



**PURCHASING ITEM
FOR
COUNCIL AGENDA
Memo No. CP16-211**

1. Agenda Item Number:
15
2. Council Meeting Date:
May 26, 2016

TO: MAYOR & COUNCIL
THROUGH: CITY MANAGER

3. Date Prepared: April 29, 2016
4. Requesting Department: Transportation & Development

5. SUBJECT: Professional Services Contract award to RAK Development, Inc., dba Kreuzer Consulting Group, for Arizona Avenue Improvements, Frye Road to Pecos Road

6. RECOMMENDATION: Staff recommends City Council award a Professional Services Contract to RAK Development, Inc., dba Kreuzer Consulting Group, for Design Consultant Services for Arizona Avenue Improvements, Frye Road to Pecos Road, Contract No. ST1607.201, in an amount not to exceed \$749,947.

7. BACKGROUND/DISCUSSION: The Arizona Avenue Improvements, Frye Road to Pecos Road, is part of a comprehensive plan to improve Downtown Chandler streets and Infrastructure for further development and to improve traffic circulation in the downtown area. The project will include analysis and design for Americans with Disabilities Act (ADA) compliance, pedestrian safety, and maintaining business access; analysis and design of raised landscaped medians vs. flush medians and possible driveway consolidation; landscape; analysis and design for landscape, hardscape, pedestrian lighting, street furniture; traffic signal at Fairview Street; dry utility relocations; and pavement mill and overlay.

The scope of work also includes stakeholder coordination with the various high profile stakeholder groups within the project location; The Kreuzer Consulting Group shall maintain a significant presence and coordination with City staff, City Public Relations Consultant, Stakeholders, and Downtown Redevelopment necessary to complete the design and permitting for the project.

8. EVALUATION PROCESS: On November 17, 2015, staff received Statements of Qualifications from seven (7) firms for Design Consultant Services. On December 10, 2015, the selection committee met to review the statement of qualifications and short listed the firms to be interviewed to further present their qualifications. On January 28, 2016, interviews were held and a consultant was selected in accordance with state law. Staff reviewed the scope of work, billing rates, and total fee for this project, compared them to historical costs, and determined they are reasonable. Project completion is 308 calendar days following the Notice to Proceed.

A Professional Services Contract for Public Outreach Services, Project No. ST1607.101, with Mak Pro Services, LLC, for Arizona Avenue Improvements, Frye Road to Pecos Road, is also scheduled for this Council meeting.

9. FINANCIAL IMPLICATIONS:

Cost: \$749,947

Savings:

Long Term Costs:

Fund Source:

<u>Account No.:</u>	<u>Fund Name:</u>	<u>Program Name:</u>	<u>CIP Funded:</u>	<u>Amount:</u>
401.3310.5219.6ST701	Capital Gen Fund	Arizona Ave (Frye to Pecos)	Yes	\$ 541,200
401.3310.5805.6ST701	Capital Gen Fund	Arizona Ave (Frye to Pecos)	Yes	\$ 22,550
401.3310.6517.6ST303	Capital Gen Fund	Street Const/Variou Imp	Yes	\$ 68,157
605.3820.6718.6WA110	Water Bond	Water System Upgrades w/Street Projects	Yes	\$ 100,000
401.1291.6211.6GG619	General Fund	Downtown Redevelopment Program	Yes	\$ 18,040

10. PROPOSED MOTION: Move City Council award a Professional Services Contract to RAK Development, Inc., dba Kreuzer Consulting Group, for Design Consultant Services for Arizona Avenue Improvements, Frye Road to Pecos Road, Contract No. ST1607.201, in an amount not to exceed \$749,947.

ATTACHMENTS: Contract, Location Map

APPROVALS

11. Requesting Department



Bob Fortier, Capital Projects Manager

13. Department Head



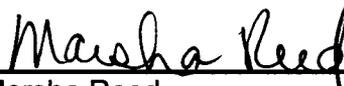
R.J. Zeder, Transportation & Development Director

12. Transportation & Development

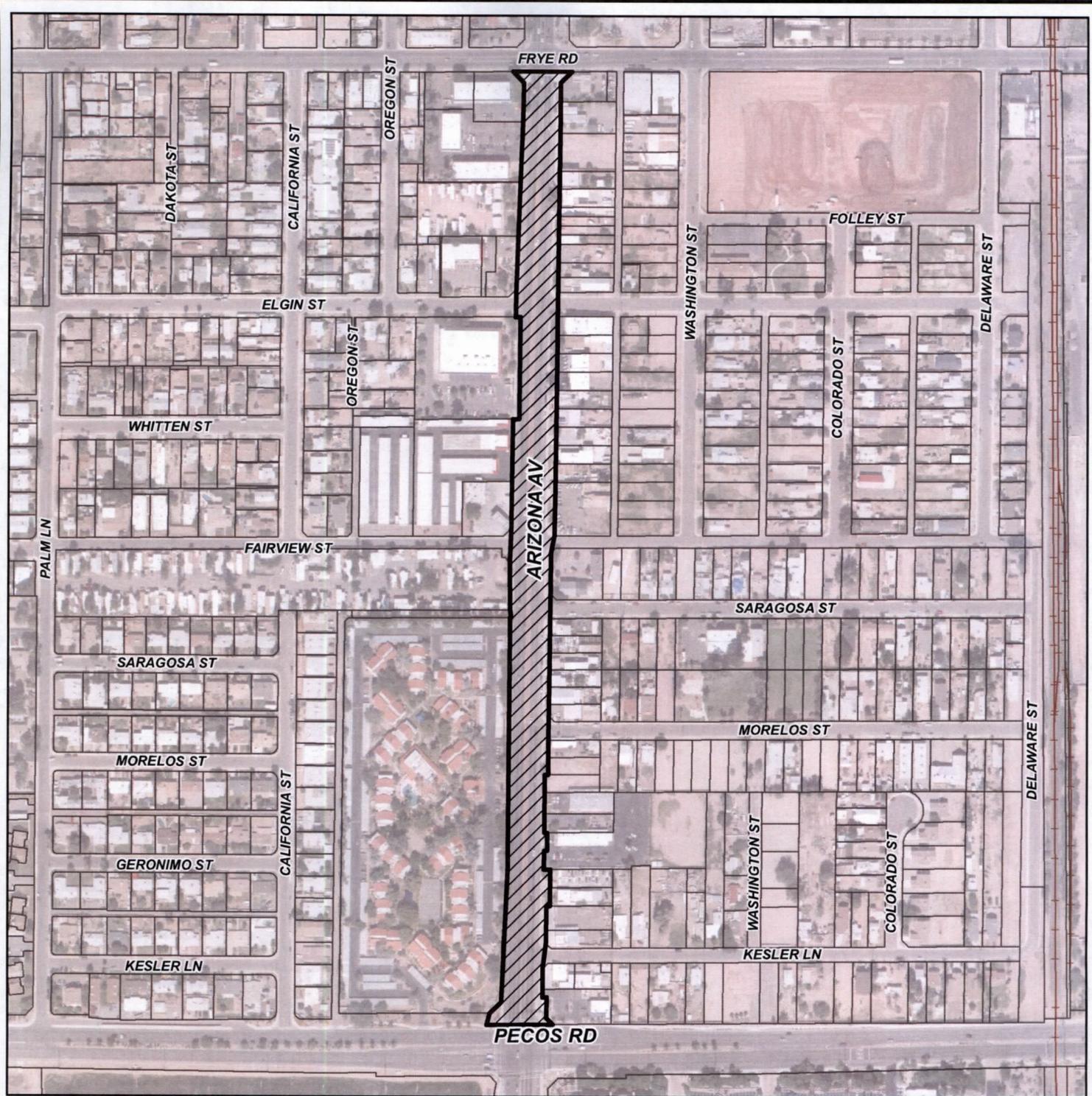


Daniel W. Cook, City Engineer

14. City Manager

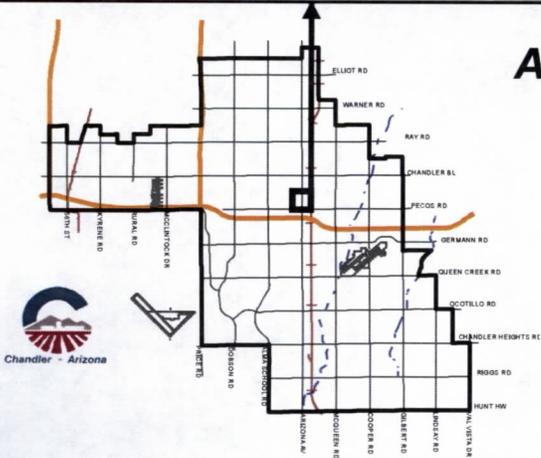


Marsha Reed



**ARIZONA AVE IMPROVEMENTS
FRYE RD TO PECOS RD
PROJECT NO ST1607.201**

MEMO NO. CP16-211



 PROJECT LOCATION

DESIGN CONSULTANT SERVICES CONTRACT

PROJECT TITLE: Arizona Avenue Improvements (Frye Road to Pecos Road)
PROJECT NO: ST1607.201

This Contract is made and entered into by and between the City of Chandler, Arizona, a municipal Corporation, hereinafter called the CITY, and RAK Development, Inc, dba Kreuzer Consulting Group, a California Corporation doing business in Arizona, hereinafter called DESIGN CONSULTANT.

WHEREAS, DESIGN CONSULTANT represents DESIGN CONSULTANT has the expertise and is qualified to perform the services described in this Contract; and

WHEREAS, the Mayor and City Council/City Manager of the City of Chandler are authorized and empowered by the provisions of the City Charter to execute contracts for Professional Services;

NOW THEREFORE, for and in consideration of the mutual covenants and conditions hereinafter contained, it is agreed by and between the CITY and DESIGN CONSULTANT, as follows:

1. **DESCRIPTION OF PROJECT:**

DESIGN CONSULTANT shall provide those services described in Exhibit A attached hereto and made a part hereof by reference.

2. **DEFINITIONS:**

Words used in this Contract which are defined in CITY's General Conditions for Construction Contracts shall have the meaning stated therein. DESIGN CONSULTANT is the Project Designer as defined in said General Conditions (chandleraz.gov).

3. **SCOPE OF WORK:**

DESIGN CONSULTANT shall provide those services described in Exhibit A attached hereto and made a part hereof by reference.

4. **PAYMENT SCHEDULE:**

For services described in paragraph 3 of this Contract, the CITY shall pay DESIGN CONSULTANT a fee based on the fee schedule attached hereto and made a part hereof by reference Exhibit B not to exceed the sum **Seven Hundred Forty Nine Thousand Nine Hundred Forty Seven dollars (\$749,947)**. Payment will be made monthly on the basis of progress reports. An Application and Certification for Payment Sheet must be provided. In addition, the following must also be included: a clear, detailed invoice reflecting items being billed for, a summary sheet showing percentage of work completed to date, amount/percent billed to date and current status of all tasks within a project; any/all backup documentation supporting the above items. Work schedule updates will be included in the monthly progress payment requests.

5. **PERIOD OF SERVICE:**

DESIGN CONSULTANT shall complete all services described in paragraph 3 within **Three Hundred Eight (308)** calendar days after "Notice to Proceed" is issued by the CITY. In the event delays are experienced beyond the control of DESIGN CONSULTANT, the completion date may be extended as mutually agreed upon by CITY and DESIGN CONSULTANT.

6. **OPINIONS OF PROBABLE COSTS (ESTIMATES):**

Any opinions of probable project cost or probable construction cost provided by DESIGN CONSULTANT are made on the basis of information available to DESIGN CONSULTANT and on the basis of DESIGN

AZ Ave. Imp. (Frye Rd to Pecos Rd)

CONSULTANT's experience and qualifications, and represents its judgment as an experienced and qualified professional architect. However, since DESIGN CONSULTANT has no control over the cost of labor, materials, equipment or services furnished by others, or over the contractor(s) methods of determining prices, or over competitive bidding or market conditions, DESIGN CONSULTANT does not guarantee that proposals, bids or actual project or construction cost will not vary from opinions of probable cost DESIGN CONSULTANT prepares.

