Chandler · Arizona
Where Values Make The Difference

**PURCHASING ITEM**
**FOR**
**COUNCIL AGENDA**
**Memo No. CP13-171**

**1. Agenda Item Number:** 25

**2. Council Meeting Date:** April 25, 2013

**TO:** **MAYOR & COUNCIL**

**THROUGH:** **CITY MANAGER**

**3. Date Prepared:** April 10, 2013

**4. Requesting Department:** Municipal Utilities

**5. SUBJECT:** Miscellaneous Water Line Improvements

**6. RECOMMENDATION:** Staff recommends Council award a Project Agreement to Dibble Engineers for Miscellaneous Water Line Improvements pursuant to Contract No. EN1003-102, Project No. WA1307-201, in an amount not to exceed $96,613.

**7. BACKGROUND/DISCUSSION:** City staff identified three locations within the City's water distribution system that require pipe replacement. This work will improve water service and eliminate aging pipe prone to main breaks. Individual design for each of these projects has been combined to save costs on overlapping design elements. The scope of work includes completing a loop system north of downtown, locating and replacing asbestos cement (AC) pipe on Pecos Road, east of McQueen Road, and abandoning the old AC pipe on Chandler Boulevard from McQueen Road east to Cooper Road shifting water service to the newer 16" ductile iron pipe on the north side of Chandler Boulevard. The City recently encountered significant maintenance issues with AC pipe material as it ages, including two recent waterline breaks on Chandler Boulevard.

**8. EVALUATION:** On May 10, 2012, Council awarded a contract extension to Dibble Engineers for the first option year of the annual permitting, study and design for water and wastewater facilities, Contract No. EN1003-102. Staff reviewed the scope of work, billing rates and total fee for this project, compared them to historical costs, and determined they are reasonable.

**9. FINANCIAL IMPLICATIONS:**

Cost: $96,613
Savings: N/A
Long Term Costs: N/A
Fund Source:

| Acct. No.: | Fund Name: | Program Name: | CIP Funded: | Amount: |
|---|---|---|---|---|
| 601.3820.6714.6WA023 | Water Bonds | Main Replacements | Yes | $96,613 |

**10. PROPOSED MOTION:** Move Council award a Project Agreement to Dibble Engineers for Miscellaneous Water Line Improvements pursuant to Contract No. EN1003-102, Project No. WA1307-201, in an amount not to exceed $96,613, and authorize the Mayor to sign the contract documents.

**ATTACHMENTS:** Location Map, Project Agreement

**APPROVALS**

**11. Requesting Department**
John Knudson, Utilities Engineering Manager

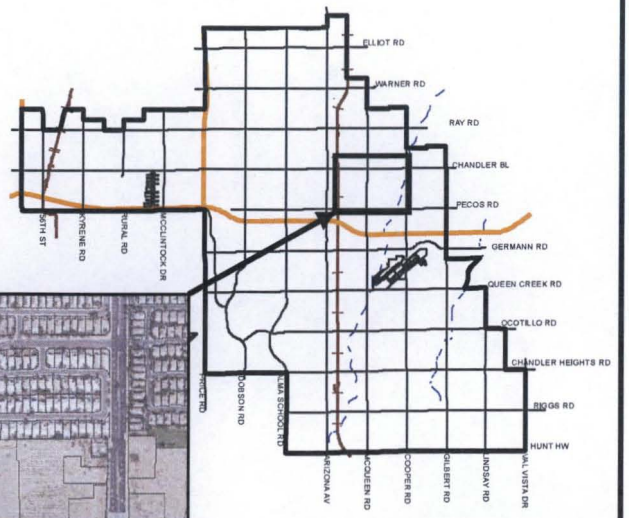
**13. Department Head**
Dave Siegel, Municipal Utilities Director

