil, grease, gasoline, and other objectionable material. In urban areas, the surface shall be cleaned with a self-propelled pick-up sweeper. In rural areas, power brooms may be used. When necessary, cleaning shall be supplemented by hand brooms. When necessary, cleaning of the existing pavement surface shall be supplemented by hand brooms or other methods, approved by the Engineer. Power brooms or pick up brooms alone may not be adequate to thoroughly clean the surface.

The Contractor shall remove existing markings in an acceptable manner. Existing pavement markings shall not be removed by painting over with blank paint. Existing markings shall be removed only by water blasting. The Contractor shall satisfactorily repair any pavement or surface damage caused by the removal of the markings.

The Contractor shall take all steps, procedures, and means to prevent dust pollution due to his construction practices in connection with this work. Dust prevention measures shall be maintained at all times during construction of the project to the satisfaction of the Engineer, in accordance with "Maricopa County Air Pollution Control Regulations".

Prior to the Pre-Construction meeting, the Contractor shall have a dust control plan, approved by the Maricopa County Division of Air Pollution Control. For information and requirements for the dust control plan, the Contractor shall contact:

Maricopa County Environmental Services Department  
Division of Air Pollution Control  
2406 South 24th Street, Suite E-214  
Phoenix, AZ 85034 (602) 506-6727

The Contractor shall remove and dispose of raised pavement markers (if any) prior to the placement of the slurry seal. Removal shall be by chipping, grinding, or any other method approved by the Engineer. The cost of raised pavement marker removal is incidental to pavement preparation.

2.16.5 LOCATION FOR PLACEMENT:

The Contractor shall follow all requirements for location, spacing, and number of raised pavement markers as found in the latest edition of the MCDOT Pavement Parking Manual.

2.16.6 QUALITY CONTROL:

The Contractor is responsible for the quality control of all materials used. Testing performed by the Engineer will assure that materials conform to the specifications and shall not be considered a quality control measure. Quality Control shall be in accordance with section 706 of ADOT's Standard Specifications for Road and Bridge Construction.

2.16.7 MEASUREMENT:

Quantities and materials for this work will be paid for at the contract price per unit of measurement for each of the following pay items as indicated in the proposal.

Pavement markers will be measured as a unit for each marker furnished and placed.

2.17 TRAFFIC CONTROL:

2.17.1 DESCRIPTION:

The work covered by this specification consists of furnishing all labor, equipment, and materials necessary to provide traffic control. All traffic control devices and their application shall conform to the more stringent of the Manual on Uniform Traffic Control Devices (MUTCD - United States Department of Transportation, Federal Highway Administration) as modified by the Arizona Department of Transportation's Supplement, the special provisions, and latest edition of the City of Phoenix "Traffic Barricade Manual".

All traffic control shall be in accordance with MAG Specs Section 401 Traffic Control and attached City of Buckeye Traffic Control Plan Guidelines.

2.17.2 MEASUREMENT:

Measurement for Traffic Control shall be made on a Lump Sum basis. This lump sum measurement shall include all materials, equipment and labor necessary to facilitate traffic control per the contract documents. Traffic Control includes but is not limited to the application and removal of temporary pavement markings including related modification of existing pavement markings, pilot cars, flagmen, barricades, sign panels, sign stands, warning lights, and related temporary pavements.

No direct measurement of individual traffic control elements or devices will be made. All traffic control devices, unless otherwise noted, shall be considered as included in the lump sum measurement for the Traffic Control pay item. No direct measurement for temporary pavements will be made. All sawcutting, grading, aggregate base course materials, asphaltic concrete pavement, labor, and equipment shall be considered as included in the lump sum measurement for the Traffic Control pay item.

No direct measurement for removal of temporary pavements will be made. All sawcutting, and removal of aggregate base course materials and asphaltic concrete pavement shall be considered as included in the lump sum measurement for the Traffic Control pay item.

**SOLICITATION AMENDMENT  
RFQ NO. 2024193  
CITY OF BUCKEYE**

**AMENDMENT NO. 1**

**NOTE:** Attach to the Request for Qualifications (RFQ). However, if the Statement of Qualifications (SOQ) has already been submitted, complete this Amendment and return for attachment to your SOQ no later than 3:00 PM, June 17, 2024.

