



**PURCHASING ITEM  
FOR  
COUNCIL AGENDA  
Memo No. CP15-005**

**1. Agenda Item Number:**

**20**

**2. Council Meeting Date:**  
August 14, 2014

**TO: MAYOR & CITY COUNCIL**

**3. Date Prepared:** July 22, 2014

**THROUGH: CITY MANAGER**

**4. Requesting Department:** Transportation & Development

**5. SUBJECT:** Project Agreement with Ritoch-Powell & Associates, for design services of Washington Street

**6. RECOMMENDATION:** Staff recommends City Council award a Project Agreement to Ritoch-Powell & Associates, for design services, for street and utility improvements associated with the Alta Chandler development, located along Frye Road and east of Washington Street, Project No. ST1406.201, pursuant to Annual Engineering Services Contract, No. EN1002.101, in an amount not to exceed \$191,855.89.

**7. BACKGROUND/DISCUSSION:** The recently approved Alta Chandler development located along Frye Road and east of Washington Street have brought forward the need to improve the street and utility infrastructure in the vicinity.

The project scope includes a new roadway typical section for Washington Street from Frye Road to Elgin Street with two (2) 11-foot wide lanes, bike lanes in each direction, vertical curb and gutter, 8-foot wide sidewalks, curb "bump outs", landscape treatment with a scaled down version of the South Arizona Avenue Corridor Design Standards, Americans with Disabilities Act compliant pedestrian ramps, lighting, storm water conveyance, signing and marking, and parking. The scope also includes utility improvements within and slightly beyond the identified Washington Street corridor such as new water and sewer pipelines in Washington Street, dry utility ductbanks in Washington Street, water line replacements along Frye Road, and a new sewer in Elgin Street.

**8. EVALUATION:** This project is being performed under the Annual Engineering Services Contract, No. EN1002.101, with Ritoch-Powell & Associates. The costs proposed for this project have been evaluated by staff and are determined to be reasonable. The contract completion time is 150 calendar days following Notice to Proceed.

**9. FINANCIAL IMPLICATIONS:**

Cost: \$191,855.89  
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>
411.3310.6517.0.6GG613	GO BONDS	South Arizona Ave Corridor Imp.	Yes	\$94,201.24
611.3910.6813.0.6WW332	Wastewater Bonds	Wastewater System Upgrades w/Street Projects	Yes	\$63,888.01
601.3820.6714.0.6WA110	Water Bonds	Water System Upgrades w/Street Projects	Yes	\$33,766.64

**10. PROPOSED MOTION:** Move City Council award a Project Agreement to Ritoch-Powell & Associates, for design services, for street and utility improvements associated with the Alta Chandler development, located along Frye Road and east of Washington Street, Project No. ST1406.201, pursuant to Annual Engineering Services Contract, No. EN1002.101, in an amount not to exceed \$191,855.89.

APPROVALS

11. Requesting Department



Daniel W. Cook, Interim City Engineer/ Transportation Manager

13. Department Head



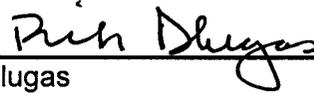
R.J. Zeder, Transportation & Development Director