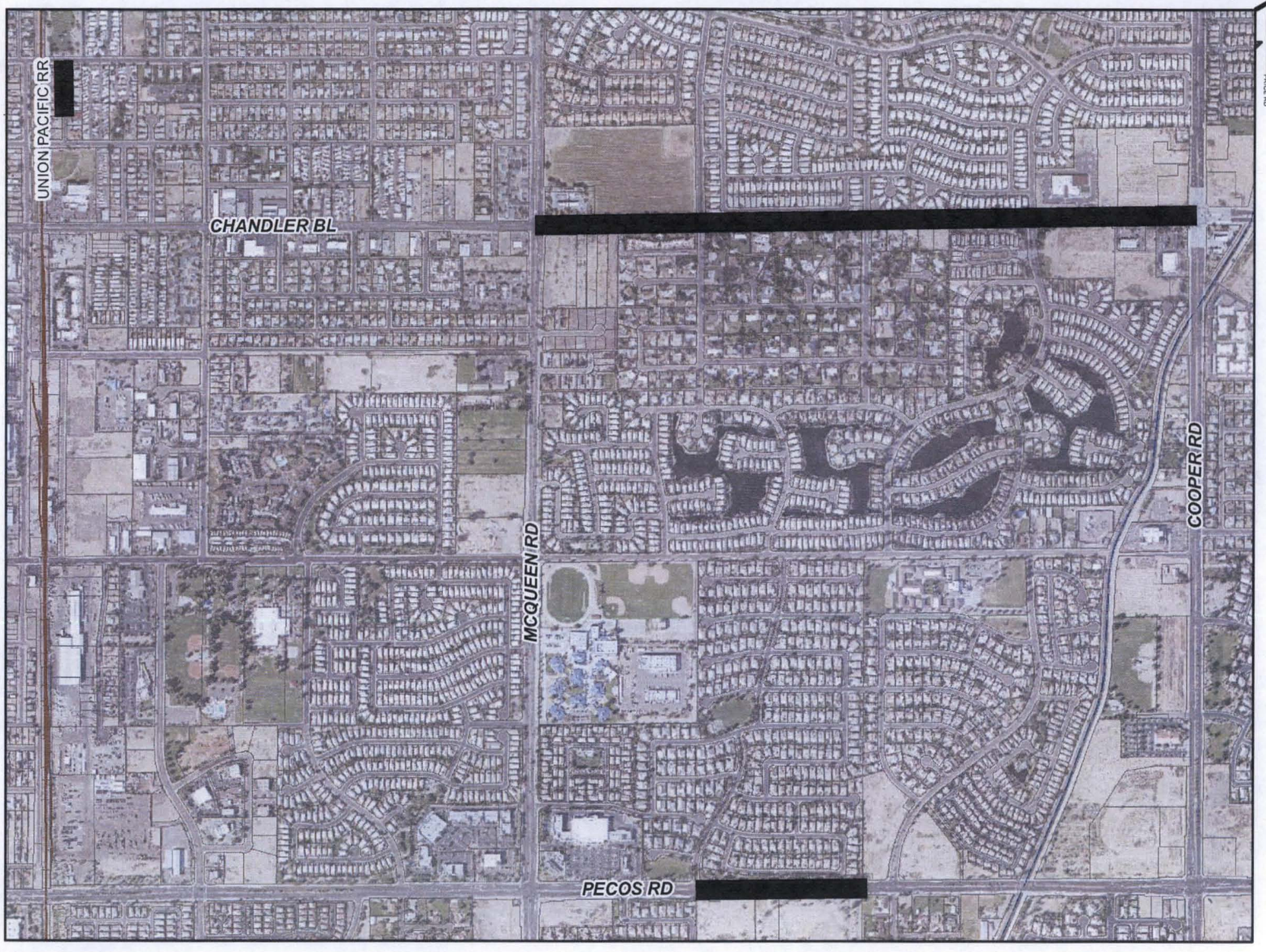
**12. Transportation & Development**
Bob Fortier, Capital Projects Manager

**14. City Manager**
Rich Dlugas

Chandler + Arizona

# MISCELLANEOUS WATER LINE IMPROVEMENTS
# PROJECT NO. WA1307-201




**MEMO NO. CP13-171**

PROJECT SITE

NTS

ChanGIS

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**PROJECT AGREEMENT**
**PURSUANT TO ANNUAL CONTRACT NO. EN1003-102**

**AGREEMENT NO: WA1307-201**

This AGREEMENT is made this _____ day of _____, 2013, by and between the City of Chandler, a municipal corporation (hereinafter referred to as "CITY") and Dibble Engineering, (hereinafter referred to as "Annual Consultant") and is a project agreement entered into pursuant to Annual Contract No. EN1003-102.