City of Buckeye  
Attn: Travis Stewart, Contracts Administrator  
Finance Department  
tstewart@buckeyeaz.gov

**SOLICITATION: RFQ NO. 2024193 REQUEST FOR  
QUALIFICATIONS JOB ORDER CONTRACTING (JOC) GENERAL**  
Last Day for Questions: **June 10, 2024, no later than 3:00 PM local time**  
SOQ Due Date and Time: **June 17, 2024, no later than 3:00 PM local time**

**NOTICE TO CONTRACTORS:**

This Amendment forms a part of the Contract and clarifies, corrects, or modifies the original Request for Qualifications documents prepared by the City of Buckeye.

**The balance of the specifications and instructions remain the same. Offeror must acknowledge receipt and acceptance of this Amendment by returning the attached Solicitation Amendment Acknowledgement Page with the SOQ.**

**Questions from Contractors:**

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**Q1.** Section 4 Submittal Requirements specifies that there is a one (1) page limit for the cover letter and two (2) page limit for the financial information. Can additional pages be submitted for financial information if needed?

**A1.** The cover letter will be limited to one (1) page. Financial information can be provided as an appendix to the submittal without any page limitations.

**Q2.** Do submittals have to be in a searchable "PDF" file format? There is a potential issue with the Past Performance Questionnaire that once signed prevents the submittal from being a searchable "PDF"

**A2.** It is preferred that the "PDF" file be searchable, but due to the acknowledged potential issue with the questionnaires contractors will not be penalized if a submittal isn't searchable.

**The Past Performance Questionnaires can also be submitted as a separate file. The solicitation has been setup to allow for submission of multiple files.**

**Q3.** Can you please clarify what you are looking for in Tab A, Item No. 2 Multiple Award JOC Contracts with Public Entities. (City, State, School District, County)?

**A3.** This is to show any experience with Multiple Award JOC Contracts, current or previous, that a contractor may have with public entities of any kind. The contracts would not necessarily need to be of the same type of work as the category the contractor is providing a submission for. It is show contractor experience performing work under similar types of contract.

**Q4.** Can you please clarify what you are looking for in Tab C, Item (b) Project Assignment (i.e. current project assignment, previous project assignment, or other)?

**A4.** It would be projects the person worked on, current or previous, where the type of work performed is similar to the JOC category in question or where the person was in a similar role they would be under this JOC.

**Q5.** Will the City of Buckeye share forecast spending by each of the defined categories for the proposed period of the JOCs?

**A5.** The City of Buckeye has not fully defined the spending forecast for each category at this time. The potential usage has been set at \$6 million a year per contractor per category with a limit of \$2 million for project.

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**PLEASE ACKNOWLEDGE YOUR FIRM S RECEIPT OF THIS AMENDMENT BY SIGNING THE ATTACHED SOLICITATION AMENDMENT ACKNOWLEDGEMENT.**

**SOLICITATION AMENDMENT ACKNOWLEDGEMENT**

**SOLICITATION: RFQ NO. 2024193  
JOB ORDER CONTRACTING (JOC) GENERAL  
AMENDMENT NUMBER 1  
AMENDMENT ISSUE DATE: June 3, 2024**

Offeror certifies that Offeror has read, understands, and will fully and faithfully comply with this Request for Qualifications, its attachments and any referenced documents. Offeror also certifies that this SOQ was independently developed without consultation with any of the other Submitters or potential Submitters.

Name of Company: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

Print Name and Title: \_\_\_\_\_

Date: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip Code: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

**SOLICITATION AMENDMENT  
RFQ NO. 2024193  
CITY OF BUCKEYE**

**AMENDMENT NO. 2**

**NOTE:** Attach to the Request for Qualifications (RFQ). However, if the Statement of Qualifications (SOQ) has already been submitted, complete this Amendment and return for attachment to your SOQ no later than 3:00 PM, June 17, 2024.

City of Buckeye  
Attn: Travis Stewart, Contracts Administrator  
Finance Department  
tstewart@buckeyeaz.gov

**SOLICITATION: RFQ NO. 2024193 REQUEST FOR  
QUALIFICATIONS JOB ORDER CONTRACTING (JOC) GENERAL**

Last Day for Questions: **June 10, 2024, no later than 3:00 PM local time**

SOQ Due Date and Time: **June 17, 2024, no later than 3:00 PM local time**

**NOTICE TO CONTRACTORS:**

This Amendment forms a part of the Contract and clarifies, corrects, or modifies the original Request for Qualifications documents prepared by the City of Buckeye.