12. Transportation & Development



Bob Fortier, Capital Projects Manager

14. City Manager



Rich Dlugas

for



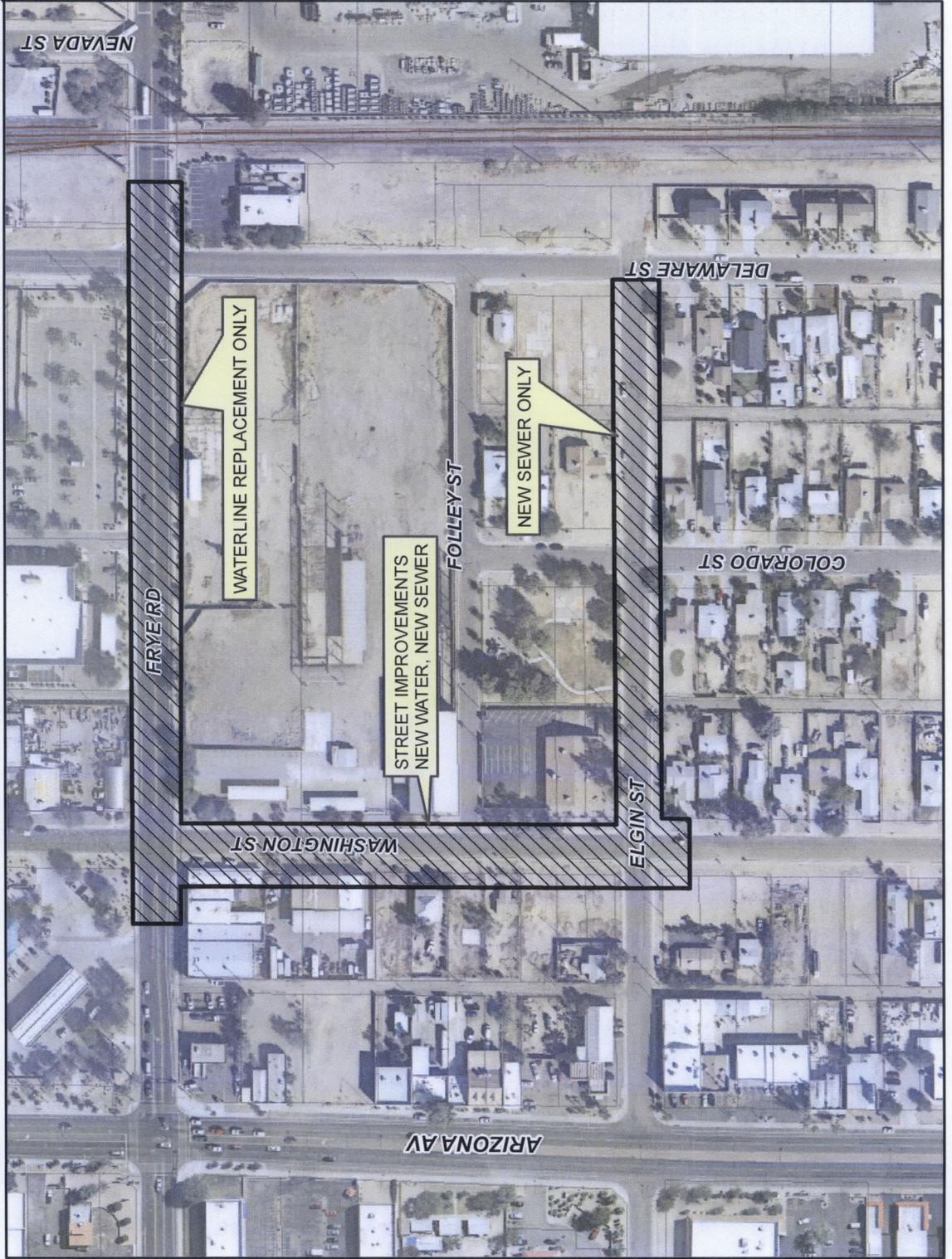
# SOUTH WASHINGTON STREET PROJECT NO. ST1406.201



MEMO NO. CP15-005



PROJECT SITE



**PROJECT AGREEMENT  
PURSUANT TO ANNUAL CONTRACT NO. EN1002-101**

**PROJECT AGREEMENT NO: ST1406.201**

This PROJECT AGREEMENT is made this \_\_\_\_ day of \_\_\_\_\_, 2014, by and between the City of Chandler, a municipal corporation (hereinafter referred to as "CITY") and Ritoch-Powell & Associates, (hereinafter referred to as "Annual Consultant") and is a project agreement entered into pursuant to Annual Contract No. EN1002-101.

CITY and Ritoch-Powell & Associates, in consideration of the mutual covenants herein set forth, agree as follows:

**ARTICLE 1 - DESCRIPTION OF WORK:**

This project is South Washington Street, Project Number ST1406.201. The scope of work consists of streetscape improvements for Washington Street from Frye Road to Elgin Street. Washington Street improvements include wet and dry utility improvements in Washington Street, Frye Road and Elgin Street, all as more particularly set forth in Exhibit A attached hereto and incorporated herein by reference.

The Annual Consultant shall not accept any change of scope, or change in contract provisions, unless issued in writing, as a contract amendment and signed by the Contract Administrator.

**ARTICLE 2 - CONTRACT PRICE:**

CITY shall pay Annual Consultant for completion of the Work in accordance with the Contract Documents a fee not to exceed One Hundred Ninety One Thousand Eight Hundred Fifty Five Dollars and Eighty Nine Cents (\$191,855.89) determined and payable as set forth in Annual Contract EN1002-101 and Exhibit B attached hereto and made a part hereof by reference.