CITY and Dibble Engineering, in consideration of the mutual covenants herein set forth, agree as follows:

**ARTICLE 1 - DESCRIPTION OF WORK:**

This project is Water Line Improvements - Miscellaneous, Project Number WA1307-201. The scope of work consists of designing miscellaneous water line improvements, 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 Ninety Six Thousand Six Hundred Thirteen Dollars ($96,613) determined and payable as set forth in Annual Contract EN1003-102 and Exhibit B attached hereto and made a part hereof by reference.

**ARTICLE 3 - CONTRACT TIME:**

The contract time is One Hundred Seventy Five days and Annual Consultant agrees to complete all work within One Hundred Seventy Five (175) days of the date CITY issues a Notice to Proceed.

**ARTICLE 4 – GENERAL:**

This Project Agreement is entered into pursuant to Annual Contract No. EN1003-102 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 Agreement on the day and year first written above.

This Agreement will be effective on this _____day of_____, 2013.

CITY OF CHANDLER

_____
MAYOR DATE:

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

APPROVED AS TO FORM:

_____
City Attorney By:

ATTEST:

_____
City Clerk

FOR THE ANNUAL:

By:
Title:

ADDRESS FOR NOTICE
Mr. Steve Rex
Dibble Engineering
7500 N. Dreamy Draw Dr., Ste. 200
Phoenix, AZ 85020

Phone: 602-957-1155
Fax: 602-957-2838

**EXHIBIT A**
**SCOPE OF WORK**

The City of Chandler (City) proposes to design and construct improvements to its water distribution system. The proposed improvements include the following:

- Abandon the 12-inch asbestos cement water main on the south side of Chandler Boulevard from McQueen Road to Cooper Road (1 mile) and tie-over all water services, water mains and fire hydrants to the 16-inch water main on the north side of Chandler Boulevard. It is anticipated there will be 25 tie-overs.
- Extend 8-inch water main approximately 400 feet on Nevada Street (between Detroit Street and Erie Street) to Erie Street creating a loop system, and provide water services to Parcels 302-63-003C and 302-63-003B.
- Locate and replace asbestos cement pipe (ACP) segment on Pecos Road west of 124th Street in front of surface water treatment plant.

ANNUAL CONSULTANT will provide professional services for engineering design and construction document preparation for the project described herein.

**Design Standards**

This project will be designed in accordance with the following standards, listed in order of precedence:

- Arizona Department of Environmental Quality, Engineering Bulletin No. 10, Guidelines for Construction of Water Systems, May 1978
- City of Chandler, Water System Design - Technical Design Manual #1, February 2012
- City of Chandler Supplement to Maricopa Association of Governments Uniform Standard Details and Specifications, Revisions through 2012.
- Maricopa Association of Governments, Uniform Standard Specifications for Public Works Construction, Revisions through 2013.
- Maricopa Association of Governments, Uniform Standard Details for Public Works Construction, Revisions through 2013.

**PROJECT TASKS**

**Task 1: Data Collection and Background Research**

DESIGN CONSULTANT shall collect and review readily available record data relevant to the project design. Relevant data may include but not be limited to the following: existing infrastructure quarter section maps, record drawings, right-of-way maps, property maps, easements and other land rights documents, Geographic Information System (GIS) database data, master plans, studies, and design reports. City will be responsible for obtaining title reports, if necessary.

**Task 2: Field Survey**

1. **Sectional Control Survey** – DESIGN CONSULTANT shall provide horizontal location and verification of the controlling corners for Section 35 in Township 1 South, Range 5 East, as necessary to establish horizontal control and centerline for Chandler Boulevard and Pecos Road. Coordinates will be based on Arizona State Plane – Grid and will be provided in ground format. DESIGN CONSULTANT will not reset or set any missing or obliterated sectional control, National Geodetic Survey (NGS) Monuments, or property corners.

2. **Project Vertical Control Survey** – DESIGN CONSULTANT shall provide field run level loops along the project route if required to establish uniform vertical control. Vertical datum will be based on the City's vertical datum.

3. **Topographic Survey** – DESIGN CONSULTANT shall provide a ground based topographic survey of existing surface conditions and infrastructure at the following locations:
   - Chandler Boulevard between McQueen Road and Cooper Road.
   - Nevada Street between Detroit Street and Erie Street.
   - Pecos Road west of 124th Street in front of the surface water treatment plant.

   DESIGN CONSULTANT shall prepare a fifty-foot spacing grid surface in a three-dimensional format (Digital Terrain Model (DTM)) along with raw survey data points.

