Chandler · Arizona
Where Values Make The Difference

**PURCHASING ITEM**
**FOR**
**COUNCIL AGENDA**
**Memo No. CP15-142**

**1. Agenda Item Number:** 31

**2. Council Meeting Date:** December 11, 2014

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

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

**3. Date Prepared:** November 19, 2014

**4. Requesting Department:** Municipal Utilities

**5. SUBJECT:** Project Agreement with Dibble Engineering, Inc., for design services for the Water Valve Replacement Program

**6. RECOMMENDATION:** Staff recommends City Council award a Project Agreement to Dibble Engineering, Inc., for design services for the Water Valve Replacement Program, pursuant to On-call Water and Wastewater Services Contract No. EN1520.101, Project No. WA1511.201, in an amount not to exceed $127,910.

**7. BACKGROUND/DISCUSSION:** The project is a continuation of the Municipal Utilities Department's Water Valve Replacement Program, replacing broken valves.

The replacement of valves in the City's water distribution system will reduce the time required to shut down a water main during water emergencies, reducing liability of water damage, and limiting the outage impact to customers.

This project scope of work includes utility investigation, mapping and utility coordination, preparing construction plans and specifications, and bidding assistance for the replacement and addition of approximately seventy valves.

**8. EVALUATION:** This project is being performed under the On-call Water and Wastewater Services Contract No. EN1520.101, to Dibble Engineering, Inc. The costs proposed for this project have been evaluated by Staff and are determined to be reasonable. The contract completion time is 180 calendar days following Notice to Proceed.

**9. FINANCIAL IMPLICATIONS:**

Cost: $127,910
Savings: N/A
Long Term Costs: N/A

Fund Source:

| Account No.: | Fund Name: | Program Name: | CIP Funded: | Amount: |
|---|---|---|---|---|
| 601.3820.6712.6WA023 | Water Bond | Main Replacements | Yes | $127,910 |

**10. PROPOSED MOTION:** Move City Council award a Project Agreement to Dibble Engineering, Inc., for design services for the Water Valve Replacement Program, pursuant to On-call Water and Wastewater Services Contract No. EN1520.101, Project No. WA1511.201, in an amount not to exceed $127,910.