7. APPROVALS:

All work shall be subject to the approval by the City Engineer.

DESIGN CONSULTANT agrees to exercise the skill and care which would be exercised by comparable professional architect performing similar services at the time and in the locality such services are performed. If the failure to meet these standards results in faulty work, DESIGN CONSULTANT shall undertake at its own expense, the corrective adjustments or modifications.

8. REPORTING:

Written monthly reports, along with updated work schedules, will be made by DESIGN CONSULTANT in the format prescribed by the CITY. These reports will be delivered to the CITY per schedule. When requested by the CITY, DESIGN CONSULTANT will attend Council meetings and provide finished documents including correspondence for Council action, supporting charts, graphs, drawings and colored slides of same.

9. STANDARDS OF PERFORMANCE:

A. This design contract has been awarded to DESIGN CONSULTANT based on their proposal that those personnel and consultants listed in Exhibit A attached hereto will perform the portions of the work listed on said Exhibit A. DESIGN CONSULTANT shall not deviate nor substitute any of these team members without prior written approval by CITY.

B. DESIGN CONSULTANT shall be familiar with CITY's Standard Details and Specifications and other relevant CITY regulations http://www.chandleraz.gov/content/UDM_SDnSpecs.pdf. DESIGN CONSULTANT shall ensure there are no conflicts among the Contract Documents including, but not limited to, the CITY's General and Supplementary Conditions for Construction Contracts, the plans and specifications prepared by DESIGN CONSULTANT, any standard details or specifications incorporated therein by reference, and the Construction Contract.

C. Correction of Mistakes: DESIGN CONSULTANT shall be responsible for the completeness and accuracy of the work prepared or compiled under DESIGN CONSULTANT's obligation for this project and shall correct, at DESIGN CONSULTANT's expense, all errors or omissions therein which may be disclosed. Correction of errors disclosed and determined to exist during any construction of the project on architectural or engineering drawings and specifications shall be accomplished by DESIGN CONSULTANT. The cost of the design necessary to correct those errors attributable to DESIGN CONSULTANT shall be provided by the Design Consultant at no cost to the City, and any damage incurred by CITY as a result of additional construction costs caused by such engineering or architectural errors shall be chargeable to DESIGN CONSULTANT and shall not be considered a cost of the Work, but only to the extent caused by the negligence, recklessness or intentional wrongful conduct of such Design Consultant. The fact that CITY has reviewed or approved DESIGN CONSULTANT's work shall in no way relieve DESIGN CONSULTANT of any of its responsibilities.

10. INDEMNIFICATION:

To the fullest extent permitted by law, but only to the extent caused by the negligence, recklessness or intentional wrong conduct, DESIGN CONSULTANT, its successors, assigns and guarantors, shall defend, indemnify and hold harmless City and any of its elected or appointed officials, officers, directors, commissioners, board members, agents or employees from and against any and all allegations, demands,

claims, proceedings, suits, actions, damages, including, without limitation, property damage, environmental damages, personal injury and wrongful death claims, losses, expenses (including claim adjusting and handling expenses), penalties and fines (including, but not limited to, attorney fees, court costs, and the cost of appellate proceedings), judgments or obligations, which may be imposed upon or incurred by or asserted against the City by reason of this Contract or the services performed or permissions granted under it, or related to, arising from or out of, or resulting from any negligent or intentional actions, acts, errors, mistakes or omissions caused in whole or part by DESIGN CONSULTANT, or any of its subcontractors, or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, relating to the discharge of any duties or the exercise of any rights or privileges arising from or incidental to this Contract, including but not limited to, any injury or damages claimed by any of DESIGN CONSULTANT's and subcontractor's employees. The amount and type of insurance coverage requirements set forth in the Agreement will in no way be construed as limiting the scope of indemnity in this paragraph.

11. INSURANCE:

1. General

A. At the same time as execution of this Contract, DESIGN CONSULTANT shall furnish the City of Chandler a certificate of insurance on a standard insurance industry ACORD form. The ACORD form must be issued by an insurance company authorized to transact business in the State of Arizona possessing a current A.M. Best, Inc. rating of A-7, or better and legally authorized to do business in the State of Arizona with policies and forms satisfactory to CITY. Provided, however, the A.M. Best rating requirement shall not be deemed to apply to required Worker's Compensation coverage.

B. DESIGN CONSULTANT and any of its subcontractors, subconsultants or sublicensees shall procure and maintain, until all of their obligations have been discharged, including any warranty periods under this Contract are satisfied, the insurances set forth below.

C. The insurance requirements set forth below are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract.

D. The City in no way warrants that the minimum insurance limits contained in this Contract are sufficient to protect DESIGN CONSULTANT from liabilities that might arise out of the performance of the Contract services under this Contract by DESIGN CONSULTANT, its agents, representatives, employees, subcontractors, sublicensees or subconsultants and DESIGN CONSULTANT is free to purchase any additional insurance as may be determined necessary.

E. Failure to demand evidence of full compliance with the insurance requirements in this Contract or failure to identify any insurance deficiency will not relieve the DESIGN CONSULTANT from, nor will it be considered a waiver of its obligation to maintain the required insurance at all times during the performance of this Contract.

F. Use of SubContractors: If any work is subcontracted in any way, DESIGN CONSULTANT shall execute a written Contract with Subcontractor containing the same Indemnification Clause and Insurance Requirements as the City requires of DESIGN CONSULTANT in this Contract. DESIGN CONSULTANT is responsible for executing the Contract with the Subcontractor and obtaining Certificates of Insurance and verifying the insurance requirements.

2. Minimum Scope and Limits Of Insurance. DESIGN CONSULTANT shall provide coverage with limits of liability not less than those stated below.

A. Commercial General Liability-Occurrence Form. DESIGN CONSULTANT must maintain "occurrence" form Commercial General Liability insurance with a limit of not less than \$2,000,000 for each occurrence, \$4,000,000 aggregate. Said insurance must also include coverage for products and completed operations, independent contractors, personal injury and advertising injury. If any Excess insurance is utilized

to fulfill the requirements of this paragraph, the Excess insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

B. Automobile Liability-Any Auto or Owned, Hired and Non-Owned Vehicles

Vehicle Liability: DESIGN CONSULTANT must maintain Business/Automobile Liability insurance with a limit of \$1,000,000 each accident on DESIGN CONSULTANT owned, hired, and non-owned vehicles assigned to or used in the performance of DESIGN CONSULTANT's work or services under this Contract. If any Excess or Umbrella insurance is utilized to fulfill the requirements of this paragraph, the Excess or Umbrella insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

C. Workers Compensation and Employers Liability Insurance: DESIGN CONSULTANT must maintain Workers Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of DESIGN CONSULTANT employees engaged in the performance of work or services under this Contract and must also maintain Employers' Liability insurance of not less than \$1,000,000 for each accident and \$1,000,000 disease for each employee.

D. Professional Liability. If the Contract is the subject of any professional services or work performed by DESIGN CONSULTANT, or if DESIGN CONSULTANT engages in any professional services or work adjunct or residual to performing the work under this Contract, DESIGN CONSULTANT must maintain Professional Liability insurance covering errors and omissions arising out of the work or services performed by the DESIGN CONSULTANT, or anyone employed by DESIGN CONSULTANT, or anyone whose acts, mistakes, errors and omissions the DESIGN CONSULTANT is legally liable, with a liability limit of \$1,000,000 each claim and \$2,000,000 all claims. In the event the Professional Liability insurance policy is written on a "claims made" basis, coverage must extend for 3 years past completion and acceptance of the work or services, and DESIGN CONSULTANT, or its selected Design Professional will submit Certificates of Insurance as evidence the required coverage is in effect. The Design Professional must annually submit Certificates of Insurance citing that the applicable coverage is in force and contains the required provisions for a 3 year period.

3. Additional Policy Provisions Required.

A. Self-Insured Retentions Or Deductibles. Any self-insured retentions and deductibles must be declared and approved by the City. If not approved, the City may require that the insurer reduce or eliminate any deductible or self-insured retentions with respect to the City, its officers, officials, agents, employees, and volunteers.

B. City as Additional Insured. The policies are to contain, or be endorsed to contain, the following provisions:

1. The Commercial General Liability and Automobile Liability policies are to contain, or be endorsed to contain, the following provisions: The City, its officers, officials, agents, and employees are additional insureds with respect to liability arising out of activities performed by, or on behalf of, DESIGN CONSULTANT including the City's general supervision of the DESIGN CONSULTANT; Products and Completed operations of DESIGN CONSULTANT; and automobiles owned, leased, hired, or borrowed by DESIGN CONSULTANT.

2. DESIGN CONSULTANT's insurance must contain broad form contractual liability coverage and must not exclude liability arising out of explosion, collapse, or underground property damage hazards ("XCU") coverage.

3. The City, its officers, officials, agents, and employees must be additional insureds to the full limits of liability purchased by DESIGN CONSULTANT even if those limits of liability are in excess of those required by this Contract.

4. DESIGN CONSULTANT's insurance coverage must be primary insurance with respect to the City, its officers, officials, agents, and employees. Any insurance or self-insurance maintained by the City, its

officers, officials, agents, and employees shall be in excess of the coverage provided by DESIGN CONSULTANT and must not contribute to it.

5. DESIGN CONSULTANT's insurance must apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

6. Coverage provided by DESIGN CONSULTANT must not be limited to the liability assumed under the indemnification provisions of this Contract.

7. The policies must contain a severability of interest clause and waiver of subrogation against the City, its officers, officials, agents, and employees, for losses arising from Work performed by DESIGN CONSULTANT for the City.

8. DESIGN CONSULTANT, its successors and or assigns, are required to maintain Commercial General Liability insurance as specified in this Contract for a minimum period of 3 years following completion and acceptance of the Work. DESIGN CONSULTANT must submit a Certificate of Insurance evidencing Commercial General Liability insurance during this 3 year period containing all the Contract insurance requirements, including naming the City of Chandler, its agents, representatives, officers, directors, officials and employees as Additional Insured as required.

9. If a Certificate of Insurance is submitted as verification of coverage, the City will reasonably rely upon the Certificate of Insurance as evidence of coverage but this acceptance and reliance will not waive or alter in any way the insurance requirements or obligations of this Contract. If any of the required policies expire during the life of this Contract, the DESIGN CONSULTANT must forward renewal or replacement Certificates to the City within 10 days after the renewal date containing all the necessary insurance provisions.

12. AMENDMENTS:

Whenever a change in the scope of work contemplated in this Contract is determined to be necessary, the work will be performed in accordance with the Contract provided, however, that BEFORE such work is started, a Contract Amendment shall be executed by the CITY and DESIGN CONSULTANT. Additions to, modifications of, or deletions from the project provided herein may be made and the compensation to be paid to DESIGN CONSULTANT may be adjusted accordingly by mutual agreement of the contracting parties. It is agreed that no claim for extra work by DESIGN CONSULTANT will be allowed by the CITY except as provided herein, nor shall DESIGN CONSULTANT do any work not covered by this Contract unless such work is authorized through an executed amendment.