**ARTICLE 3 - CONTRACT TIME:**

The contract time is One Hundred Fifty calendar days and Annual Consultant agrees to complete all work within One Hundred Fifty (150) calendar days of the date CITY issues a Notice to Proceed.

**ARTICLE 4 - GENERAL:**

This Project Agreement is entered into pursuant to Annual Contract No. EN1002-101 and the terms and conditions contained therein are incorporated herein by reference as if set forth in full.

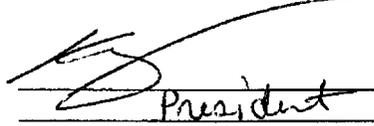
IN WITNESS WHEREOF, the parties hereto have executed this Project Agreement on the day and year first written above.

This Project Agreement will be effective on this \_\_\_\_\_ day of \_\_\_\_\_, 2014.

CITY OF CHANDLER

FOR THE ANNUAL:

\_\_\_\_\_  
MAYOR DATE:

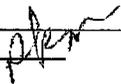
By:   
Title: President

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

ADDRESS FOR NOTICE  
Mr. Karl Obergh  
Ritoch-Powell & Associates  
5727 N. 7th St., Ste. 120  
Phoenix, AZ 85014

APPROVED AS TO FORM:

Phone: 602-263-1177  
Fax: 602-277-6286

\_\_\_\_\_  
City Attorney By: 

ATTEST:

\_\_\_\_\_  
City Clerk

## EXHIBIT A SCOPE OF WORK

### BACKGROUND

CITY of Chandler's Project No. ST1406.201 will construct streetscape improvements for Washington Street from Frye Road to Elgin Street. Washington Street improvements include wet and dry utility improvements in both Washington Street and Frye Road.

Proposed Washington Street improvements consist of:

- Curb "bump outs" at all intersections and construct new roadway typical section: Two 11' lanes, 5.5' bike lanes in each direction, vertical curb and gutter, and 8' attached sidewalk.
- Parallel parking on the east side of Washington Street and angled parking on the west side.
- Full depth pavement reconstruction. All other pavement will remain in place with a microseal surface.
- Landscape treatment in public right-of-way shall comply with a scaled down version of the the South Arizona Avenue Corridor Design Standards.
- Curb, gutter, sidewalk along Washington
- ADA ramps at Frye/Washington, Washington/Foley, Washington/Elgin and Frye/Delaware intersections
- Roadway lighting
- Storm water conveyance system to existing storm drain trunk lines
- Signing and marking.

Proposed utility improvements consist of:

- Replace existing waterline in Frye Road from UPRR to Arizona Avenue.
- New water line in Washington Street from Frye Road to Elgin Street, including stub out for Alta Chandler development.
- New sewer line in Washington Street from Frye Road to Elgin Street.
- New sewer line in Elgin Street from Washington Street to Delaware Street
- Installation of new fire hydrants to comply with City spacing requirements.
- Reconnection / replacement of existing water services and laterals throughout project limits.
- Dry utility duct bank in Washington Street.

**GENERAL REQUIREMENTS** – DESIGN CONSULTANT work shall conform to the latest edition of the following:

- CITY of Chandler Standard Details and Specifications
- CITY of Chandler Technical Design Manual #1: Water System Design
- CITY of Chandler Technical Design Manual #2: Wastewater and Reclaimed Water 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
- MAG Uniform Standard Specifications and Details
- 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

### DATA COLLECTION

1. CITY shall provide, at no cost to DESIGN CONSULTANT, the following existing information, but not necessarily limited to, as-built drawings, related design studies and reports, geotechnical

investigations, traffic data and projections, maintenance records, and drawings of developments planned within the project area.