**ATTACHMENTS:** Location Map, Agreement

**APPROVALS**

**11. Requesting Department**

John Knudson, Utilities Engineering Manager

**12. Transportation & Development**

RB FOR

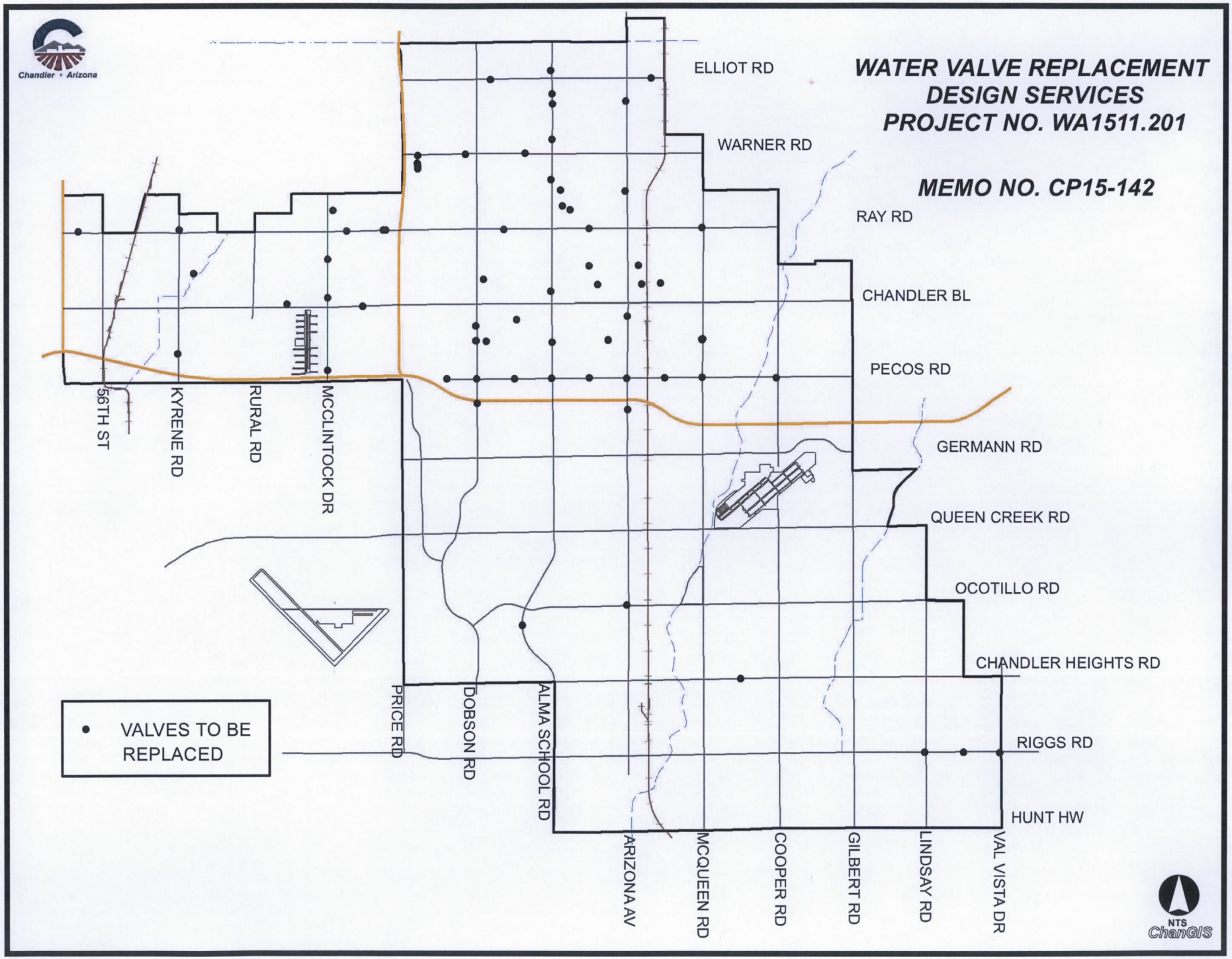
Bob Fortier, Capital Projects Manager

**13. Department Head**

Dave Siegel, Municipal Utilities Director

**14. City Manager**

Rich Dlugas


Chandler + Arizona
WATER VALVE REPLACEMENT
DESIGN SERVICES
PROJECT NO. WA1511.201
MEMO NO. CP15-142
ELLIOT RD
WARNER RD
RAY RD
CHANDLER BL
PECOS RD
GERMANN RD
QUEEN CREEK RD
OCOTILLO RD
CHANDLER HEIGHTS RD
RIGGS RD
HUNT HW
56TH ST
KYRENE RD
RURAL RD
MCCLINTOCK DR
PRICE RD
DOBSON RD
ALMA SCHOOL RD
ARIZONA AV
MCQUEEN RD
COOPER RD
GILBERT RD
LINDSAY RD
VAL VISTA DR
VALVES TO BE REPLACED
NTS
ChanGIS

**PROJECT AGREEMENT**
**PURSUANT TO ANNUAL CONTRACT NO. EN1520.101**

**PROJECT AGREEMENT NO: WA1511.201**

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 Dibble & Associates Consulting Engineers, Inc., an Arizona corporation doing business as Dibble Engineering, Inc. (hereinafter referred to as "Annual Consultant") and is a project agreement entered into pursuant to Annual Contract No. EN1520.101.

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 Valve Replacement, Project Number WA1511.201. The scope of work consists of providing professional services for utility coordination, engineering design and construction document preparation for the valve replacements, 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 Twenty Seven Thousand Nine Hundred Ten Dollars ($127,910) determined and payable as set forth in Annual Contract EN1520.101 and Exhibit B attached hereto and made a part hereof by reference.

**ARTICLE 3 - CONTRACT TIME:**

The contract time is One Hundred Eighty calendar days and Annual Consultant agrees to complete all work within One Hundred Eighty (180) 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. EN1520.101 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

_____
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: CH

ATTEST:

_____
City Clerk

FOR THE ANNUAL:

By: _____
Title: VICE PRESIDENT

ADDRESS FOR NOTICE
Mr. Steve Rex
Dibble & Associates Consulting Engineers, Inc.
7500 N. Dreamy Draw Dr., Ste. 200
Phoenix, AZ 85020

Phone: 602-957-1155

## EXHIBIT A
## SCOPE OF WORK

**Task 1: Project Management & Meetings**

Annual Consultant will attend project meetings noted in this Scope of Work. After receipt of notice to proceed, Annual Consultant will contact the City's project manager to arrange a kick-off meeting to discuss project schedule, water valve locations, and coordinate anticipated City participation efforts. The City GIS files noted in Task 2 shall be provided to the Annual Consultant at the kick-off meeting. One (1) submittal review meeting will be held following the 60% Preliminary Design Submittal and one (1) submittal review meeting will be held following the 90% Permit Submittal.

Annual Consultant will attend one (1) field visit meeting accompanied by City of Chandler staff familiar with water system operations to visit all valve replacement sites, coordinate construction sequencing, prioritization and proposed design features. The City's project manager will be responsible for inviting City staff as required. The field visit meeting will be held after the 60% Design Submittal.