13. TERMINATION FOR CAUSE:

This Contract may be terminated by CITY for cause should the DESIGN CONSULTANT fail to perform any provision of this Contract, including without limitation, for any of the following reasons:

- (a) DESIGN CONSULTANT abandons Work;
- (b) DESIGN CONSULTANT assigns or attempts to assign its rights or obligations under this Contract or any part thereof to any third-party (without the prior written consent of CITY);
- (c) DESIGN CONSULTANT is adjudged bankrupt or insolvent, makes a general assignments for the benefit of creditors, has a trustee or receiver appointed for its property, or files a petition to take advantage of any debtor's act;
- (d) DESIGN CONSULTANT fails or refuses to perform any obligation under the Contract, or fails to remedy such nonperformance within seven (7) days after its occurrence;
- (e) DESIGN CONSULTANT fails to comply with any applicable Laws and fails to remedy such nonperformance within seven (7) days after its occurrence;
- (f) DESIGN CONSULTANT fails to achieve the required dates for performance required pursuant to the Contract.

14. TERMINATION FOR CONVENIENCE:

CITY may at any time and for any or no reason, at its convenience, terminate this contract or any part of the services to be rendered pursuant thereto by written notice to DESIGN CONSULTANT specifying the termination date. Immediately after receiving such notice, DESIGN CONSULTANT shall discontinue advancing the work under this Contract and shall deliver to the CITY all drawings, notes, calculations, sketches and other materials entirely or partially completed, together with all unused materials supplied by the CITY.

DESIGN CONSULTANT shall receive as compensation in full for services performed to date of such termination, a fee for the percentage of work actually completed. This fee shall be a percentage of DESIGN CONSULTANT (S) fee described in this Contract under paragraph 3 and shall be in the amount to be agreed mutually by DESIGN CONSULTANT and the CITY. The CITY shall make this final payment within sixty (60) days after DESIGN CONSULTANT has delivered the last of the partially completed items.

15. OWNERSHIP OF INSTRUMENTS OF SERVICE UPON TERMINATION FOR CAUSE AND/OR FOR CONVENIENCE:

Upon Termination for Cause or for Convenience, the CITY shall have ownership of the Instruments of Service.

16. OWNERSHIP OF DOCUMENTS:

All documents, including, but not limited to, tracings, drawings, original mylars, estimates, field notes, investigations, design analysis and studies which are prepared in the performance of this Contract are to be, and remain the property of, the CITY. DESIGN CONSULTANT shall furnish the CITY, upon its request, originals or reproducible of technical specifications and copies of all other documents listed above. DESIGN CONSULTANT shall endorse, by his professional seal, all plans and engineering data furnished by him.

17. RE- USE OF DOCUMENTS:

The parties agree the documents, drawings, specifications and designs, although the property of CITY, are prepared for this specific project and are not intended nor represented by DESIGN CONSULTANT to be suitable for re-use for any other project. Any reuse without written verification or adaptation by DESIGN CONSULTANT for the specific purpose intended will be at CITY's sole risk and without liability or legal exposure to DESIGN CONSULTANT.

18. NO KICK-BACK CERTIFICATION:

DESIGN CONSULTANT warrants that no person has been employed or retained to solicit or secure this Contract upon a Contract or understanding for a commission, percentage, brokerage or contingent fee; and that no member of the City Council or any employee of the CITY has any interest, financially or otherwise, in the DESIGN CONSULTANTING firm.

For breach or violation of this warranty, the CITY shall have the right to annul this Contract without liability, or at its discretion to deduct from the Contract Price or consideration, the full amount of such commission, percentage, brokerage or contingent fee.

19. CONFLICT OF INTEREST:

DESIGN CONSULTANT stipulates that its officers and employees do not now have a conflict of interest and it further agrees for itself, its officers and its employees that it will not contract for or accept employment for the performance of any work or services with any individual business, corporation or government unit that would create a conflict of interest in the performance of its obligations pursuant to this Contract.

Pursuant to A.R.S. Section 38-511, the City may cancel this contract within three (3) years after its execution, without penalty or further obligation by the City if any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the City of Chandler is, at any time while the contract is in effect, an employee of any other party to the contract in any capacity or a consultant to any other party of the contract with respect to the subject matter of the contract.

20. ARIZONA LAW, JURISDICTION AND VENUE, AND FEES AND COSTS:

20.1 Arizona Law. This Contract shall be governed and interpreted according to the laws of the State of Arizona.

20.2 Jurisdiction and Venue. The parties agree that this Contract is made in and shall be performed in Maricopa County. Any lawsuits between the Parties arising out of this Contract shall be brought and concluded in the courts of Maricopa County in the State of Arizona, which shall have exclusive jurisdiction over such lawsuits.

20.3 Fees and Costs. Except as otherwise agreed by the parties, the prevailing party in any adjudicated dispute relating to this Contract is entitled to an award of reasonable attorney's fees, expert witness fees and costs including, as applicable, arbitrator fees; provided, however, that no award of attorney's fees shall exceed ten percent (10%) of the damages awarded the prevailing party unless the non-prevailing party has been determined to have acted in bad faith or in a frivolous manner during the adjudication.

21. CONTROLLING LAW:

The law of the state of Arizona shall govern this Contract.

22. REQUIRED COMPLIANCE WITH ARIZONA PROCUREMENT LAW:

Compliance with A.R.S. § 41-4401. Pursuant to the provisions of A.R.S. § 41-4401, the Design Consultant hereby warrants to the City that the Design Consultant and each of its subcontractors ("Subcontractors") will comply with all Federal Immigration laws and regulations that relate to the immigration status of their employees and the requirement to use E-Verify set forth in A.R.S. §23-214(A) (hereinafter "Design Consultant Immigration Warranty").

A breach of the Design Consultant Immigration Warranty (Exhibit C) shall constitute a material breach of this Contract that is subject to penalties up to and including termination of the contract.

The City retains the legal right to inspect the papers of any Design Consultant or Subcontractor employee who works on this Contract to ensure that the Design Consultant or Subcontractor is complying with the Design Consultant Immigration Warranty. The Design Consultant agrees to assist the City in the conduct of any such inspections.

The City may, at its sole discretion, conduct random verifications of the employment records of the Design Consultant and any Subcontractors to ensure compliance with Design Consultants Immigration Warranty. The Design Consultant agrees to assist the City in performing any such random verifications.

The provisions of this Article must be included in any contract the Design Consultant enters into with any and all of its subcontractors who provide services under this Contract or any subcontract. "Services" are defined as furnishing labor, time or effort in the State of Arizona by a Design Consultant or subcontractor. Services include construction or maintenance of any structure, building or transportation facility or improvement to real property.

23. NO ASSIGNMENT:

DESIGN CONSULTANT shall not assign, transfer, convey or subcontract this contract or the services to be rendered pursuant thereto without the prior written consent of CITY.

24. NOTICES:

Any notice required under this Contract shall be in writing, addressed to the appropriate party at its address on the signature page and given personally or by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.

IN WITNESS WHEREOF, the parties have hereunto subscribed their names to this _____ day of _____, 2016.

CITY OF CHANDLER

DESIGN CONSULTANT:

MAYOR Date

By: 
Title: President

ADDRESS FOR NOTICE
City of Chandler
P.O. Box 4008, Mail Stop 407
Chandler, AZ 85244-4008
480-782-3307

ADDRESS FOR NOTICE
Kreuzer Consulting Group
2150 S. Country Club Dr. Ste. 34
Mesa, AZ
Phone: 480-999-5954

ATTEST:

ATTEST: If Corporation

City Clerk


Secretary

APPROVED AS TO FORM:

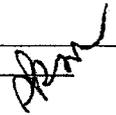
City Attorney by:  SEAL

EXHIBIT A SCOPE OF WORK

DESIGN CONSULTANT shall provide design services for Arizona Avenue Improvements between Frye Road and Pecos Road:

- Constructing 2 northbound and southbound lanes with on-street bike lanes, potential right turn lanes, on-street parking on both sides and a raised and/or flush median island.
- Upgrading the entire project reach to be American with Disabilities Act (ADA) compliant.
- Storm water pavement drainage conveyance and retention.
- Traffic signal improvements.
- Lighting and electrical improvements.
- Private utility coordination and relocation.
- New and/or restored landscaping and irrigation.
- Water line improvements on Arizona Avenue consisting of the abandonment of an existing 12-inch asbestos cement waterline for ½ mile on Arizona Avenue between Frye Road and Pecos Road. North of Fairview, the waterline to be abandoned is on the east side of the road and south of Fairview, the waterline to be abandoned is on the west side of the road. There are approximately four tie-overs of services, lateral and hydrant connections that must be made to the existing 12-inch ductile iron waterline on the opposite side of the road.
- Water line improvements on Frye Road consisting of the removal of an existing 10-inch cast iron waterline for approximately 1600 linear feet on the north side of Frye Road between Arizona Avenue and the Frye Water Production Facility, installation of a new 16-inch ductile iron waterline (~1600 ft), abandonment of an existing 16-inch asbestos cement waterline (~1600 ft) and subsequent tie-overs of all service, lateral and hydrant connections to the new 16-inch ductile iron waterline. It is anticipated there will be 26 tie-overs.
- Potential entry monumentation at the north and/or south limits of the project.
- Right-of-way (ROW) and/or easement legal descriptions and acquisition documents.
- Design of Arizona Avenue to consider future abandonment of Saragosa Road, Morelos Road and Kessler Road when the Washington Street improvements are completed.
- Arizona Avenue is on the National Highway System (NHS). The project will be designed and processed at the minimum design standards per 23CFR 625.4. Any design exceptions require FHWA approval through ADOT CFR 625.3 (f).

CITY DESIGN STANDARDS

DESIGN CONSULTANT shall perform project tasks outlined below and all work shall conform to the latest edition and amendments of the following, unless specifically noted otherwise:

- City of Chandler Standard Details and Specifications
- City of Chandler Technical Design Manual #1 & 2: Water & Wastewater System Design
- City of Chandler Technical Design Manual #3: Storm Drainage System Design
- City of Chandler Technical Design Manual #4: Street Design and Access Control
- City of Chandler Technical Design Manual #5: Traffic Signal Design
- City of Chandler Technical Design Manual #6: Street Light Design
- City of Chandler Technical Design Manual #7: Traffic Barricade Design
- City of Chandler Technical Design Manual #8: Landscape and Irrigation Design of Right Of Ways, Retention Basins and Parks
- Maricopa Association of Governments (MAG) Uniform Standard Specifications and Details for Public Works Construction
- City of Chandler Supplements to MAG

- Manual of Uniform Traffic Control Devices for Streets and Highways (MUTCD)
- AASHTO Policy on Geometric Design of Highways and Streets
- The Code of the City of Chandler
- Arizona Department of Transportation Utility and Railroad Engineering Section Utility Coordination Guide For Design Consultants (UCGDC)
- Arizona Utility Coordinating Committee (AUCC) Public Improvement Project Guide (PIPG)
- City of Chandler Unified Development Manual
- City of Chandler General Plan
- City of Chandler Transportation Master Plan
- 2011 National Electrical Code
- Americans with Disabilities Act (ADA) requirements
- Proposed Right Of Way Accessibility Guidelines (PROWAG) or ROWAG (if finalized during project duration)

DESIGN CONSULTANT shall perform the following tasks:

A. BASIC SERVICES

1. DATA COLLECTION

a. Task 1.1: Collect and Review Existing Records

- i. CITY shall provide at no cost to DESIGN CONSULTANT the following, but not necessarily limited to, existing information as available: as-built drawings, related design studies and reports, geotechnical investigations, existing traffic data and projections, maintenance records, and drawings of developments planned within the project area.
- ii. DESIGN CONSULTANT shall keep a log and copy of all information collected through the duration of the project, including photos, as-builts, reports, and other documents provided from CITY, stakeholders, utility companies, external agencies, and developers.