**The balance of the specifications and instructions remain the same. Offeror must acknowledge receipt and acceptance of this Amendment by returning the attached Solicitation Amendment A cknowledgement Page with the SOQ.**

**Questions from Contractors:**

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**Q1.** In Tab A Project Experience, it states that all projects must have been completed within the last five (5) years. Does this exclude projects that are currently in progress?

**A1.** Tab A is meant to reflect projects that have been completed. This gives the City a better idea of a Contractor s experience through the entirety of a project. Projects that are currently in progress can be listed under the current backlog/project list.

**Q2.** Past Performance Questionnaire, it states that the project owner must fill out the form. Are we allowed to list City of Buckeye projects and project owners?

**A2.** Yes, projects completed for the City of Buckeye reflect experience working with City personnel and at locations within the City.

**Q3.** The proposed method of file naming the PDF results in an inability to save the file. Could we shorten the proposed file name and remove symbols that prevent saving such as / and & ?

**A3.** Yes, the original intention was for the file name to include the RFQ number and/or name and contractor name. File names can be shortened. The City is only requesting that the file name include the RFQ number and contract name, which can be abbreviated. Examples: RFQ 2024193 ABC Const, RFQ 2024194 ABC Inc, 2024193 ABC and 2024194 ABC Inc.

**Q4.** Do you want this (Tab A: Item 2) added as its own page after my projects appear since it is a list?

**A4.** Item 2 is intended to be examples of the types of projects that can be included in Tab A. If a contractor has projects that fit this category, then this shows experience with similar types of contracts. This should be added as another project in this section if the contractor chooses to include it as a project.

**Q5.** Do you just need the rate for the Experience Modification Rate (EMR), or do you require a letter from our Insurance Carrier?

**A5.** The City is only requesting the rate at this time.

**Q6.** For showing the evidence of the appropriate Arizona State contractor license, can this be put on the Financial information page?

**A6.** Yes, this information can be included on the cover letter or financial information page.

**Q7.** Additional clarification on requested Financial Information:

1. Financial Capacity/Bonding/Insurance
2. Total Bonding Capacity Single Limit and Aggregate Limit
3. Current Backlog/Project List
4. Insurance Provider Rating

**A7.** Items 1-3 have been requested to be documented/verified by your surety or insurance carrier. This can be done via a one (1) page letter from your surety or insurance carrier. Item 1 Financial Capacity/Bonding/Insurance: this item is more of a general status of your company with your surety or insurance carrier. Is the company in good standing? Are there any outstanding claims that may affect future work? Item 2 Total Bonding Capacity: this item is to provide a view of your company s current limits, single and aggregate. If there is no aggregate limit then the limit can be reflected as N/A or no limit. Item 3 Current Backlog/Project List: this information can be included as an attachment to the above information. Item 4 Insurance Provider Rating: A rating from one of the websites (e.g. A.M. Best, Moody s, S&P, etc.) is sufficient. There is no requirement to obtain anything officially from the insurance provider specifying the rating.

**Q8.** What is the maximum total page count for the SOQ?

**A8.** There isn't a maximum page count. There are sections that have page limitations. There are also sections where the page limit is dependent on the information provided (Tab A and B are dependent on the number of projects presented by a contractor). The City has also removed the page limitation on the Financial Information section.

**Q9.** Are contractors required to provide a Certificate of Insurance with their submission?

**A9.** No, the City will be requesting a Certificate of Insurance to those contractors awarded under each JOC category.

**\*REMINDER:** All questions received to date should have been addressed between Amendment No. 1 and 2. If there is a question that hasn't been addressed, please reach out to the Contracts Administrator for this solicitation.

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**PLEASE ACKNOWLEDGE YOUR FIRM'S RECEIPT OF THIS AMENDMENT BY SIGNING THE ATTACHED SOLICITATION AMENDMENT ACKNOWLEDGEMENT.**

**SOLICITATION AMENDMENT ACKNOWLEDGEMENT**

**SOLICITATION: RFQ NO. 2024193  
JOB ORDER CONTRACTING (JOC) GENERAL  
AMENDMENT NUMBER 2  
AMENDMENT ISSUE DATE: June 5, 2024**

Offeror certifies that Offeror has read, understands, and will fully and faithfully comply with this Request for Qualifications, its attachments and any referenced documents. Offeror also certifies that this SOQ was independently developed without consultation with any of the other Submitters or potential Submitters.