4. **Utility Survey** – DESIGN CONSULTANT shall provide detailed locations of visible utilities at the locations noted above. Visible utilities include overhead power, overhead communications, sanitary and storm manholes (rim and invert elevations), water valves (rim and top of nut elevations), water meter boxes, concrete irrigation structures (invert elevations), drainage pipes and structures (invert elevations), telephone and cable risers, electric boxes, and any existing blue stake markings.

**Task 3: Base Mapping**

DESIGN CONSULTANT shall create comprehensive base maps from the information gathered during the field survey, data collection and background research tasks. Utilities will be shown based on surveyed surface features and mapping information provided by each utility. Base mapping will be created in AutoDesk Civil 3D (AutoCAD) 2011 format in conformance with DESIGN CONSULTANT's CAD standards (incorporating elements of City's CAD standard, if applicable).

**Task 4: Utility Coordination and Investigation**

1. **Utility Coordination** - Following each progress submittal, DESIGN CONSULTANT shall submit one set of plans to each utility along with a no conflict (clearance) letter utilizing the City's standard format. DESIGN CONSULTANT shall provide the City's Project Manager with a receipt indicating the utilities that were sent submittal sets of plans. DESIGN CONSULTANT shall participate in one (1) utility coordination meeting with affected utility companies. The City will be responsible for organizing the utility coordination meeting and inviting utility companies, as necessary.

2. **Utility Investigation** – Confirmation of the location, pipe material, and connection of the existing water mains is a critical component of this project. DESIGN CONSULTANT shall complete utility investigations through potholing prior to the Final Engineering Submittal. DESIGN CONSULTANT shall locate pothole locations on the Preliminary Engineering Submittal and prepare a pothole list for approval by the City. Utility potholing will be completed by RT Underground, as a subconsultant to the DESIGN CONSULTANT. Utility potholing will be completed as an allowance.

**Task 5: Construction Plans and Specifications**

DESIGN CONSULTANT shall prepare construction plans, bid documents, and opinions of probable construction costs for the proposed project. The City will provide electronic (AutoCAD) formats for desired standard plan sheet format and drafting standards. The construction plans will include plan view sheets (1" = 20' horizontal scale and 1"=2' vertical scale) and detail sheets as necessary to

provide a complete, clear and concise set of construction plans (see Estimated Plan Sheet Index). DESIGN CONSULTANT shall make the following progress submittals:

1. **Conceptual Engineering Submittal (30%)** - DESIGN CONSULTANT shall prepare Conceptual Design Drawings, Technical Special Provisions Table of Contents, and an Engineer's Opinion of Probable Construction Costs. Drawings will depict existing topography and utilities as well as preliminary pipeline plan and profile.

2. **Preliminary Engineering Submittal (60%)** - DESIGN CONSULTANT shall prepare Preliminary Design Drawings, Technical Special Provisions, and an Engineer's Opinion of Probable Construction Costs. Drawings will depict horizontal and vertical alignment of proposed pipelines, water services, and construction notes with cross references. Planned utility pothole locations will be shown on the Preliminary Submittal.

3. **Final Engineering Submittal (90%)** - DESIGN CONSULTANT shall prepare Final Design Drawings, Technical Special Provisions, and an Engineer's Opinion of Probable Construction Costs. Drawings will show the final horizontal alignment and vertical alignment of proposed pipelines, standard and special details with cross references, and general and construction notes with cross references. DESIGN CONSULTANT shall prepare technical special provisions for items not adequately addressed by the standard specifications referenced herein. Pothole locations and data will be shown on the Final Submittal. Final engineering submittal will be suitable for permitting.

4. **Construction Document Submittal (100%):** DESIGN CONSULTANT shall prepare Construction Documents for the improvements incorporating comments from permit review agencies and the City. Construction documents will be suitable for competitive bidding and construction; and will be sealed by a Professional Engineer licensed in the State of Arizona.

**Estimated Plan Sheet Index**

| **Sheet** | **No. of Sheets** |
|---|---|
| Cover (Including Vicinity Map) | 1 |
| Legend and Abbreviations | 1 |
| General Notes | 2 |
| Key Map | 1 |
| Survey Control | 1 |
| Water Main Plan and Profile (1" = 20') | 13 |
| Design Details | 2 |
| **TOTAL ESTIMATED SHEETS =** | **21** |

DESIGN CONSULTANT shall provide each progress submittal to the City's designated Project Manager. In addition, five (5) sets of progress plans will be submitted to the City Engineering Department for review.