2. PRIVATE UTILITY COORDINATION

a. Task 2.1 Utility Coordination

- i. DESIGN CONSULTANT shall perform utility coordination in conformance with City Design Standards and the City's Certificated Acceptance plan for the Arizona Department of Transportation (ADOT).
 1. DESIGN CONSULTANT shall coordinate with each utility company to determine if the utilities have any need to upgrade their facilities before or during the project's construction.
 2. DESIGN CONSULTANT shall work with the CITY to coordinate the early determination of facilities that may be abandoned or deactivated.
 3. DESIGN CONSULTANT shall send Utility Conflict Review letters to each utility company notifying them of the project and defining the project scope and timeline along with Project Plans at each submittal (15%, 30%, 60%, 95% and Final) for their review along with a request for written response from each company to determine the disposition of their utility as it relates to the planned roadway improvements.
 4. For each submittal to the utility companies, DESIGN CONSULTANT shall provide the CITY each with a written record of receipt.
- ii. DESIGN CONSULTANT shall work with the CITY to facilitate utility coordination meetings following each submittal (30%, 60%, 95%, Final). This task includes up to four (4) general utility coordination meetings. DESIGN CONSULTANT anticipates a maximum of two personnel attending the utility coordination meetings.

- iii. DESIGN CONSULTANT shall work with the CITY to facilitate utility land coordination meetings. This task includes up to two (2) utility land coordination meetings. DESIGN CONSULTANT anticipates a maximum of two personnel attending the utility land coordination meetings.

b. Task 2.2: Utility Locating and Verification

- i. DESIGN CONSULTANT shall be responsible for field verifying the horizontal locations of all utilities within the project limits prior to the Preliminary (15%) design submittal.
- ii. DESIGN CONSULTANT shall prepare base maps detailing all existing utility data and transmitting to the utility companies for verification and comment concerning the utility locations. DESIGN CONSULTANT shall incorporate the utility company comments into the base maps.
- iii. Utility Potholing (see Task 10.0 under Special Services)

c. Task 2.3: Utility Strip Map

- i. DESIGN CONSULTANT include all existing and proposed utilities, and existing and proposed easements for each utility, to include parcel numbers and addresses with utility base map (Task 2.2). Separate utility strip map will not be prepared or submitted to City. The map shall be updated and provided at the 30%, 60% and 95% submittals.

d. Task 2.4: Utility Relocation Design Coordination

- i. DESIGN CONSULTANT shall coordinate with the utilities to facilitate the design to relocate their facilities. DESIGN CONSULTANT shall request a letter from each utility impacted by the planned roadway improvement identifying a time line for relocating their facilities.
- ii. DESIGN CONSULTANT shall specifically identify utility conflicts, with input from utility companies and CITY, which might affect alignment or grade and recommend alignment alternatives.
- iii. Prior to 30% plan submittal, DESIGN CONSULTANT shall develop preliminary alignments of any utilities requiring relocation for which the CITY has requested an alignment design. DESIGN CONSULTANT shall submit preliminary locations to each utility for review with a request for written response from each utility. DESIGN CONSULTANT shall coordinate with CITY to make joint trenching recommendations for underground utilities, and submit those recommendations to the CITY for approval.
- iv. DESIGN CONSULTANT shall review all utility relocation plans for constructability within the project limits. This task includes up to two (2) reviews of private utility relocation plans per utility.
- v. Prior to submittal of Final (100%) construction documents, DESIGN CONSULTANT shall be responsible for ensuring all utility relocations have been designed and coordinated with proposed CITY and private installations, and that such relocations shall not impact the proposed construction schedule of the CITY's project.

e. Task 2.5: Utility Clearance Letter and Service Request Letters

- i. DESIGN CONSULTANT shall prepare a utility clearance letter, providing a review of proposed utility plans, including conflict evaluation, and general considerations.
- ii. DESIGN CONSULTANT shall provide load calculations for new services to the utilities and prepare service request letter.

3. PROGRESS MEETINGS

a. Task 3.1: Monthly Progress Meetings

- i. This task includes up to nine (9) general progress meetings and one (1) aesthetics review meeting. DESIGN CONSULTANT anticipates a maximum of two (2) personnel attending the Progress Meetings.
- ii. DESIGN CONSULTANT shall prepare and distribute meeting minutes for each Progress Meeting, including Action Items to be reviewed and updated at each Progress Meeting.

b. Task 3.2: Comment Resolution Meetings

- i. Meeting shall be held no later than one week after redlines are returned to DESIGN CONSULTANT at each plan submittal. Comments Resolution Meetings are for both internal and external agency reviews.

4. PUBLIC AND STAKEHOLDER MEETINGS

a. Task 4.1: Public Information Meetings

- i. DESIGN CONSULTANT shall prepare for and participate in four (4) Public Information Meetings. DESIGN CONSULTANT shall prepare display boards that feature the horizontal alignment and depict both existing and proposed right-of-way from the most recent plan submittal, and also a display board depicting the proposed roadway section. DESIGN CONSULTANT anticipates a maximum of three (3) personnel attending the public meetings.
- ii. DESIGN CONSULTANT shall be responsible for the following:
 1. Assist CITY in preparing information for mailers/flyers
 2. Develop and setup display boards
 3. Prepare a meeting sign-in sheet
 4. Prepare project facts sheet/agenda handout for meeting
 5. Give a brief presentation and answer questions as needed
 6. Prepare and make available a public comment sheet at each meeting
 7. Provide beverages for each public meeting
- iii. CITY shall be responsible for the following:
 1. Secure a location and time for each public meeting
 2. Prepare and distribute mailers/flyers to those residents within and adjacent to the project corridor, if required
 3. Prepare newspaper notice of meeting, if required

Task 4.2: Stakeholder Meetings

- iv. DESIGN CONSULTANT shall prepare for and participate in up to fifteen (15) Stakeholder Meetings for the duration of the project. DESIGN CONSULTANT shall prepare display boards that feature the horizontal alignment and depict both existing and proposed right-of-way, and a display board depicting the proposed typical roadway section. DESIGN CONSULTANT anticipates a maximum of three (3) personnel attending the Stakeholder Meetings.
- v. DESIGN CONSULTANT shall be responsible for the following:
 1. Develop and setup display boards and other graphic materials
 2. Prepare a meeting sign-in sheet
 3. Give a brief presentation and answer questions as needed
 4. Prepare and distribute meeting minutes, including Action Items to be reviewed and updated at each Stakeholder Meeting

- vi. CITY shall be responsible for the following:
 - 1. Secure a location and time for each public meeting
 - 2. Send invitations to stakeholders

5. PROJECT MANAGEMENT

a. Task 5.1: Project Monitoring

- i. Prepare regular monthly progress reports
- ii. Perform regular budget monitoring
 - 1. Pay applications will be submitted monthly. Invoices will be broken down to the same level of detail as the attached fee schedule.
- iii. Perform regular schedule monitoring
 - 2. DESIGN CONSULTANT shall adhere to the production schedule established for the project and such schedule may not be modified or deviated from without written consent by the CITY.

3. The following is the project schedule that the DESIGN CONSULTANT shall manage and maintain. DESIGN CONSULTANT shall revise and submit for review an updated schedule whenever completion of the project design, or any of the partial completion points listed in the schedule are delayed by one week or more. Such adjusted schedule shall include a written explanation stating the reasons for the schedule change and a plan for getting back on schedule. DESIGN CONSULTANT shall take all reasonable action necessary to get the project back on schedule and CITY shall cooperate to assist DESIGN CONSULTANT.

Notice To Proceed (NTP)	0
Data Collection/Survey	NTP + 5 Weeks
Submit 15% Plans & Estimate	NTP + 11 Weeks
Submit 30% Plans, Specifications, and Estimate	NTP + 20 Weeks
Public Meeting #1	NTP + 23 Weeks
Submit ROW Acquisition Documents	NTP + 26 Weeks
Submit 60% Plans, Specifications, and Estimate	NTP + 26 Weeks
Submit 95% Plans, Specifications, and Estimate	NTP + 35 Weeks
Submit 100% Plans, Specifications, and Estimate	NTP + 41 Weeks
Submit Final Plans, Specifications, and Estimate	NTP + 44 Weeks

b. Task 5.2: Design Quality Control Plan

- iv. DESIGN CONSULTANT shall institute and comply with the Design Quality Control Plan established for the project.

c. Task 5.3: Manage Subconsultants

- i. DESIGN CONSULTANT shall monitor all sub-consultants schedule and work products and ensure that all activities are coordinated.

6. PLANS, SPECIFICATIONS AND ESTIMATES

a. Task 6.1: Plans

- i. Design Consultant shall prepare plans for the project in accordance with City Standards and FHWA guidelines.
- ii. DESIGN CONSULTANT shall submit plans on CD in AutoCAD .DWG format and exports of each plan sheet and reference files and PDF of each plan sheet and PDFs of complete plans set at the 15%, 30%, 60%, 95% and 100%/Final submittals. Payment for this task shall be directly correlated with submittal percentage.

- iii. Following each review, DESIGN CONSULTANT shall review the CITY's comments and complete the comment resolution forms. DESIGN CONSULTANT shall provide a matrix that summarizes the comments and indicates whether the comment was incorporated or provides justification for not implementing the change noted in the plan review comments. DESIGN CONSULTANT shall provide the comment matrix to the CITY one week prior to the Comment Resolution Meeting. All comments shall be incorporated unless otherwise authorized by the CITY.
- iv. DESIGN CONSULTANT shall provide project plans to external agencies such as Maricopa County Department of Environmental Services, Arizona Department of Transportation, and Flood Control District of Maricopa County, and upon direction from City to adjacent project consultants and contractors as appropriate to ensure construction activities are permitted and coordinated for construction to start immediately after award of City's construction contract.
- v. Plans shall include:
 1. Cover Sheet
 2. General Notes Sheets
 3. Geometric Layout and Survey Control Sheet
 4. Typical Section Sheets
 5. Construction Detail Sheets
 6. Removal Plans
 7. Paving Plans (Task 6.1A)
 8. Drainage Plans (Task 6.1B)
 9. Traffic Signal Plans (Task 6.1C)
 10. Lighting and Electrical Plans (Task 6.1D)
 11. Signing and Striping Plans (Task 6.1E)
 12. Hardscape, Landscape and Irrigation Plans (Task 6.1F)
 13. Monumentation and Signage Details (Task 6.1G)
 14. Water Plans (Task 6.1I)
 15. Construction Sequencing Plan (Task 6.1I)

vi. Task 6.1A: Paving Plans

1. DESIGN CONSULTANT shall perform work necessary to create Typical Roadway Sections, Geometric Layout, Removal Plans and Paving Plan & Profile Sheets using design right-of-way needs for Arizona Avenue per City of Chandler Standard Details.
2. DESIGN CONSULTANT shall prepare paving and profile plans at a scale of 1"=20' horizontal and 1"=2' vertical, to include base sheet preparation including survey control, topographic mapping, centerline stationing, curb and gutter, sidewalk, handicap ramps, driveways, turn lanes, median curb (if raised) intersecting streets, utilities, existing right-of-way, proposed right-of-way, existing utilities, construction notes, etc. Profiles shall show centerline stationing, existing ground, proposed curb and gutter grades, proposed median curb (if raised) benchmarks and underground utilities.
3. DESIGN CONSULTANT shall evaluate all existing sidewalk between Frye Road and Pecos Road (including all four corners of Frye and Pecos Intersections and ensure compliance with ADA cross-slope and curb ramp requirements. Any sidewalk or ramp that is not in compliance with ADA shall be incorporated into the plans.

vii. Task 6.1B: Drainage Plans

1. DESIGN CONSULTANT shall review the existing drainage reports and as-builts for the adjacent developments. The reports and as-builts shall be provided by the CITY. DESIGN CONSULTANT shall conduct a field visit to verify the existing drainage infrastructure and concepts.

2. DESIGN CONSULTANT shall prepare a drainage analysis to determine the effects of the roadway improvements from this project. DESIGN CONSULTANT shall perform hydrologic calculations per the CITY standards to estimate the additional runoff. The hydrologic and hydraulic calculations shall meet the CITY criteria.