Name of Company: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

Print Name and Title: \_\_\_\_\_

Date: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip Code: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

**SOLICITATION AMENDMENT  
RFQ NO. 2024193  
CITY OF BUCKEYE**

**AMENDMENT NO. 3**

**NOTE:** Attach to the Request for Qualifications (RFQ). However, if the Statement of Qualifications (SOQ) has already been submitted, complete this Amendment and return for attachment to your SOQ no later than 3:00 PM, June 17, 2024.

City of Buckeye  
Attn: Travis Stewart, Contracts Administrator  
Finance Department  
tstewart@buckeyeaz.gov

**SOLICITATION: RFQ NO. 2024193 REQUEST FOR  
QUALIFICATIONS JOB ORDER CONTRACTING (JOC) GENERAL**  
Last Day for Questions: **June 10, 2024, no later than 3:00 PM local time**  
SOQ Due Date and Time: **June 17, 2024, no later than 3:00 PM local time**

**NOTICE TO CONTRACTORS:**

This Amendment forms a part of the Contract and clarifies, corrects, or modifies the original Request for Qualifications documents prepared by the City of Buckeye.

**The balance of the specifications and instructions remain the same. Offeror must acknowledge receipt and acceptance of this Amendment by returning the attached Solicitation Amendment Acknowledgement Page with the SOQ.**

**Questions from Contractors:**

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**Q1.** On page 6 of the RFQ for Job Order Contracting (JOC) General, you ask for a Current Backlog/Project List. Is this a list of backlog projects that are bonded? Or all backlog?

**A1.** This is a list of all backlog projects that are bonded.

**Q2.** I would just like confirmation that the org chart can be an 11 x 17 page?

**A2.** Yes, the organizational chart can be submitted in a 11"x17" page

**Q3.** Page 4 Section 2 - the first paragraph states; "separate Contractors in each category who will subsequently compete for individual Job Orders (Delivery Orders) for projects by providing a proposal as each project arises"

Does this mean that ALL projects procured under this contract will be bid amongst ALL contractors holding that category of this contract?

**A3. No, the City has the option to award individual Job Orders through two methods. The City of Buckeye reserves the right to issue individual Job Orders (Delivery Orders) for projects either by requesting proposals from all contractors under a particular JOC category through a Delivery Order Request for Proposal (DORFP) or through direct negotiations with a contractor based off the next most qualified contractor as each project is identified and awarded. The idea is for all contractors, under each category, to have equal opportunity for projects, to the extent reasonably practicable.**

**Q4.** Page 4 Section 2 - the second paragraph states; "The City reserves the right to issue individual Job Orders by negotiating with the contractor that scored as the most qualified under a JOC category.:

Please clarify what "most qualified" refers to.

**A4. All submittals received in a category will be evaluated and scored by an evaluation panel after the solicitation due date. Those contractors that are awarded under a category will be identified as qualified contractors for that category and ranked based off their evaluation scores. The contractor that scored the highest in a category would be "most qualified"**

**Q5.** Page 4 Section 2 - the second paragraph states; "projects will be rotated through all contractors under the JOC category to provide equal opportunity"

How will the City handle this if all projects are being bid amongst all the contractors in that category and then being negotiated with the most qualified?

**A5. The City will select which method will be utilized to award an individual Job Order as each project is identified. Projects bid amongst all contractors in a category provide equal opportunity for all contractors to be awarded those opportunities.**

**Projects negotiated directly with contractors based off qualifications will be awarded on a round-robin method. The initial project will be negotiated with the contractor identified as the most qualified. If negotiations are unsuccessful, the City will go to the next most qualified contractor. The process will continue until negotiations are successful or the contractor list is exhausted. If negotiations are successful with a contractor for a project, then negotiations will be initiated with the next most qualified contractor for the following project utilizing this method. This process will continue as new projects are identified. The idea is for the City to rotate projects through all contractors under a category to provide equal opportunity as practicable.**

**Q6.** If we are interested in certain tasks under a category do we note that in the cover letter or will additional categories be added?