#### **PUBLIC UTILITY COORDINATION**

1. DESIGN CONSULTANT shall obtain and prepare utility base map of utility companies', private developments', and City's existing and proposed utilities in accordance with the latest version of the Arizona Utility Coordinating Committee "Public Improvement Project Guide" (PIPG).
2. DESIGN CONSULTANT shall coordinate with each utility company and City of Chandler Municipal Utilities Department (MUD) to identify utility companies that are planning facility upgrades prior to project construction Bid Advertisement.
3. DESIGN CONSULTANT shall work with the CITY's Utility Coordinator to coordinate the early determination of facilities that may be abandoned or deactivated.
4. DESIGN CONSULTANT shall be responsible for field verifying the horizontal locations of all utilities within the project limits prior to the Preliminary (60%) design submittal. DESIGN CONSULTANT shall prepare base maps detailing all existing utility data and transmit them to the utility companies for verification and comment concerning the utility locations. DESIGN CONSULTANT shall incorporate the utility company comments into the base maps.
5. DESIGN CONSULTANT shall specifically identify utility conflicts, with input from utility companies, which might affect alignment or grade and recommend alignment alternatives.
6. DESIGN CONSULTANT shall send a letter to each utility company defining the project scope, design schedule and construction schedule. DESIGN CONSULTANT shall send one set 60%, 95%, and Final plans to each utility company for their review with a request for written response from each company to determine the disposition of their utility as it relates to the planned roadway improvements.
7. DESIGN CONSULTANT shall provide the utility companies with electronic base files and coordinate with the utilities to facilitate their relocation design. DESIGN CONSULTANT shall request a letter from each utility impacted by the planned roadway improvement identifying a time line for relocating their facilities.
8. For each submittal to the utility companies, DESIGN CONSULTANT shall provide the CITY's Project Manager and Utility Coordinator each with a written record of receipt.
9. DESIGN CONSULTANT shall work with the CITY's Utility Coordinator to facilitate utility land coordination meetings at 60% and 95% submittal.
10. DESIGN CONSULTANT shall review all utility plans for constructability.
11. DESIGN CONSULTANT shall ensure all utility relocations have been designed and coordinated with proposed CITY and that relocations will not impact CITY's proposed construction schedule prior to submittal of Final (100%) construction documents,

#### **MUD COORDINATION**

1. DESIGN CONSULTANT shall participate in three (3) MUD coordination meetings regarding proposed alignments and profiles for new water, sewer, and dry utility facilities.

#### **DEVELOPER COORDINATION**

1. DESIGN CONSULTANT shall provide electronic base files and coordinate roadway, drainage, and landscape designs with adjacent Alta Chandler development plans.

#### **PROGRESS MEETINGS**

1. DESIGN CONSULTANT shall hold the following progress meetings at the CITY of Chandler offices or project site:

- a. Monthly Progress Meetings (6)
  - b. Comment Resolution Meetings (3) within two weeks after redlines are returned to DESIGN CONSULTANT for 60%, 95%, Final submittal
  - c. Utility Coordination Meetings (4) after 60% submittal.
  - d. Aesthetics Review Meeting (1) after 60% submittal.
2. DESIGN CONSULTANT shall prepare and distribute meeting minutes with Action Items for each Progress, Comment Resolution and Utility Coordination Meeting.

#### **PUBLIC MEETINGS**

1. DESIGN CONSULTANT shall participate in two (2) Public Information Meetings.
2. DESIGN CONSULTANT shall be responsible for the following:
  - a. Develop display boards showing proposed improvements, existing right-of-way, proposed right-of-way and proposed typical section
  - b. Prepare a meeting sign-in sheet
  - c. Prepare and make available a public comment sheet at each meeting
  - d. Provide snack foods and beverages for each public meeting
3. CITY shall be responsible for the following:
  - a. Secure a location and time for each public meeting
  - b. Prepare and distribute mailers/flyers to those residents within and adjacent to the project corridor, if required
  - c. Prepare newspaper notice of meeting, if required

#### **PROJECT MANAGEMENT**

1. DESIGN CONSULTANT shall prepare regular monthly progress reports, perform monthly budget and schedule monitoring, perform project administration tasks and manage sub-consultants.

#### **DESIGN SURVEY**

1. 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. Existing roadway centerline shall be established through Maricopa County Recorder's maps and land surveys in conjunction with existing street monuments.
2. DESIGN CONSULTANT shall perform a full topographic survey of all existing features including but not limited to curb and gutter, median curb, catch basins, scuppers, culverts, box culverts, 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, plants and shrubs.
3. DESIGN CONSULTANT survey limits are:
  - a. Washington Street – Frye Road to Elgin Street
  - b. Frye Road - Arizona Avenue to UPRR
  - c. Elgin Street – Arizona Avenue to Washington Street
4. DESIGN CONSULTANT shall take Frye Road, Washington Street, and Elgin Street centerline pavement, gutter pan, top of curb, and existing ground elevations at 50 foot intervals within the limits stated in Item B9.3 to the existing right-of-way lines.