3. DESIGN CONSULTANT shall prepare a Drainage Report to accompany the drainage design for roadway improvements. The Draft Drainage Report shall be submitted with the 30% Submittal. The Draft Final Drainage Report shall be submitted with the 60% Submittal. The Final Drainage Report shall be submitted with the 95% Submittal. DESIGN CONSULTANT shall incorporate comments received at each submittal.

4. Subconsultant J2 ENGINEERING shall complete services 1 through 4 above. DESIGN CONSULTANT shall coordinate all work completed by sub-consultant.

5. DESIGN CONSULTANT shall prepare drainage plans that include but is not limited to, storm drain profiles, and drainage details.

viii. Task 6.1C: Traffic Signal Plans

1. DESIGN CONSULTANT shall design traffic signal modifications at Frye Road and Pecos Road to accommodate the new alignment for Arizona Avenue. The modifications at Pecos Road will only involve the "A" pole signal. All other poles will remain.

2. DESIGN CONSULTANT shall design a new traffic signal at the Arizona Avenue Fairview Road intersection.

3. Traffic signal interconnect conduit/wiring is in place. The traffic signal plans will depict any modifications necessary to connect the new or modified signals to the existing interconnect system.

4. Subconsultant WRIGHT ENGINEERING shall complete all services described above. DESIGN CONSULTANT shall coordinate all work completed by subconsultant.

ix. Task 6.1D: Lighting and Electrical Plans

1. DESIGN CONSULTANT shall design lighting and electrical systems along Arizona Avenue within the project limits in accordance with applicable City of Chandler Streetlight Technical Design Manual (TDM) #6 and electrical standards.

2. DESIGN CONSULTANT shall perform a site visit and document to the extent possible the equipment and conditions related to the existing street lighting, the existing lighting control equipment, existing underground conduit and conductor routes.

3. DESIGN CONSULTANT shall coordinate lighting and electrical design with Salt River Project (SRP) to define a power source to serve the lighting and electrical systems.

4. DESIGN CONSULTANT shall provide a computer generated point-to-point foot-candle grid for the project limits on Arizona Avenue, and submit documents to CITY for approval as exhibits along with the 60% and 95% submittals. It is assumed that the street lighting shall be based on City of Chandler 2014 illumination standards utilizing LED light fixtures.

5. DESIGN CONSULTANT shall prepare lighting and electrical plans for approximately 2,600 feet on Arizona Avenue, as necessary, including new pole locations at the 30%, 65%, 95%, and final plan stage. The Lighting and Electrical Plans (1"=20') shall consist of the following:

- Street lighting general notes and key map
- Street lighting plans showing pole locations with station and offset

- Electrical plan depicting systems required to power street tree lights, power outlets, up lighting, internally illuminated signs and all other project elements requiring electrical power as determined during the design process.

6. DESIGN CONSULTANT shall reference the TDM #6 standard details and drawings for the following:

- Pole Assembly Detail (Pole, foundation, mast arm)
- Junction Box detail
- Trench detail
- Connection details

7. SRP shall be responsible for providing detail drawings for the electrical details (Control center, wiring schematic, and cable schedule). These items on drawings prepared by SRP shall be accounted for in the project specifications and engineer's estimate.

8. Sub-consultant WRIGHT ENGINEERING shall complete all services described above. DESIGN CONSULTANT shall coordinate all work completed by sub-consultant.

x. Task 6.1E: Striping and Signing Plans

1. DESIGN CONSULTANT shall develop preliminary traffic signing and striping plans for this project at the 30% plan stage. DESIGN CONSULTANT shall finalize the traffic signing and striping plans at the 60% plan stage. The Signing and Striping Design Plans shall be produced at 1"= 40' scale and shall include the following sheets:

- a) General Striping Notes sheet (including striping quantities)
- b) General Signing Summary, Notes, and Index
- c) Striping and Signing plan sheets

xi. Task 6.1F: Hardscape, Landscape and Irrigation Plans

1. DESIGN CONSULTANT shall inventory existing trees, located via GPS survey and catalogue to determine if they are to remain in place or be removed. DESIGN CONSULTANT shall identify the tree species, record the caliper, ascertain the general health, and record the viability for survival given construction activities.

2. DESIGN CONSULTANT shall review existing irrigation water meters, valves, mainline, controllers, and other major irrigation infrastructure locations to determine potential for salvage. Locations shall be derived from as-built and design plans provided by the CITY combined with survey and existing conditions observation. DESIGN CONSULTANT shall overlay the existing irrigation location with improvement plans.

3. DESIGN CONSULTANT shall coordinate with the CITY to determine the desired types of plant material, inert material, and irrigation equipment. DESIGN CONSULTANT shall coordinate with the CITY on the identification of areas within the project area to receive landscape and irrigation as well as existing landscape and irrigation to be protected in place.

4. DESIGN CONSULTANT shall prepare Hardscape Plans (1"=20'). The plans shall include the following:

- 60% Plans- location and layout of special paving, street furnishings and other architectural amenities (if any)
- 95% plans- hardscape quantities and details.

5. DESIGN CONSULTANT shall prepare Landscape Plans (1"=20'). The plans shall include the following:

- 60% plans - location and species of proposed new trees and shrubs and existing trees to remain

- 95% plans - plant schedule, plant quantities, landscape notes, and CITY standard landscape details

6. DESIGN CONSULTANT shall coordinate with private entities as necessary for matching or maintaining existing landscaping and/or ground cover.

7. DESIGN CONSULTANT shall prepare Irrigation Plans (1"=20'). The plans shall include the following:

- 60% plans - locations of existing infrastructure to remain in place and new locations of laterals, water meter(s), mainline, booster pumps, and valves
- 95% plans - irrigation quantities, irrigation emitter schedule, irrigation notes, and CITY of Chandler standard irrigation details shall be shown

8. DESIGN CONSULTANT shall coordinate with private entities as necessary for new connections and maintenance of existing irrigation systems. DESIGN CONSULTANT shall prepare water meter applications, when applicable.

9. DESIGN CONSULTANT shall show the water taps for irrigation equipment on the utility plans and roadway plans, as appropriate. DESIGN CONSULTANT shall provide the complete design and all necessary details for these water taps and power for the irrigation controllers.

10. Sub-consultant J2 ENGINEERING shall complete all services described above. DESIGN CONSULTANT shall coordinate all work completed by sub-consultant.

xii. Task 6.1G: Monumentation and Signage Plans

1. DESIGN CONSULTANT will prepare plans and details for monumentation and/or specialty signage. The plans will convey intent with enough detail to facilitate bidding and preparation of shop drawings by a fabricator. Utilizing Arizona Avenue Phase 1 approved shop drawings DESIGN CONSULTANT will refine elevations, plans, descriptions, details and notations to communicate the following: necessary layout and associated dimensions; material and finish specifications hardware specifications, if necessary for aesthetic intent; font specification and text layout; fabrication techniques as required to replicate existing aesthetic intent as well as address maintenance and/or durability concerns. Any structural/electrical intent will be outlined only as it may relate to the aforementioned. Required structural engineering (other than foundation) and electrical design will be the responsibility of the fabricator.

2. Subconsultant LISA RANZENBERGER shall complete all services described above. DESIGN CONSULTANT shall coordinate all work completed by sub-consultant.

xiii. 6.1H Water Plans

1. DESIGN CONSULTANT shall prepare water plans and details for the following improvements:

- Water line improvements on Arizona Avenue consisting of the abandonment of an existing 12-inch asbestos cement waterline for ½ mile on Arizona Avenue between Frye Road and Pecos Road. North of Fairview, the waterline to be abandoned is on the east side of the road and south of Fairview, the waterline to be abandoned is on the west side of the road. There are approximately four tie-overs of service, lateral and hydrant connections that must be made to the existing 12-inch ductile iron waterline on the opposite side of the road.
- Water line improvements on Frye Road consisting of the removal of an existing 10-inch cast iron waterline for approximately 1600 linear feet on the north side of Frye Road between Arizona Avenue and the Frye Water Production Facility,

AZ Ave. Imp. (Frye Rd to Pecos Rd)

ST1607.201

Page 17 of 33

installation of a new 16-inch ductile iron waterline (~1600), abandonment of an existing 16-inch asbestos cement waterline (~1600) and subsequent tie-overs of all service, lateral and hydrant connections to the new 16-inch ductile iron waterline. It is anticipated there will be 26 tie-overs.

2. DESIGN CONSULTANT shall prepare plans and certification documents for required relocations and miscellaneous upgrades, which include meter relocation, potable water back, flow preventer (BFP) relocations, new potable water BFPs, fire hydrant relocation, new fire hydrants.

3. DESIGN CONSULTANT shall prepare and submit the Maricopa County Environmental Services (MCESD) permit applications including Approval to Construct (ATC) application/ applicable design reports.

xiv. Task 6.1: Sequencing Plans

1. DESIGN CONSULTANT shall prepare a sequencing plan for construction activities. These plans will depict the proposed staging/phasing of construction and will delineate travel and construction zones for each phase of construction. These plans will be prepared at 1"=40' scale in roll plot format for each construction phase.

b. Task 6.2: Specifications

i. Technical Specifications shall be in accordance with City of Chandler Standard Specifications, MAG Standard Specifications, Arizona Department of Transportation (ADOT) Standard Specifications, and ADOT (stored) standard special provisions. DESIGN CONSULTANT shall create technical specifications for all items not adequately covered by these standard specifications.

ii. Word and PDF format of Specifications shall be provided with each submittal.

c. Task 6.3 Cost Estimates

i. DESIGN CONSULTANT shall prepare cost estimates for all pay items per the standard specifications and special provisions, except that volumetric measurements shall not be used for pay items. DESIGN CONSULTANT shall determine earthwork quantities.

7. SUBMITTALS

a. Task 7.1: 15% Submittal

i. DESIGN CONSULTANT shall provide the following at **15% Submittal** to the CITY:

1. Three (3) full size sets of the Alignment 15% Plans
2. One (1) copy of construction cost estimate
3. One (1) copy of the preliminary/draft geotechnical report
4. One (1) copy of right of way strip map

b. Task 7.2: 30% Submittal

i. DESIGN CONSULTANT shall provide the following at the **30% submittal** to the City:

1. City Plan review and construction permit applications
2. Eight (8) full size sets of 30% preliminary plans including:
 - a. Cover sheet
 - b. Typical Roadway Sections
 - c. Geometric Configurations
 - d. Removal Plans
 - e. Paving Plan and Profiles
 - f. Drainage Plan and Profiles
 - g. Hardscape, Landscape and Irrigation plans (including median landscape and irrigation)
 - h. Entry Monumentation/Sign Plans

- i. Water Plan and Profile
 - j. Traffic Signal Plans and details
 - k. Signing and Striping Plans and Details
 - l. Lighting and Electrical Plans and Details
 - m. Sequencing Plan
3. Five (5) copies of the outline/preliminary technical specifications
 4. Five (5) copies of the construction cost estimate
 5. Five (5) copies of the draft/preliminary drainage report
 6. Five (5) copies of the sealed geotechnical report
 7. Two (2) copies of the "Testhole Data Summary Sheet"
 8. Two (2) copies of the right-of-way strip map
 9. Two (2) copies of the utility strip map

c. Task 7.3: 60% Submittal

- i. DESIGN CONSULTANT shall provide the following at the **60% submittal** to the CITY:
 1. City Plan review and construction permit applications
 2. 30% submittal redlines and comments
 3. Eight (8) full size and eight (8) half-size sets of 60% plans including:
 - a. Cover sheet
 - b. Index, Key Map, and General Notes
 - c. Typical Roadway Sections
 - d. Geometric Configurations
 - e. Removal Plans
 - f. Paving Plan and Profiles
 - g. Drainage Plan and Profiles
 - h. Hardscape, Landscape and Irrigation plans (including median landscape and irrigation)
 - i. Entry Monument/Sign Plans
 - j. Water Plan and Profile
 - k. Traffic Signal Plans and Details
 - l. Signing and Striping Plans and Details
 - m. Lighting and Electrical Plans and Details
 - n. Sequencing Plan
 - o. Special Details
 4. Six (6) copies of the 60% technical specifications
 5. Six (6) copies of the 60% construction cost estimate
 6. Three (3) copies of the final/sealed drainage report
 7. Two (2) copies of the right-of-way strip map with legal descriptions
 8. Two (2) copies of the utility strip map with legal descriptions
 9. Three (3) copies of the final/sealed Phase I ESA

d. Task 7.4: 95% Submittal

- i. DESIGN CONSULTANT shall provide the following at **95% submittal** to the CITY:
 1. City Plan review and construction permit applications
 2. 60% submittal redlines and comments
 3. Sixteen (16) full size and eight (8) half size sets of 95% plans including:
 - a. Cover sheet
 - b. Index, Key Map, and General Notes
 - c. Typical Roadway Sections
 - d. Geometric Configurations
 - e. Removal Plans
 - f. Paving Plan and Profiles
 - g. Drainage Plan and Profiles
 - h. Hardscape, Landscape and Irrigation plans (including median landscape and irrigation)
 - i. Entry Monument/Sign Plans