Following the conceptual, preliminary and final engineering submittal, DESIGN CONSULTANT shall review the City's comments and complete a comment resolution form. DESIGN CONSULTANT shall incorporate all comments unless otherwise directed by the City.

Technical special provisions will be prepared by the DESIGN CONSULTANT and delivered to the City for all items not adequately addressed by the standard specifications referenced above. The City

will be responsible for preparing contract general conditions and contract documents and assembling the integrated bid package.

Engineer's opinions of probable construction costs will be prepared for each progress submittal using standard unit costs and item descriptions.

**Deliverables**

- Conceptual Engineering Submittal (30%) - Five (5) full-size (22" X 34" bond) plan sets, One (1) half-size (11" X 17" bond) plan set, One (1) copy of ENGINEER's Opinion of Probable Construction Costs, and Two (2) copies of Technical Special Provisions Table of Contents.

- Preliminary Engineering Submittal (60%) - Five (5) full-size (22" X 34" bond) plan sets, One (1) half-size (11" X 17" bond) plan set, One (1) copy of Engineer's Opinion of Probable Construction Costs, and Two (2) copies of Technical Special Provisions.

- Final Engineering Submittal (90%) – Preliminary Engineering Submittal comments and comment resolution form, Five (5) full-size (22" X 34" bond) plan sets, One (1) half-size (11" X 17" bond) plan set, One (1) copy of Engineer's Opinion of Probable Construction Costs, and Two (2) copies of Technical Special Provisions.

- Construction Document Submittal (100%) - Final Engineering Submittal comments and comment resolution form, One (1) copy 3 mil, double matte mylars, full-size (22" X 34") professionally sealed, One (1) full size (22" X 34" bond) plan sets. One (1) copy final Technical Special Provisions professionally sealed. One (1) copy of Engineer's Opinion of Probable Construction Costs along with one (1) copy of electronic PDF and DWG files (on CD-ROM) of all construction bid documents.

**Task 6: Project Management & Meetings**

DESIGN CONSULTANT's project manager and project engineer will attend project meetings noted in this Scope of Work and will prepare and distribute agenda and meeting minutes to all participants. After receipt of notice to proceed, the DESIGN CONSULTANT's project manager will contact the City's project manager to arrange a kick-off meeting to discuss project schedule, design parameters, and coordinate anticipated City participation efforts. Three (3) submittal review meetings will be held at design milestones (30%, 60% and 90%).

DESIGN CONSULTANT shall attend two (2) coordination and/or field visit meeting accompanied by City of Chandler staff familiar with water system operations to coordinate construction sequencing and proposed design features. The City's project manager will be responsible for inviting City staff as required.
DESIGN CONSULTANT shall be responsible for comprehensive project management which will include: drawings, technical special provisions, bid documents, Engineer's opinion of probable construction costs, utility coordination, pothole coordination, correspondence management, schedule maintenance, and meeting minutes.

**Task 7: Permitting**

DESIGN CONSULTANT shall prepare application and submittal packages for the following permitting agencies:

- Maricopa County Environmental Services Department (MCESD): Approval to Construct (non-expedited review and fee)
- City of Chandler Development Services / Engineering Permit Review

DESIGN CONSULTANT shall coordinate submittal of plans to the City Development Services / Engineering department for review with the City's project manager. It is assumed that City review fees will be waived.

DESIGN CONSULTANT shall incorporate all review comments unless otherwise directed by the City's Project Manager.

**Task 8: Valve Sequencing Exhibits for Operating on Different System Zones**

DESIGN CONSULTANT shall prepare Valve Sequencing Exhibits for the valves on Pecos Road in front of the surface water treatment plant for the City's Operations Staff use in switching from Zone 1 to Zone 2. The exhibits will show a map of the valve locations with a written sequence identifying valves to be open and closed. The City shall provide GIS data to DESIGN CONSULTANT for use in identifying the valve number and information to include on the exhibits. DESIGN CONSULTANT shall submit One (1) copy of the exhibits at the final engineering submittal for review and comment, and One (1) copy of the exhibits at the Construction Document Submittal for the City's use.

**Task 9: Bidding Phase Services**

This project is intended to be constructed under a Design-Bid-Build Contract. The City will be responsible for preparing contract bidding documents, advertising for public bidding, plan reproduction for bidding, distribution of contract documents to potential bidders, distributing addenda to plan holders, and opening bids.