5. DESIGN CONSULTANT shall take elevations along driveway centerline and edges at 10' intervals beginning at the back of curb to 50 feet beyond the back of curb.
6. DESIGN CONSULTANT shall take elevations at the inverts of catch basins, manholes, and water valve nuts within the project limits. DESIGN CONSULTANT shall establish two benchmarks within half mile each direction along Washington Street.
7. DESIGN CONSULTANT shall provide a sketch showing each benchmark with a minimum of 3 ties to features that will not be disturbed by construction.

#### **RIGHT-OF-WAY SURVEY**

1. At Preliminary (60%) Design, DESIGN CONSULTANT shall prepare a right-of-way strip map overlain on an aerial photograph showing existing right-of-way. The right-of-way strip map is for the purpose of identifying property boundaries to prepare legal descriptions and exhibits for new property acquisitions for road right-of-way, future bus bays, drainage easements, temporary construction easements, sight triangle easements and utility easements. DESIGN CONSULTANT shall include a list of identified properties and property rights. DESIGN CONSULTANT shall provide CITY with list of properties requiring title reports for acquisitions.
2. DESIGN CONSULTANT shall provide legal descriptions and exhibits for new property acquisitions for right-of-way, temporary construction easements, sight vision easements and utility easements. CITY shall provide title search documents with Schedule "B" attachments for each parcel requiring new right of way or easement. DESIGN CONSULTANT scope and fee based on preparing eight (8) temporary construction easement descriptions with associated exhibits and closure data. Additional legal descriptions will be reimbursed from Allowance.
3. DESIGN CONSULTANT shall submit final right-of-way documents to the CITY between 60% and 95% design completion. These documents shall include legal descriptions, exhibits, parcel maps, right-of-way strip maps, a draft drainage report and 95% design plans for all acquisitions and easements.

#### **PLANS, SPECIFICATIONS AND ESTIMATES**

1. DESIGN CONSULTANT shall prepare plans, specifications and estimates in accordance with CITY standards. The plans shall include, but not be limited to:

Cover Sheet

General Notes Sheets

Design Data and Index of Sheets

Paving Plans/Profiles (1"=20'H/1"=2' V) – See Item B 12.0 for additional information

Drainage Plans (1"=20'H/1"=2' V) – See Item 13.0 for additional information

Striping and Signing Plans (1"=40') – See Item 15.0 for additional information

Street Light Plans – See Item 16.0 for additional information

Landscape and Irrigation Plans – See Item 17.0 for additional information

Storm Water Pollution Prevention Plans – see Item 18.0 for additional information

Waterline Plans (1"=20' H/1"=2' V) – See Item 19.0 for additional information.

Sewer Plans (1"=20' H/1"=2' V) – See Item 19.0 for additional information.

2. DESIGN CONSULTANT shall submit 15% concept layout showing proposed improvements. Concept layout will be submitted on roll plot with aerial background.
3. DESIGN CONSULTANT shall plans at the 60%, 95%, and Pre-Final stages.
4. At the 60% and 95% plan submittals, DESIGN CONSULTANT shall submit a CD containing base files in AutoCAD .DWG format, and AutoCAD .DWF (Design Web Format) exports of each plan sheet and scanned .PDF images of each plan sheet.

5. At the completion of the design, DESIGN CONSULTANT shall submit a CD containing complete improvement base files in AutoCAD .DWG format and scanned .PDF images of each plan sheet (signature set.)
6. Specifications will be in accordance with the MAG Standard Specifications and CITY of Chandler Standard Specifications. DESIGN CONSULTANT shall supply technical specifications for all items not adequately covered by the standard specifications.
7. DESIGN CONSULTANT shall prepare cross sections and earthwork quantities determined, with the intent to provide a balanced earthwork project.
8. DESIGN CONSULTANT shall prepare opinions of probable cost for all pay items per the standard specifications and technical specifications, except that volumetric measurements will not be used for pay items.
9. DESIGN CONSULTANT shall review the CITY's comments and complete the comment resolution forms provided by the CITY. DESIGN CONSULTANT will 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 two days prior to the Comment Resolution Meeting.
10. DESIGN CONSULTANT shall return all redline plans and review comments received from CITY for each plan submittal with subsequent plan submittal.
11. DESIGN CONSULTANT shall be responsible for delivering to the CITY a complete set of constructible plans and shall be responsible for ensuring constructability of such plans, including, but not limited to, completion of right-of-way, TCE, and drainage easement acquisitions, and completion of utility relocation design.