- j. Water Plan and Profile
 - k. Traffic Signal Plans and Details
 - l. Signing and Striping Plans and Details
 - m. Lighting and Electrical Plans and Details
 - n. Sequencing Plan
 - o. Special Details
4. Eight (8) copies of the 95% technical specifications
 5. Eight (8) copies of the 95% construction cost estimate
 6. Two (2) copies of the right-of-way strip map with new or revised legal descriptions
 7. Two (2) copies of the utility strip map with new or revised legal descriptions

e. Task 7.5: 100% Submittal

- i. Upon acquisition of all right-of-way and easements necessary for construction, DESIGN CONSULTANT shall provide the following with the **100% submittal** to the CITY:
 1. City plan review and construction permit applications
 2. 95% submittal redlines and comments
 3. Three (3) full size and eight (8) half size sets of sealed construction plans including:
 - a. Cover sheet
 - b. Index, Key Map, and General Notes
 - c. Typical Roadway Sections
 - d. Geometric Configurations
 - e. Removal Plans
 - f. Paving Plan and Profiles
 - g. Drainage Plan and Profiles
 - h. Hardscape, Landscape and Irrigation plans (including median landscape and irrigation)
 - i. Entry Monument/Sign Plans
 - j. Water Plan and Profile
 - k. Traffic Signal Plans and Details
 - l. Signing and Striping Plans and Details
 - m. Lighting and Electrical Plans and Details
 - n. Sequencing Plan
 - o. Special Details
 4. One (1) cover sheet on 4 mil Mylar
 5. Eight (8) copies of final specification
 6. Eight (8) copies of the final construction cost estimate and bid schedule
 7. Two (2) copies of the right-of-way strip map
 8. Two (2) copies of the utility strip map

f. Task 7.6: Final Submittal

- i. Upon receipt of response from utility companies, DESIGN CONSULTANT shall provide the following as the Final submittal: Full payment for this task shall not be made until CITY acceptance, not just delivery, of all items on this final submittal list.
 1. One (1) copy of construction plans including any private utility plans
 2. Eight (8) copies of final specification
 3. Eight (8) copies of the final construction cost estimate and bid schedule
 4. Utility Clearance Letter per Task 2.5
- ii. DESIGN CONSULTANT shall be responsible for delivering to the CITY a complete set of constructible plans and shall be responsible for constructability of such plans, including, but not limited to, completion of right-of-way documentation acquiring all necessary easements, and completion of utility relocation design. DESIGN CONSULTANT shall be responsible for preparing and obtaining written approval of any design exceptions and/or variances to Design Standards.

8. POST DESIGN SERVICES

a. Task 8.1: Pre-Bid Meeting

- i. DESIGN CONSULTANT shall attend and actively participate in a pre-bid meeting. DESIGN CONSULTANT shall give a brief overview of the project and address questions related to the construction documents.

b. Task 8.2: Addenda Preparation

- i. DESIGN CONSULTANT shall prepare and deliver to CITY to issue any necessary Addenda for clarification or correction of the construction documents

B. SPECIAL SERVICES

9. DESIGN SURVEY

a. Task 9.1: Ground Survey

- i. DESIGN CONSULTANT shall perform ground survey to establish horizontal and vertical control throughout the project limits based on the datum specified by the CITY. Survey control for the project shall be in accordance with CITY requirements. The horizontal survey data used for the project shall be presented in State Plane Coordinates, North American Datum of 1983 (NAD 83) 1992 epoch, and Arizona Central Zone, International Foot. Vertical datum shall be referenced to the North American Vertical Datum of 1988 (NAVD 88), International Foot, and in particular those NAVD 88 elevations assigned to benchmarks shown on published City of Chandler Benchmarks – Vertical Control map and list. Existing roadway centerline shall be established using existing street monumentation along with recorded surveys, plats and deeds available from the Maricopa County Recorder's Office and/or the McDOT plat index.

b. Task 9.2: Topographic Survey

- i. DESIGN CONSULTANT shall perform a full topographic survey of all existing features including but not limited to curb and gutter, striping, median curb, catch basins, scuppers, water meter boxes, water and gas valves, manholes, utility poles and guy wires, traffic signal poles, utility boxes, fences, trees, mailboxes, public and private irrigation. DESIGN CONSULTANT shall collect survey data as follows:
 1. Cross sections at 50 foot intervals along Arizona Avenue and Frye Road to the following limits:
 - Arizona Avenue from 100' feet south of Pecos to 100 feet north of Frye
 - Frye Road from 250 feet east of Arizona Avenue (alley) to 1,700 feet west of Arizona Avenue
 2. Locations and elevations of all existing features (i.e. valves, manholes, pull boxes, etc.) within the limits identified in 1 above.

These cross sections will pick up all curb and gutter top of curbs and flowlines, median curb elevations, centerline finish surface, back of walk elevations and elevations on adjacent properties to a minimum of 20 feet beyond the existing right of way, except where physical obstructions (i.e. fences or walls) prohibit access.
 3. Locations and elevations on intersecting streets along Arizona Avenue between Frye and Pecos. This data will be gathered to a minimum of 100 feet east and west of Arizona Avenue.
 4. Driveway locations on Arizona Avenue between Frye and Pecos at 10' intervals will be gathered along the centerline and edges of each driveway beginning at the gutter flow line for a distance of 20 feet beyond the proposed or existing right-of-way, whichever is furthest from the centerline, as allowed by the property owner. DESIGN

CONSULTANT shall document all grade breaks along each driveway centerline and edges.

5. Catch basins, manholes, pipes and water valve nuts (including inverts) on Arizona Avenue between Frye and Pecos and on Frye Road between Arizona Avenue and 1,700 feet west of Arizona Avenue.

c. Task 9.3: Benchmarks

- i. DESIGN CONSULTANT shall establish two (2) temporary benchmarks at least 1,000 feet apart along Arizona Avenue between Frye Road and Pecos Road and run a level loop between these temporary benchmarks to tie it to project control.

10. UTILITY LOCATION VERIFICATION (POTHOLING)

- i. DESIGN CONSULTANT shall verify the elevation of any utilities, using potholing, which are identified as being in potential conflict with CITY's roadway and water Improvements.

1. During the 30% design phase, DESIGN CONSULTANT shall develop a suggested pothole list that identifies stationing and offset. DESIGN CONSULTANT shall provide the list to utility companies affected by the project, and facilitate coordination of a master pothole list.

2. Prior to completion of the 60% plans, DESIGN CONSULTANT shall provide up to one hundred (100) vacuum excavation potholes (testholes) on existing subsurface utilities at locations identified on the master pothole list. Pertinent pothole data shall be presented in spreadsheet format on a standard "Testhole Data Summary" form that includes the utility found, depth, horizontal and vertical location, size and material composition, and top and bottom elevation of the utility line exposed. Potholes shall be patched back with hot mix and backfilled with half sack slurry per MAG Detail 212.

3. DESIGN CONSULTANT shall be responsible for field survey to initially stake the pothole location in white paint or white flagging for Blue Stake notification and as a reference point for the surveyed location of each pothole. DESIGN CONSULTANT shall identify the pothole number, northing, easting and elevation of the staked location. DESIGN CONSULTANT, shall measure and record adjustments from the surveyed location to the steel reference pin set above the centerline of each exposed utility.

4. Vacuum excavation potholing shall include mobilization, set-up, traffic control pavement cut and removal (if any), pavement patch as specified in Streetcut permit (if any), excavation, backfill and compaction, all information requested, and clean up. DESIGN CONSULTANT shall apply for and obtain permits for potholing.

5. For identified water and sewer lines, while the pothole is excavated, representatives from the CITY and DESIGN CONSULTANT shall perform visual inspection of the condition of the lines. Upon inspection, DESIGN CONSULTANT shall provide evaluation of existing condition of lines. If evaluation determines that the existing condition is of concern, then DESIGN CONSULTANT shall coordinate with City and provide recommendations for additional rehabilitation or replacement beyond that already included within this project.

6. DESIGN CONSULTANT shall conduct Subsurface Utility Engineering (SUE) per American Society of Civil Engineering (ASCE) publication CI/ASCE 38-02 "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data" at a "Quality Level C" for public water, sewer, reclaimed water and overhead utilities.

7. DESIGN CONSULTANT shall conduct Subsurface Utility Engineering (SUE) per ASCE publication CI/ASCE 38-02 "Standard Guideline for the Collection and

Depiction of Existing Subsurface Utility Data” at a “Quality Level A” for locatable existing underground utilities including private water, private sewer, private reclaimed water, gas, cable TV, telephone, fiber and power.

8. Subconsultant CARDNO shall complete all services described above. DESIGN CONSULTANT shall coordinate all work completed by subconsultant.

11. TRAFFIC ENGINEERING

a. Task 11.1: FHWA compliance

- i. If design exceptions to FHWA guidelines are required and the City requests assistance with the documentation for the exception(s), the DESIGN CONSULTANT’S contract will be amended to include this additional work.

b. Task 11.2: Traffic Study

- i. DESIGN CONSULTANT will prepare a comprehensive traffic study for the project area.. This includes establishing the appropriate size of the roadway infrastructure necessary to deliver acceptable level of service traffic operations, including analysis and recommendations for lane configurations and turn lane lengths at Arizona Avenue and Frye Road and Arizona Avenue and Pecos Road; a focus on a multi-modal system of linkages connecting existing and future amenities and areas of interest; and providing flexibility to integrate future street connections and intersections that are mutually beneficial to the corridor character and vision as well as the surrounding private land development long term goals and objectives.
- ii. The DESIGN CONSULTANT will gain a thorough understanding of the study area background by reviewing past studies, plans and policies, including but not limited to, the South Arizona Entry Corridor Study (October 2006), South Arizona Avenue Design Guidelines (January 2010), Chandler Redevelopment Element (July 1995), Arizona Avenue Traffic Study completed by Southwest Traffic Engineering, and 2008 Chandler General Plan, and before and after speed studies completed by the City of Chandler. The study area will include Arizona Avenue bounded by Frye Road on the north and Pecos Road on the south. The DESIGN CONSULTANT will conduct a field review of the study area with emphasis on intersections to document the existing conditions including the roadway geometrics, lane configuration and dimensions at the study intersections and driveway locations, turn bay storage lengths, location of crosswalks and connectivity, and bike facilities
- iii. Traffic Data will be collected as follows:
 1. Obtain classification, speed, bi-directional tube counts for 24-hours in 15-minute intervals on a typical weekday (Tuesday, Wednesday, or Thursday) at two (2) locations:
 - Arizona Avenue south of Frye Road
 - Arizona Avenue north of Pecos Road
 2. Obtain 8 hours (Weekday - 7:00 am to 9:00 am, 11 am to 1 pm, and 4:00 pm to 6:00 pm; Saturday – 2 hours of count time to be determined) of turning movement counts, including vehicles, pedestrians and bicyclists, at the following seven (7) intersections:
 - Arizona Avenue and Frye Road (includes classification)
 - Arizona Avenue and Elgin Street
 - Arizona Avenue and Fairview Street
 - Arizona Avenue and Saragosa Street
 - Arizona Avenue and Morelos Street
 - Arizona Avenue and Kesler Lane
 - Arizona Avenue and Pecos Road