DESIGN CONSULTANT shall provide the following bidding phase services:

- Attend the pre-bid meeting.
- Respond to bidder's questions as directed.
- Prepare one (1) addendum as necessary to clarify construction contract documents.
- Prepare a bid tab and recommendation of award following the bid opening.

**Estimated Design Schedule**

The following schedule estimates project milestone submittal timeframes relative to the Notice to Proceed. Submittal schedule is contingent upon an anticipated three (3) week review time by the City. A final schedule will be provided for review and approval at the project kickoff meeting.

| | |
|---|---|
| Conceptual Engineering Submittal (30%): | NTP + 7 weeks |
| City Review (3 wks) | NTP + 10 weeks |
| Preliminary Engineering Submittal (60%): | NTP + 14 weeks |
| City Review (3 wks) | NTP + 17 weeks |
| Final Engineering Submittal (90%): | NTP + 21 weeks |
| City Review and Permitting (3 wks) | NTP + 24 weeks |

Construction Document Submittal (100%): NTP + 25 weeks

**Allowances**

The following ALLOWANCE items may be added to the base contract with written authorization from the City:

- Utility Potholing: Utility pothole investigations will be completed in accordance with Scope of Work Task 4.2. RT Underground, as a subconsultant to the DESIGN CONSULTANT, will complete utility potholing. Proposal assumes 30 utility crossings, connections points, and water main crossing configuration potholes, which may require exploratory excavations. Potholes will be completed as a direct cost per pothole excavated; dry holes excavated at Blue Stake locations will be invoiced at the standard unit price.

- Owner's Allowance: An allowance is provided for additional services requested by the City. This allowance will be utilized at the City's discretion and based on written direction from the City's Project Manager.

**Direct Cost Reimbursement**

Maricopa County Environmental Services Department (MCESD), Permit to Construct plan review fee (standard, non-expedited review fee) will be reimbursed as a direct cost allowance.

Reimbursements shall be made by the City for direct costs incurred for printing, document reproduction, plotting, mylars, permit application fees, and any additional work directed by the City not specifically included in this Scope of Work.

**EXCLUSIONS**

- Geotechnical Investigation
- Hydraulic Modeling
- Construction Phase Services
- Public Involvement Coordination
- Legal Descriptions
- Environmental Evaluation/Clearance
- Historical/Archaeological Clearances

# EXHIBIT B
# FEE SCHEDULE

**Staff Hours By Task**

| No. | Task | Project Manager | QA/QC | Project Engineer (PE) | Assistant Engineer (EIT) | CAD Technician | Land Manager (RLS) | Asst Land Surveyor (LSIT) | Survey Crew | Admin Assistant | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Design Phase Services | | | | | | | | | | | |
| 1 | Data Collection & Background Research | 1 | | 4 | | 4 | 2 | 8 | | 2 | 21 |
| 2 | Field Survey | | | | | | | | | | |
| 2.1 | Sectional Control Survey | | | | | 4 | 2 | 6 | 8 | | 20 |
| 2.2 | Project Vertical Control Survey | | | | | 4 | 2 | 6 | 16 | | 28 |
| 2.3 | Topographic Survey | | | | | 8 | 2 | 4 | 50 | | 64 |
| 2.4 | Utility Survey | | | | | 8 | 2 | 4 | 20 | | 34 |
| 3 | Base Mapping | | | | | 36 | 2 | 16 | | | 54 |
| 4 | Utility Coordination & Investigation | | | | | | | | | | |
| 4.1 | Utility Coordination | 1 | | 4 | 16 | | | | | 4 | 25 |
| 4.2 | Utility Investigation | 2 | | 8 | 24 | | | | | | 34 |
| 5 | Construction Plans & Specificaltons | | | | | | | | | | |
| 5.1 | Conceptual Engineering Submittal | 12 | 16 | 24 | 24 | 40 | | | | 1 | 117 |
| 5.2 | Preliminary Engineering Submittal | 8 | | 16 | 16 | 32 | | | | 1 | 73 |
| 5.3 | Final Engineering Submittal | 8 | 12 | 8 | 16 | 24 | | | | 1 | 69 |
| 5.4 | Construction Document Submittal | 8 | | 8 | 12 | 16 | | | | 1 | 45 |
| 6 | Project Management & Meetings | 12 | | 32 | | | | | | 2 | 46 |
| 7 | Permitting | 1 | | 8 | 4 | | | | | 2 | 15 |
| 8 | Valve Sequencing Exhibits | 2 | | 24 | | 24 | | | | | 50 |
| 9 | Bidding Phase Services | 3 | | 8 | | 4 | | | | 1 | 16 |
| Total | | 58 | 28 | 144 | 112 | 204 | 12 | 44 | 94 | 15 | 711 |