#### **PAVING PLAN/PROFILES**

1. DESIGN CONSULTANT shall prepare Typical Roadway Sections, Geometric Layout, Paving Plan & Profile Sheets and Cross Sections at 50' intervals for a minor arterial (CITY Supplied Typical Section) for Washington Street.
2. DESIGN CONSULTANT shall prepare plan and profile plans at a scale of 1"=20' horizontal and 1"=2' vertical showing survey control, topographic mapping, centerline stationing, curb and gutter, sidewalk, handicap ramps, driveways, turn lanes, intersecting streets, utilities, existing right-of-way, proposed right-of-way, existing utilities, and construction notes. Profiles shall show centerline stationing, existing ground, proposed curb and gutter grades, benchmarks and underground utilities.
3. DESIGN CONSULTANT shall prepare calculations, plans, specifications, quantity determinations and opinion of probable costs. Submittals shall be made for 60%, 95%, Pre-Final and the Final PS&E package.

#### **DRAINAGE REPORT & PLANS/PROFILES**

1. DESIGN CONSULTANT shall prepare a drainage analysis and perform calculations to define the new runoff expected as a result of the Washington Street improvements.
2. DESIGN CONSULTANT shall prepare Draft Drainage Report to accompany the 60% submittal. The Draft Drainage Report shall identify recommended improvements, proposed storm drain systems, and tie in points. This report shall document all calculations certifying the proposed design meets design criteria.
3. DESIGN CONSULTANT shall incorporate comments received from the Draft Drainage Report into a Final Drainage Report between the 60% and 95% plan submittals.
4. DESIGN CONSULTANT shall prepare plans, specifications, quantity determinations and opinion of probable costs. Submittals shall be made for 60%, 95%, Pre-Final and the Final PS&E package.

## **STRUCUTRAL PLANS**

1. Not used

## **LIGHTING**

1. Lighting services to be provided by Southwest Traffic Engineers, LLC. See attached scope and fee.

## **STRIPING AND SIGNING PLANS**

1. Striping and Signing Plan services to be provided by Southwest Traffic Engineers, LLC. See attached scope and fee.

## **LANDSCAPE, HARDSCAPE & IRRIGATION PLANS**

1. Landscape, Hardscape and Irrigation Plan services to be provided by J2 Engineering and Environmental. See attached scope and fee.

## **STORMWATER POLLUTION PREVENTION PLANS**

1. DESIGN CONSULTANT shall prepare Storm Water Pollution Prevention Plan (SWPPP). The SWPP shall meet most current Arizona Pollutant Discharge Elimination System (AZPDES) General Permit for Discharge from Construction Activities to Waters of the United States. The SWPP shall include a completed checklist (<http://www.azdeq.gov/enviroin/water/permits/download/cswppp.pdf>) that identifies the location of the required SWPPP components outlined in the Construction General Permit. Erosion and Sediment Control Plans meeting the requirements of the CITY shall also be developed and submitted. A copy of the SWPPP and Erosions and Sediment Control Plans shall be provided to the CITY and the Contractor.
2. DESIGN CONSULTANT shall prepare calculations, plans, specifications, quantity determinations and opinion of probable costs. Submittals shall be made for 60%, 95%, Pre-Final and the Final PS&E package.

## **WATERLINE, SANITARY SEWER, AND DRY UTILITY**

1. DESIGN CONSULTANT shall prepare waterline plans for a new 12" diameter waterline in Frye Road and a new 16" diameter waterline in Washington Street as well as to vertically realign existing waterlines under new storm drain pipes and culverts.
2. DESIGN CONSULTANT shall prepare and submit Maricopa County Environmental Services Department Approval to Construct (ATC) application and required Engineering Design Report. CITY will provide all permit fees at the time of submittal.
3. DESIGN CONSULTANT shall prepare sewer line plans for a new 8" diameter sewer line in Washington Street Frye Road to Elgin Street and In Elgin Street (Washington to Delaware).
4. DESIGN CONSULTANT shall prepare dry utility plans for a new utility duct bank in Washington Street.