3. Obtain 8 hours (Weekday - 7:00 am to 9:00 am, 11 am to 1 pm, and 4:00 pm to 6:00 pm; Saturday – 2 hours of count time to be determined) of turning movement counts at all driveways along Arizona Avenue between Fry Road and Pecos Road.
 4. Obtain 8 hours (Weekday - 7:00 am to 9:00 am, 11 am to 1 pm, and 4:00 pm to 6:00 pm; Saturday – 2 hours of count time to be determined) of pedestrian and bicyclist crossing data along Arizona Avenue between Fry Road and Pecos Road.
 5. Obtain signal timing for the existing signalized intersections, to be provided by the City of Chandler.
 6. Obtain existing transit routes and stops, sidewalk inventory, pedestrian amenities, bike lanes/routes, and bicycle amenities.
- iv. The DESIGN CONSULTANT will complete a traffic analysis using Synchro 9.0 or HCS 2010. The existing AM and PM peak hour level of service will be analyzed for the study intersections.
 - v. The DESIGN CONSULTANT will complete a crash analysis by obtaining a history from the Arizona Department of Transportation, Maricopa County, and the City of Chandler for the most recent 3 year history for the following seven (7) locations.
 - Arizona Avenue and Frye Road
 - Arizona Avenue and Elgin Street
 - Arizona Avenue and Fairview Street
 - Arizona Avenue and Saragosa Street
 - Arizona Avenue and Morelos Street
 - Arizona Avenue and Kesler Lane
 - Arizona Avenue and Pecos Road

These results will be summarized and will identify crash patterns, potential causes, and possible solutions.

- vi. The DESIGN CONSULTANT will prepare an email for the City of Chandler project manager to send to the Maricopa Association of Governments (MAG) requesting current year and 20 year traffic projections for the study intersections and roadway segments and use the percentage increase from MAG and apply to current volumes. This letter will also request additional (up to 2) 20 year model runs with revised parameters.
- vii. The DESIGN CONSULTANT will utilize the MAG traffic projections to determine future traffic volumes and projections. Alternatives (up to 2) will then be developed based on existing and future traffic analysis, along with crash analysis. The future alternative analysis will include:
 1. Queue analysis for turn lanes at all study intersections to determine the storage needed to accommodate the expected traffic volumes using Synchro 9.0 and Highway Capacity Manual 2010 methodology.
 2. Balancing traffic operations and safety through effective access management, minimizing conflicts between all modes of travels, appropriately sized facility and traffic controls, and safety analysis using the Highway Safety Manual.
 3. Incorporation of stakeholder and public feedback.
 4. Incorporation of streetscape and urban design concepts, including elements such as bicycle and pedestrian improvements.
 5. Multi-modal approach and evaluation of all modes of travel including vehicular, pedestrian, bicycle and transit using Synchro 9.0 and Highway Capacity Manual 2010 methodology.
- viii. The DESIGN CONSULTANT will prepare a draft report for review by City of Chandler staff and incorporate review comments, as appropriate, into a final traffic report. The report will include all figures, tables, and documentation of the data collected, analysis

methodology, conclusions, and recommendations. The draft traffic report will be submitted with the 15% submittal. The final traffic report will be submitted at the 30% completion stage.

- ix. Subconsultant J2 ENGINEERING shall complete all services described above. DESIGN CONSULTANT shall coordinate all work completed by subconsultant.

12. GEOTECHNICAL

a. Task 12.1: Geotechnical Subsurface Exploration and Laboratory Testing

- i. DESIGN CONSULTANT shall conduct a visual geologic reconnaissance of the project area and review available geologic literature and aerial photographs of the project site and shall conduct a visual pavement reconnaissance of the roadway segment in question.
- ii. DESIGN CONSULTANT shall obtain a City Encroachment Permit, as necessary, to conduct work in the Right-of-Way.
- iii. DESIGN CONSULTANT shall establish test locations in the field and arrange for the mark-out of underground utilities through Arizona Blue Stake.
- iv. DESIGN CONSULTANT shall core the existing pavement of the roadway segment in question at up to five (5) locations to determine the existing structural (asphalt and aggregate base) section. The corings shall be combined with the test borings.
- v. DESIGN CONSULTANT shall Drill four (4) hollow-stem auger borings using a truck-mounted two-wheel drive drill rig. These borings shall be located within the existing roadway or in the shoulder whichever is more appropriate and shall extend 5 feet deep. DESIGN CONSULTANT shall collect ring samples and bulk samples for laboratory testing and shall be responsible for preparation of field boring logs.
- vi. DESIGN CONSULTANT shall perform laboratory testing to evaluate the index, compressibility, expansion and chemical characteristics of the subsurface soils encountered. Bio assay tests and agronomy tests will also be conducted.

b. Task 12.2: Geotechnical Report

- i. DESIGN CONSULTANT shall prepare a draft geotechnical report, to accompany the 15% submittal, which shall contain the results of the field and laboratory analyses, with presentations of the engineering parameters for design of the new pavement and recommendations for construction. In addition, the reports shall contain vicinity maps depicting the project limits, plans showing the boring locations, narrative descriptions of the surface and subsurface conditions, laboratory test results and geotechnical recommendations related to excavation characteristics, bedding material, backfilling guidelines, subgrade support for new pavements, pavement design recommendations, pavement rehabilitation recommendations, and the re-use of on-site soils for engineered fill.
- ii. DESIGN CONSULTANT shall incorporate comments received on the draft geotechnical report into a final geotechnical report to accompany the 30% submittal.
- iii. Subconsultant RICKER, ATKINSON, MCBEE (RAMM) shall complete all services described above. DESIGN CONSULTANT shall coordinate all work completed by subconsultant.

13. VISIONING/BRANDING/MASTER PLANNING

a. Task 13.1: Visioning/Branding/Master Planning

- i. The DESIGN CONSULTANT will develop multiple concepts, ideas, and alternatives for enhancing the overall downtown experience and driving the potential for private investment now and in the future. This will include, but will not necessarily be limited to, evaluation of the following elements:
 - Road connectivity options for Saragosa, Morelos and Elgin.
 - Open space and greenbelts

- Bike lane opportunities
- Branding elements/Monumentation

- ii. The DESIGN CONSULTANT, in conjunction with J2 ENGINEERING, will develop a series of plans, layouts, renderings, photo imagery and details to present the various ideas and alternatives that are envisioned for the elements outlined above.

14. RIGHT-OF-WAY (ROW) COORDINATION

a. Task 14.1: ROW Strip Map

- i. At Preliminary (15%) Design, DESIGN CONSULTANT shall prepare a right-of-way strip map overlaid on an aerial photograph of the project limits, showing existing property lines, easements, and utilities on Arizona Avenue between Frye Road and Pecos Road. The right-of-way strip map is for the purpose of identifying property boundaries to prepare legal descriptions and exhibits for property acquisition, temporary construction easements (TCE), and utility easements and shall include a list of identified properties and property rights. The CITY shall provide litigation reports for the parcels within the project limits.

b. Task 14.2: Legal Descriptions

- i. DESIGN CONSULTANT shall provide legal descriptions and exhibits for the acquisition of new right-of-way, temporary construction easements, and utility easements. DESIGN CONSULTANT shall utilize title reports (mentioned in 14.1 above) and Sectional/centerline field survey to define the boundaries of properties where new right-of-way or easements are anticipated. DESIGN CONSULTANT shall provide closure data for all written legal descriptions and exhibits. The scope of work includes:
 2. 1. The preparation of up to ten (10) written legal descriptions and exhibits for the acquisition of permanent right-of-way (ROW). If more than 10 legal descriptions are necessary for ROW acquisition, the cost for such additional legal descriptions shall be paid from the Owner's Allowance. The preparation of ten (10) written legal descriptions and exhibits for temporary construction easements. If more than 10 legal descriptions are necessary for temporary construction easements, the cost for additional legal description shall be paid from the Owner's Allowance.
 3. The preparation of five (5) written legal descriptions and exhibits for utility easements. If more than 5 legal descriptions are necessary for utility easements, the cost for such additional legal descriptions shall be paid from the Owner's Allowance.

c. Task 14.3: ROW Documents

- i. DESIGN CONSULTANT shall submit right-of-way documents to the CITY Within 30 days of the resolution of 30% plan review comments. These documents shall include legal descriptions & Exhibits, two (2) copies of the right-of-way strip maps, and 30% design plans for all acquisitions and easements.

15. PERMITTING

a. Task 15.1: Permitting

- i. DESIGN CONSULTANT shall obtain a permit from the Maricopa County Environmental Services Department (MCESD) for the project water and sewer improvements required. This effort will include preparing the necessary application along with all supporting documentation (i.e. plans, reports, etc.) necessary to obtain the project permit. DESIGN CONSULTANT will also pay the expedited review fee (\$1,000) for MCESD processing. Any additional fees required, beyond \$1,000, will be the responsibility of the City of Chandler. At the end of construction, DESIGN CONSULTANT obtain the Approval to Construction (ATC) from the Agency and provide the required as-built drawings.

16. AERIAL ORTHOPHOTO

a. Task 16.1: Aerial Photo

- i. DESIGN CONSULTANT will provide an aerial orthophoto of Arizona Avenue from Frye Road to Pecos Road. This orthophoto will extend to 250 feet on either side of the Arizona Avenue Centerline and 100 feet north of Frye Road and 100 feet south Pecos Road.

17. ENVIRONMENTAL DOCUMENTATION AND CLEARANCE

a. Task 17.1: Phase 1 Environmental Site Assessment (ESA)

- i. If requested by the CITY, DESIGN CONSULTANT shall conduct a Phase I Environmental Site Assessment (ESA) in accordance with ASTM-1527-13 and submit a draft Phase I ESA report inclusive of each property requiring new acquisition and/or easements to the CITY at a reasonable timeframe prior to closing on the properties. A Phase I ESA (up to 3 parcels) shall be prepared for the Arizona Avenue segment. The cost for up to 3 ESA's are included as an allowance in Exhibit B. If more than 3 ESA's are required by the CITY, the cost for additional ESA's shall be paid from the Owners Allowance. The Phase I ESA reports shall document findings and provide opinions and recommendations regarding possible environmental impacts at the sites. DESIGN CONSULTANT shall provide color photographs and figures in each report. Following review by the CITY, DESIGN CONSULTANT shall review the CITY's comments and address those comments in the final Phase I ESA's.

1. DESIGN CONSULTANT shall perform up to 1 (one) update to each of the Phase I ESA reports. Any additional updates or reports shall only be done with prior written direction from the City and shall be compensated utilizing the Owner's allowance.

2. DESIGN CONSULTANT shall review lease records for the sites, to evaluate probable past site uses and their possible impact on the current environmental status of the sites.

3. DESIGN CONSULTANT shall review readily available maps and reports pertaining to the sites to evaluate probable past site use and there possible impact on the current environmental status of the sites.

4. CITY shall obtain title commitments including Schedule B to show liens and a chain-of-title report for ownership back to 1940 or earlier for each property to be acquired and provide to DESIGN CONSULTANT. DESIGN CONSULTANT shall review chain-of-title report for each parcel to evaluate probable past site use and there possible impact on the current environmental status of the sites.