**A6. Contractors should have experience in all tasks in the categories they have interest in. If there are areas a contractor specializes in, that can be identified in the cover letter. Additional categories will not be added to this solicitation. The City may solicit additional JOC categories in the future.**

**Q7.** On page 20 of the RFQ, Category 4: Steel Building/Structure Construction Services, bullet point 1 states renovations on existing buildings/structures. Does this include non-steel structure renovations and repairs? I.e. concrete repairs to mezzanines

**A7. This can include renovations and repairs for non-steel buildings/structures. Depending on the type of work needed to be completed it would fall under Category 2: General Construction Services or Category 4: Steel Building/Structure Construction Services.**

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**PLEASE ACKNOWLEDGE YOUR FIRM S RECEIPT OF THIS AMENDMENT BY SIGNING THE ATTACHED SOLICITATION AMENDMENT ACKNOWLEDGEMENT.**

**SOLICITATION AMENDMENT ACKNOWLEDGEMENT**

**SOLICITATION: RFQ NO. 2024193  
JOB ORDER CONTRACTING (JOC) GENERAL  
AMENDMENT NUMBER 3  
AMENDMENT ISSUE DATE: June 10, 2024**

Offeror certifies that Offeror has read, understands, and will fully and faithfully comply with this Request for Qualifications, its attachments and any referenced documents. Offeror also certifies that this SOQ was independently developed without consultation with any of the other Submitters or potential Submitters.

Name of Company: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

Print Name and Title: \_\_\_\_\_

Date: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip Code: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

**EXHIBIT C  
TO  
JOB ORDER CONTRACT FOR  
STREET MAINTENANCE  
BETWEEN  
CITY OF BUCKEYE  
AND  
M. R. TANNER DEVELOPMENT AND CONSTRUCTION, LLC**

**[INSURANCE AND BONDS]  
SEE FOLLOWING PAGES**

## INSURANCE

1. Concurrently with the execution of the Contract, the Contractor shall furnish the City of Buckeye a certificate of insurance on a standard insurance industry ACORD form. The ACORD form shall be issued by an insurance company authorized to transact business in the State of Arizona.
  
2. Contractor, subcontractors and subconsultants shall procure and maintain until all of their obligations have been discharged, including any warranty periods under this Contract are satisfied, insurance against claims for injury to persons or damage to property, which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees, or subcontractors.
  - A. The insurance requirements herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract.
  
  - B. The City in no way warrants that the minimum limits contained herein are sufficient to protect the Contractor from liabilities that might arise out of the performance of the work under this Contract by the Contractor, his agents, representatives, employees, subcontractors or subconsultants and Contractor is free to purchase such additional insurance as may be determined necessary.
  
  - C. 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.
    - (i) Commercial General Liability-Occurrence Form Policy shall include bodily injury, property damage, and broad form contractual liability and XCU coverage.

General Aggregate	\$2,000,000
Products-Completed Operations Aggregate	\$2,000,000
Personal & Advertising Injury	\$1,000,000
Each Occurrence	\$1,000,000

The policy shall be endorsed to include the following additional insured language: "The City of Buckeye shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Contractor."

- (a) Automobile Liability- Bodily injury and property damage for any owned, hired, and non-owned vehicles used in the performance of this Contract

Combined Single Limit (CSL)	\$1,000,000
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The policy shall be endorsed to include the following additional insured language: “The City of Buckeye shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Contractor including automobiles owned, leased, hired or borrowed by the Contractor.”

(b) Workers Compensation and Employers Liability

<u>Workers Compensation</u>	<u>Statutory</u>
Employers’ Liability	
Each Accident	\$ 1,000,000
Disease-Each Employee	\$ 1,000,000
Disease-Policy Limit	\$ 1,000,000

The policy shall contain a waiver of subrogation against the City of Buckeye.

(c) Professional Liability

Each Claim	\$2,000,000
Annual Aggregate	\$2,000,000

- (i) The required professional liability coverage must cover work done or to be done or on the behalf of the Contractor.
- (ii) In the event that professional liability insurance required by this Contract is written on a “claims made” basis, coverage shall be maintained for two years past completion and acceptance of the Work or services required by this Contract.
- (iii) Should the Contract include the services of design as an integral part of the work, any professional liability shall specifically delete any design-similar exclusions that could compromise coverage’s because of the build or design-build delivery of the Project.