## **GEOTECHNICAL**

1. Geotechnical services to be provided by ATEK. See attached scope and fee.

## **PHASE I ENVIRONMENTAL SITE ASSESSMENT (ESA)**

1. Not Used

**UTILITY LOCATING SERVICES (POTHOLING)**

1. 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".
2. During the 60% design phase, DESIGN CONSULTANT shall develop a suggested pothole list that identifies coordinates, stationing and offset. DESIGN CONSULTANT will provide the list to utility companies affected by the project, and facilitate coordination of a master pothole list. Twenty-Five (25) total potholes are anticipated. CITY approved potholes will be reimbursed from Allowance.
3. Prior to completion of the 60% plans, DESIGN CONSULTANT shall provide vacuum excavation potholes (testholes) on existing subsurface utilities at locations identified on the master pothole list. Pertinent pothole data will be presented in spreadsheet format on a standard "Testhole Data Summary" form that includes the depth, horizontal and vertical location, size and material composition of the utility line exposed.
4. DESIGN CONSULTANT shall initially stake the pothole location in white paint 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.
5. Vacuum excavation potholing will include mobilization, set-up, traffic control (excluding uniformed police officer, special barricading, permit fees or inspections required by any governmental agencies), 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 CITY of Chandler permit for potholing.
6. For identified water and sewer lines, while the pothole is excavated, representatives from the CITY's Water and Sewer Department and DESIGN CONSULTANT will perform visual inspection of the condition of the lines. Rehabilitation or replacement recommendations will be developed by the MUD representatives and DESIGN CONSULTANT and provided to the CITY's project manager.

**CONSTRUCTION DOCUMENTS**

DESIGN CONSULTANT shall prepare the construction documents for each design submittal listed in the table below.

Construction Document	60% Stage	ROW	95% Stage	Final PS&E
Face Sheet	F		F	S
Design Sheet/Index	P		F	S
Special Detail Drawings	P		F	S
Typical Roadway Sections	P		F	S
Geometric Configuration	P		F	S
Paving Plan & Profile Sheets	P		F	S
Drainage Plans & Details	P		F	S
Erosion and Sediment Control Plans & Details	P		F	S
Intersection Plans & Details	P		F	S
Utility Plan/Profile/Details	P		F	S
Signing and Pavement Marking Plans & Details	P		F	S
Lighting Plans & Details	P		F	S
Landscape Plans & Details	P		F	S
Roadway Cross Sections	P		F	S
Quantity & Opinion of probable cost	P		P	F
Technical Specifications	P		P	S
Drainage Report	S	F	S	

Geotechnical Report				
Stormwater Pollution Prevention Plan				F
Right-of-Way Legal Descriptions		S		
Right-of-Way Strip Map	F	F	F	F

P – Denotes Preliminary, F – Denotes Final, S – Denotes Sealed

**PRELIMINARY (60%) PLANS**

- DESIGN CONSULTANT shall submit to the CITY six (6) full size sets of construction plans, six (6) half size sets of construction plans, three (3) copies of the draft drainage report, three (3) copies of the draft geotechnical report, two (2) copies of the "Testhole Data Summary Sheet", one (1) copy of the opinion of probable cost, two (2) copies of the outline technical specifications, two (2) copies of the preliminary right-of-way strip map. In addition, DESIGN CONSULTANT shall send one (1) half size set of construction plans, along with conflict letters and a copy of the "Testhole Data Summary Sheet" to each utility company affected by the project.
- DESIGN CONSULTANT shall submit a CD containing complete improvement base files in AutoCAD .DWG format, and AutoCAD .DWF (Design Web Format) exports of each plan sheet and scanned .PDF images of each plan sheet.

**RIGHT-OF-WAY SUBMITTAL**

- DESIGN CONSULTANT shall submit two (2) copies of the final drainage report, the final legal descriptions for acquisitions, drainage easements, sight vision easements, utility easements, and TCEs, and two (2) copies of the final right-of-way strip map. Detention volumes will be shown on drainage easement exhibits.

**PRELIMINARY (95%) PLANS**

- DESIGN CONSULTANT shall incorporate any changes, corrections and/or additions as a result of the preliminary plan review. DESIGN CONSULTANT shall submit to the CITY 60% redlines, six (6) full size sets of construction plans, six (6) half-size sets of construction plans, three (3) copies of the sealed drainage report, three (3) copies of the final geotechnical report, one (1) copies of the construction opinion of probable cost, two (2) copies of the technical specifications, one (1) copy of the final right-of-way strip map. In addition, DESIGN CONSULTANT shall send one (1) half size set of construction plans, along with conflict letters to each utility company affected by the project.
- DESIGN CONSULTANT shall submit a CD containing complete improvement base files in AutoCAD .DWG format, and AutoCAD .DWF (Design Web Format) exports of each plan sheet and scanned .PDF images of each plan sheet.