**Labor Fee By Task**

| | Personnel Rates (Incl. O.&P.) | $137.00 | $ 126.00 | $121.00 | $ 95.00 | $ 82.00 | $ 145.00 | $ 93.00 | $ 140.00 | $ 49.00 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | Task | Project Manager | QA/QC | Project Engineer (PE) | Assistant Engineer (EIT) | CAD Technician | Land Manager (RLS) | Asst Land Surveyor (LSIT) | Survey Crew | Admin Assistant | Total |
| Design Phase Services | | | | | | | | | | | |
| 1 | Data Collection & Background Research | 137 | | 484 | | 328 | 290 | 744 | | 98 | 2,081 |
| 2 | Field Survey | | | | | | | | | | |
| 2.1 | Sectional Control Survey | | | | | 328 | 290 | 558 | 1,120 | | 2,296 |
| 2.2 | Project Vertical Control Survey | | | | | 328 | 290 | 558 | 2,240 | | 3,416 |
| 2.3 | Topographic Survey | | | | | 656 | 290 | 372 | 7,000 | | 8,318 |
| 2.4 | Utility Survey | | | | | 656 | 290 | 372 | 2,800 | | 4,118 |
| 3 | Base Mapping | | | | | 2,952 | 290 | 1,488 | | | 4,730 |
| 4 | Utility Coordination & Investigation | | | | | | | | | | |
| 4.1 | Utility Coordination | 137 | | 484 | 1,520 | | | | | 196 | 2,337 |
| 4.2 | Utility Investigation | 274 | | 968 | 2,280 | | | | | | 3,522 |
| 5 | Construction Plans & Specificaltons | | | | | | | | | | |
| 5.1 | Conceptual Engineering Submittal | 1,644 | 2,016 | 2,904 | 2,280 | 3,280 | | | | 49 | 12,173 |
| 5.2 | Preliminary Engineering Submittal | 1,096 | | 1,936 | 1,520 | 2,624 | | | | 49 | 7,225 |
| 5.3 | Final Engineering Submittal | 1,096 | 1,512 | 968 | 1,520 | 1,968 | | | | 49 | 7,113 |
| 5.4 | Construction Document Submittal | 1,096 | | 968 | 1,140 | 1,312 | | | | 49 | 4,565 |
| 6 | Project Management & Meetings | 1,644 | | 3,872 | | | | | | 98 | 5,614 |
| 7 | Permitting | 137 | | 968 | 380 | | | | | 98 | 1,583 |
| 8 | Valve Sequencing Exhibits | 274 | | 2,904 | | 1,968 | | | | | 5,146 |
| 9 | Bidding Phase Services | 411 | | 968 | | 328 | | | | 49 | 1,756 |
| Total | | 7,946 | 3,528 | 17,424 | 10,640 | 16,728 | 1,740 | 4,092 | 13,160 | 735 | 75,993 |

| DIRECT COSTS | | | | |
|---|---|---|---|---|
| | Unit | Cost/Unit | No. of Units | Total |
| Reproduction/Plotting/Mylars | Set | $ 90.00 | 18 | $ 1,620.00 |
| MCESD Permit Fee | Lump Sum | $ 600.00 | 1 | $ 600.00 |
| **Subtotal, Direct Costs** | | | | $ 1,620.00 |

| ALLOWANCE ITEMS | Unit | Cost/Unit | No. of Units | Total |
|---|---|---|---|---|
| ALLOWANCE: Utility Potholing | Each | $ 700.00 | 20 | $14,000.00 |
| ALLOWANCE: Owner's Allowance | Lump Sum | $ 5,000.00 | 1 | $ 5,000.00 |
| Subtotal, Direct Costs | | | | $19,000.00 |

**Summary of Fee**

Design Phase Labor = $75,993.00
Direct Costs = $ 1,620.00
Allowances = $19,000.00
**Total Contract Amount = $96,613.00**