5. DESIGN CONSULTANT shall conduct interviews with the property representatives regarding the environmental status of the sites.

6. DESIGN CONSULTANT shall perform a site reconnaissance to visually identify areas of possibly contaminated surficial soil or surface water, improperly stored hazardous materials, possible sources of polychlorinated biphenyls (PCBs), and possible risks of contamination from activities at the sites and adjacent properties.

7. DESIGN CONSULTANT shall review available regulatory agency files, databases, and historical documents for the sites and adjacent properties to evaluate past and current site usage and the possible environmental impact to the site. Regulatory agencies Maricopa County Environmental Services Department, Air Pollution Control District, and Maricopa Flood Control District. Databases shall identify locations of known hazardous waste sites, landfills, and leaking underground storage tanks, permitted facilities that utilize underground storage tanks, and facilities that use, store or dispose of hazardous materials. DESIGN CONSULTANT shall also make note of utility connection or lack of utility connections for each site. Historical documents include aerial photographs, Sanborn Insurance Maps, and As-Built Records

8. DESIGN CONSULTANT shall review Arizona Department of Environmental Quality databases for deed restrictions such as Declaration of Environmental Use Restrictions and Voluntary Environmental Mitigation Use Restrictions.

9. DESIGN CONSULTANT shall perform visual observations limited to the surface area of the property and contiguous sites. Subsurface explorations, soil sampling, surface and groundwater sampling, and chemical analyses are not included in this proposal. The reports shall be based solely on information gained from direct observation, personal interviews, and examinations of regulatory records.

ii. Sub-consultant ACS shall complete all services described above. DESIGN CONSULTANT shall coordinate all work completed by sub-consultant.

18. ASSUMPTIONS, CLARIFICATIONS, AND EXCLUSIONS

- a. Application fees for City reviews and permits shall be paid by City.
- b. It has been assumed that all agencies have a 15-working day review period.
- c. Application fees for other agencies other than the City shall be paid utilizing the Reimbursable Allowance.
- d. Construction management or observation, inspection, or participation in construction meetings is excluded.
- e. Private Irrigation Plans are not included.
- f. Development of Design Guidelines or standards.
- g. Erosion Control/Stormwater Pollution Prevention Plans.
- h. Art work design or coordination of Art Elements.
- i. Reimbursable allowance is to be used for printing, mileage and other approved reimbursable expenses. Expenses will be reimbursed at cost.
- j. Phase 1 ESA Allowance shall only be used with prior written approval from the City Representative.
- k. Owner's Allowance shall only be used with prior written approval from the City representative.
- l. Utilize adopted standard for streetscape vision.

**EXHIBIT B
FEE SCHEDULE**

A. BASIC SERVICES (DIRECT LABOR)

TASK	DESCRIPTION	COST
1	DATA COLLECTION	
1.1	Collect & Review Existing Records	\$2,560
Subtotal 1	DATA COLLECTION	\$2,560
2	PRIVATE UTILITY COORDINATION	
2.1	Utility Coordination & Meetings (3)	\$8,340
2.2	Utility Locating & Verification	\$5,050
2.3	Utility Strip Map	\$2,710
2.4	Utility Relocation Design Coordination	\$5,660
2.5	Prepare Utility Clearance & Service Request Letters	\$2,290
Subtotal 2	PRIVATE UTILITY COORDINATION	\$24,050
3	PROGRESS MEETINGS	
3.1	Monthly Progress Meetings (9 General, 1 Aesthetic)	\$7,750
3.2	Comment Resolution Meeting (5)	\$4,550
Subtotal 3	PROGRESS MEETINGS	\$12,300
4	PUBLIC & STAKEHOLDER MEETINGS	
4.1	Public Information Meetings (4)	\$7,640
4.2	Stakeholder Information Meetings (15)	\$8,740
Subtotal 4	PUBLIC & STAKEHOLDER MEETINGS	\$16,380
5	PROJECT MANAGEMENT	
5.1	Project Monitoring	\$20,400
5.2	Design Quality Control Plan	\$5,120
5.3	Subconsultant Coordination	\$18,200
Subtotal 5	PROJECT MANAGEMENT	\$43,720
6	PLANS, SPECIFICATIONS & ESTIMATES	
6.1	Plans	\$151,210
6.1A	Paving Plans	\$61,470
	General, Typical Section, Geometric, Details	\$17,550
	Removal Plans	\$13,920
	Paving Plan & Profile	\$30,000
6.1B	Drainage Plans	\$21,480
	Drainage Study	
	Drainage Plans	\$21,480
6.1C	Traffic Signal Plans	
6.1D	Lighting & Electrical Plans	
6.1E	Striping & Signing Plans	\$8,420

6.1F	Hardscape, Landscape & Irrigation Plans	
6.1G	Monumentation & Signage Plans	
6.1H	Water Plans	\$53,780
	Arizona Avenue Water Improvements	\$23,640
	Frye Road Water Improvements	\$30,140
6.1I	Sequencing Plans	\$6,060
6.2	Specifications	\$5,660
6.3	Cost Estimates	\$7,980
Subtotal 6	PLANS, SPECIFICATIONS & ESTIMATES	\$164,850
7	SUBMITTALS	
7.1	15% Submittal	\$3,740
7.2	30% Submittal	\$3,740
7.3	60% Submittal	\$3,740
7.4	90% Submittal	\$3,740
7.5	100% Submittal	\$3,740
7.6	Final Submittal	\$3,740
Subtotal 7	SUBMITTALS	\$22,440
8	POST DESIGN SERVICES	
8.1	Pre-Bid Meeting	\$960
8.2	Bidder Questions & Addenda	\$3,400
Subtotal 8	POST DESIGN SERVICES	\$4,360
	SUBTOTAL DIRECT LABOR (BASIC SERVICES)	\$290,660

A. BASIC SERVICES (SUBCONSULTANTS)

	FIRM/TASK	COST
	J2 Engineering	\$91,707
	3.1 Monthly Progress Meetings	\$2,357
	3.2 Comment Resolution Meetings	\$1,179
	4.1 Public Information Meetings	\$2,193
	4.2 Stakeholder Meetings	\$1,768
	6.1B Drainage Study	\$6,500
	6.1F Hardscape, Landscape & Irrigation Plans	\$63,112
	6.2 Specifications	\$5,603
	6.3 Cost Estimates	\$7,500
	8.1 Pre-bid Meeting	\$295
	8.2 Addenda Preparation	\$1,200
	Lisa Ranzenberger	\$6,450
	6.1G Monument & Signage Plans	\$5,450
	6.2 Specifications	\$1,000

Wright Engineering	\$60,310
6.1C Traffic Signal Plans	\$24,025
6.1D Lighting & Electrical Plans	\$31,300
6.2 Specifications	\$2,985
6.3 Cost Estimates	\$2,000
SUBTOTAL SUBCONSULTANTS (BASIC SERVICES)	\$158,467
TOTAL BASIC SERVICES (DIRECT LABOR & SUBCONSULTANTS)	\$449,127

B. SPECIAL SERVICES (DIRECT LABOR)

TASK	DESCRIPTION	COST
9	DESIGN SURVEY	
9.1	Ground Survey	\$6,095
9.2	Topographic Survey	\$24,225
9.3	Benchmarks	\$1,880
Subtotal 9	DESIGN SURVEY	\$32,200
10	UTILITY VERTICAL ELEVATION VERIFICATION (POTHOLES)	
10.1	Utility Potholing (100)	
Subtotal 10	UTILITY VERTICAL ELEVATION VERIFICATION (POTHOLES)	\$0
11	TRAFFIC ENGINEERING	
11.1	FHWA Compliance	
11.2	Traffic Study	
Subtotal 11	TRAFFIC ENGINEERING	\$0
12	GEOTECHNICAL	
12.1	Geotechnical Subsurface Exploration & Laboratory Testing	
12.2	Geotechnical Report	
Subtotal 12	GEOTECHNICAL	\$0
13	VISIONING/BRANDING/MASTER PLANNING	
13.1	Visioning/Branding/Master Planning	\$8,940
Subtotal 13	VISIONING/BRANDING/MASTER PLANNING	\$8,940
14	RIGHT OF WAY COORDINATION	
14.1	Right of Way Strip Map	\$9,760
14.2	Legal Descriptions (25)	\$18,620
14.3	Final ROW Documents	\$2,290
Subtotal 14	RIGHT OF WAY COORDINATION	\$30,670
15	PERMITTING	
15.1	MCESD Permit	\$4,060

AZ Ave. Imp. (Frye Rd to Pecos Rd)

ST1607.201

Page 31 of 33

Subtotal 15	VISIONING/BRANDING/MASTER PLANNING	\$4,060
16	AERIAL ORTHOPHOTO	
16.1	Aerial Orthophoto	\$1,500
Subtotal 16	AERIAL ORTHOPHOTO	\$1,500
	SUBTOTAL DIRECT LABOR (SPECIAL SERVICES)	\$77,370

B. SPECIAL SERVICES (SUBCONSULTANTS)

	FIRM/TASK	COST
	J2 Engineering	\$33,000
	11.2 Traffic Study	\$26,500
	13.1 Visioning/Branding/Master Planning	\$6,500
	LISA RANZENBERGER	\$2,600
	13.1 Visioning/Branding/Master Planning	\$2,600
	RAMM	\$7,500
	12.1 Geotechnical Subsurface Exploration & Lab Testing	\$5,000
	12.2 Geotechnical Report	\$2,500
	CARDNO	\$75,100
	10.1 Utility Vertical Elevation Verification-Potholing(100)	\$75,100
	SUBTOTAL SUBCONSULTANTS (SPECIAL SERVICES)	\$118,200
	SUBTOTAL SPECIAL SERVICES (DIRECT LABOR & SUBCONSULTANTS)	\$195,570

ALLOWANCES (SPECIAL SERVICES)	
Reimbursable Allowance	\$10,000
ESA Phase I Allowance (3 @ \$6,750ea)	\$20,250
T & D Owners Allowance	\$67,500
MUD Owners Allowance	\$7,500
TOTAL ALLOWANCES	\$105,250
TOTAL SPECIAL SERVICES (SUBTOTAL + ALLOWANCES)	\$300,820

TOTAL FEE (DIRECT LABOR + SUBCONSULTANTS + ALLOWANCES)	\$749,947
---	------------------

EXHIBIT C

Design Consultant Immigration Warranty
To Be Completed by Design Consultant Prior to Execution of Contract

A.R.S. § 41-4401 requires as a condition of your contract verification of compliance by the Design Consultant and subcontractors with the Federal Immigration and Nationality Act (FINA), all other Federal immigration laws and regulations, and A.R.S. § 23-214 related to the immigration status of its employees.

By completing and signing this form the Design Consultant shall attest that it and all subcontractors performing work under the cited contract meet all conditions contained herein.

Project Number/Division:	ST1607.201
Name (as listed in the contract):	RAK Development Corporation dba Kruzer Consulting Group
Street Name and Number:	2150 S. Country Club Dr, Ste 34
City: Mesa State: AZ Zip Code: 85210	

I hereby attest that:

1. The Design Consultant complies with the Federal Immigration and Nationality Act (FINA), all other Federal immigration laws and regulations, and A.R.S. § 23-214 related to the immigration status of those employees performing work under this contract;
2. All subcontractors performing work under this contract comply with the Federal Immigration and Nationality Act (FINA), all other Federal immigration laws and regulations, and A.R.S. § 23-214 related to the immigration status of their employees; and
3. The Design Consultant has identified all Design Consultant and subcontractor employees who perform work under the contract and has verified compliance with Federal Immigration and Nationality Act (FINA), all other Federal immigration laws and regulations, and A.R.S. § 23-214.

Signature of Design Consultant (Employer) or Authorized Designee:


Printed Name: Kirk Kruzer

Title: President

Date (month/day/year): 5/10/16