**FINAL PS&E CONSTRUCTION DOCUMENTS**

- DESIGN CONSULTANT shall incorporate any changes, corrections and/or additions as a result of the 95% plan review. DESIGN CONSULTANT shall submit to the CITY 95% redlines, six (6) full size sets of construction plans, six (6) half-size sets of construction plans, one (1) sealed set of technical specifications, one (1) reproducible 4 mil Mylar with cover sheet signed by ADEQ or Maricopa Environmental Services, if applicable, one (1) copy of the final construction opinion of probable cost and bid schedule, one (1) copy of the final right-of-way strip map.
- DESIGN CONSULTANT shall submit a CD containing complete improvement base files in AutoCAD .DWG format, and AutoCAD .DWF (Design Web Format) exports of each plan sheet and scanned .PDF images of each plan sheet.

**POST DESIGN SERVICES**

- DESIGN CONSULTANT shall attend Pre-bid Meeting, respond to prospective bidders questions and prepare Addendum as required.
- DESIGN CONSULTANT shall perform shop drawing reviews and respond to Requests for Information (RFIs).

## PROJECT SCHEDULE

The following schedule was developed is indexed to the notice to proceed (NTP) date.

Data Collection	NTP + 1 weeks
Submit 15%	NTP + 2 weeks
City Review	NTP + 3 weeks
60% Plans	NTP + 10 weeks
City Review	NTP + 12 weeks
Submit 90% Plans	NTP + 18 weeks
City Review	NTP + 20 weeks
Submit Final PS&E	NTP + 22 weeks

1. 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. 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 DESIGN CONSULTANT'S plan for getting back on schedule.

## QUALITY CONTROL

DESIGN CONSULTANT shall institute and comply with the DESIGN CONSULTANT'S Quality Control Plan established for the project.

**EXHIBIT B  
FEE SCHEDULE**

<b>CONTRACT LABOR</b>				
<u>CLASSIFICATION</u>	<u>MAN HOURS</u>	<u>BILLABLE RATES</u>		<u>LABOR COSTS</u>
Project Manager	40	150.92	\$	6,036.80
Senior PE	98	115.89	\$	11,356.73
Project Engineer	276	99.72	\$	27,521.34
Senior RLS	2	115.89	\$	231.77
RLS	22	99.72	\$	2,193.73
LSIT	42	80.85	\$	3,395.70
CADD Designer	314	67.38	\$	21,155.75
Survey Crew	40	159.01	\$	6,360.20
Clerical	46	56.60	\$	2,603.37
Total Hours	880			
			Total Direct Labor \$	<b>80,855.39</b>

<b>DIRECT AND OUTSIDE EXPENSES:</b>					
<u>Description</u>	<u>Unit</u>	<u>Unit Rate</u>	<u>Quantity</u>		<u>Total</u>
Vehicle Mileage	Miles	\$ 0.45	1,500	\$	667.50
Printing (8-1/2" x 11")	Each	\$ 0.06	500	\$	30.00
Printing (24" x 36") Bond	Each	\$ 6.00	720	\$	4,320.00
Printing (24" x 36") mylar	Each	\$ 18.00	1	\$	18.00
				Subtotal Direct and Outside Expenses \$	<b>5,035.50</b>

<b>SUBCONSULTANTS FEE</b>			
<u>Subconsultant</u>	<u>Task</u>		<u>Fee</u>
SWTE	Lighting	\$	43,328.00
J2	Landscape / Irrigation	\$	22,588.00
ATEK	Geotechnical	\$	8,549.00
		Subtotal Subconsultants Fee \$	<b>74,465.00</b>

<b>ALLOWANCES</b>			
<u>Expenses</u>	<u>Task</u>		<u>Fee</u>
Utility Locating Allowance	Utility Location (25)	\$	16,500.00
Owner Design Allowance		\$	15,000.00
		Subtotal Allowances \$	<b>31,500.00</b>

<b>TOTALS</b>	
Subtotal Transportation Labor	\$ 80,855.39
Subtotal Direct and Outside Expenses	\$ 5,035.50
Subtotal Subconsultants	\$ 74,465.00
<b>Total Contract Fee</b>	<b>\$ 160,355.89</b>
Subtotal Allowances	\$ 31,500.00
<b>Total Contract Fee &amp; Allowances</b>	<b>\$ 191,855.89</b>