(d) Umbrella/Excess Liability: Umbrella/Excess Liability insurance with a limit of not less than \$5,000,000 per occurrence combined limit Bodily Injury and Property Damage, that “follows form” and applies excess of the Commercial General Liability, Automobile Liability, and Employer’s Liability, as required above.

(e) Additional Insurance Requirements. The policies shall include, or be endorsed to include, the following provisions:

- (i) On insurance policies where the City of Buckeye is named as an additional insured, the City of Buckeye shall be an additional insured 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.

- (ii) The Contractor's insurance coverage shall be primary insurance and non-contributory with respect to all other available sources.
- (iii) Coverage provided by the Contractor shall not be limited to the liability assumed under the indemnification provisions of this Contract.
- (f) Subcontractor's Insurance. Contractor's certificate(s) shall include all subcontractors as additional insureds under its policies or subcontractors shall maintain separate insurance as determined by the Contractor, however, subcontractor's limits of liability shall not be less than \$1,000,000 per occurrence / \$2,000,000 aggregate. All coverage's for subcontractors and sub CONTRACTOR shall be appropriate to cover all of its work performed herein.
- (g) Notice of Cancellation. Each insurance policy required by the insurance provisions of this Contract shall provide the required coverage and shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days prior written notice has been given, by certified mail, return receipt requested to:

William Kauppi  
Chief Financial Officer, Finance  
City of Buckeye  
530 East Monroe Avenue  
Buckeye, Arizona 85326

- (h) Acceptability of Insurers. Insurance is to be placed with insurers duly licensed or approved unlicensed companies in the State of Arizona and with an A. M. Best's rating of no less than A -. The City in no way warrants that the above required minimum insurer rating is sufficient to protect the Contractor from potential insurer insolvency.
- (i) Verification of Coverage:
  - (i) Contractor shall furnish the City Certificates of Insurance (ACORD form or equivalent approved by the City) and with original endorsements effecting coverage as required by this Contract. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. *Any policy endorsements that restrict or limit coverages shall be clearly noted on the certificate of insurance.*
  - (ii) All certificates and endorsements are to be received and approved by the City before work commences. Each insurance policy required by this Contract must be in effect at or prior to the earlier of commencement of work under this Contract or the signing of 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.

- (iii) All certificates of insurance required by this Contract shall be sent directly to the City of Buckeye, Contracts Manager. The contract number and project description shall be included on the Certificates of Insurance. The City reserves the right to require complete, certified copies of all insurance policies required by this Contract, at any time.
  
- (j) Approval. Any modification or variation from the insurance requirements in this Contract shall be approved by the City, whose decision shall be final. Such action will not require a formal contract amendment, but may be made by administrative action.
  
- (k) Approval, disapproval or failure to act by the City regarding any insurance supplied by Contractor or its Subcontractors shall not relieve Contractor of full responsibility or liability for damages, errors, omissions or accidents as set forth in this Contract. Neither the bankruptcy or insolvency of Contractor's insurer nor any denial of liability by Contractor's insurer shall exonerate Contractor from the liability or responsibility of Contractor set forth in this Contract.

## **BONDS**

Bonds and Other Performance Security. Contractor shall provide the following performance bond and labor and material payment bond:

1. Prior to execution of the each Contract for construction services, the Contractor must provide a performance bond and a labor and materials bond, each in an amount equal to the amount of the initial Contract Price designated for construction services set forth in the Contract.
  - a. Each such bond shall be executed by a surety company or companies holding a Certificate of Authority to transact surety business in the State of Arizona, issued by the City of the Arizona Department of Insurance. A copy of the Certificate of Authority shall accompany the bonds. The Certificate shall have been issued or updated within two years prior to the execution of the Contract.
  - b. The bonds shall be made payable and acceptable to the City of Buckeye.
  - c. The bonds shall be written or countersigned by an authorized representative of the surety who is either a resident of the state of Arizona or whose principal office is maintained in this state, as by law required, and the bonds shall have attached thereto a certified copy of Power of Attorney of the signing official. If one Power of Attorney is submitted, it shall be for twice the total Contract amount. If two Powers of Attorney are submitted, each shall be for the total Contract amount. Personal or individual bonds are not acceptable.
2. Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall permit a copy to be made.
3. All bonds submitted for this project shall be provided by a company which has been rated "A- or better" by the A.M. Best Company.