**Task 2: Utility Coordination and Investigations**

**Task 2.1 – Utility Coordination & Investigations** – The City shall provide Annual Consultant with locations of City owned utilities present within the vicinity of designated valve locations by providing Annual Consultant with City GIS files. The GIS files shall be compatible with ArcMap 10. City GIS files provided shall contain horizontal and vertical system data (i.e. northing, easting, rim elevations, top of nut elevations, invert elevations, size, material type, etc.), section or monument lines, monument locations, and color orthorectified aerial photos of the project area as .sid files. City utilities will be incorporated into the project base maps by the Annual Consultant based on the GIS data provided.

Prior to the start of design, Annual Consultant will contact Blue Stake to obtain a list of utilities reporting facilities in the vicinity of the project and request quarter section maps from those utilities. Existing utilities will be incorporated into the project base maps based on the quarter section map information provided.

**Due to the categorization of this project as maintenance, responses to no conflict letters will not be required from utility companies.** Following the 60% Design Submittal identified in Task 3.1, Annual Consultant will submit one set of plans to each utility along with a no conflict (clearance) letter utilizing the City's standard format. Upon request, Annual Consultant will provide the City's Project Manager with a receipt indicating the utilities that were sent submittal sets of plans. If requested by the City's utility coordination liaison, Annual Consultant will participate in one (1) utility coordination meeting with affected utility companies. The City will be responsible for organizing the utility coordination meeting and inviting requested utility companies.

**Task 2.2 – Utility Base Mapping** - Annual Consultant will create a base map from the information gathered during the utility investigation. Utilities will be shown based on mapping information provided by each utility. Base mapping will be created in AutoDesk Civil 3D (AutoCAD) 2013 format in conformance with Annual Consultant's CAD standards.

**Task 3: Construction Plans and Specifications**

Annual Consultant will prepare construction plans, bid documents, technical special provisions and opinions of probable construction costs for the proposed water valve replacements. The City will provide electronic (AutoCAD) formats for desired standard plan sheet format and drafting standards. The construction plans will include plan view only sheets (1" = 20' horizontal scale) and detail sheets as necessary to provide a complete, clear and concise set of construction plans (see Estimated Plan Sheet Index). The following progress submittals will be made:

**Task 3.1 – 60% Design Submittal:** Annual Consultant will prepare 60% Preliminary Design Drawings, Technical Special Provisions, and an Engineer's Opinion of Probable Construction Costs. Drawings will show the preliminary horizontal replacement valve locations, standard and special details with cross references, and general and construction notes with cross references. Technical special provisions will be prepared for items not adequately addressed by the standard specifications referenced herein.

**Task 3.2 – 90% Permit Submittal:** Annual Consultant will prepare 90% Permit Drawings, Technical Special Provisions, and an Engineer's Opinion of Probable Construction Costs. Drawings will show the final horizontal replacement valve locations, standard and special details with cross references, and general and construction notes with cross references. Technical special provisions will be prepared for items not adequately addressed by the standard specifications referenced herein. 90% Permit submittal will be suitable for permitting.

**Task 3.3 - Final Design Submittal:** Annual Consultant will prepare Final Design Drawings for the improvements incorporating comments from permit review and the City. Final Design Submittal 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 |
| Sheet Index and Legend | 1 |
| General Notes | 1 |
| Key Map | 1 |
| Water Valve Plan (1" = 20')(2 valves/sheet) | 33 |
| Design Details | 1 |
| **TOTAL ESTIMATED SHEETS =** | **38** |

Annual Consultant will provide each progress submittal to the City's designated Project Manager. In addition, one (1) set of progress plans will be submitted to the City Engineering Department for review.

Following the 60% Design and 90% Permit submittals, Annual Consultant will review the City's comments and complete a comment resolution form. Annual Consultant will incorporate all comments unless otherwise directed by the City.

Technical special provisions will be prepared by the Annual Consultant and delivered to the City for all items not adequately addressed by the standard specifications referenced herein. 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 unit costs and item descriptions. Engineer's opinions of probable construction costs will also include bid alternates, if necessary, to enable the City to maximize the amount of valves being replaced depending on available funding at the time of bidding.

**Deliverables**

- 60% Design Submittal - Four (4) full-size (22" X 34" bond) plan sets (black & white), One (1) half-size (11" X 17" bond) plan set (black & white), One (1) copy of Engineer's Opinion of Probable Construction Costs, and Four (4) copies of Technical Special Provisions.

- 90% Permit Submittal - 60% Design Submittal comments and comment resolution form Four (4) full-size (22" X 34" bond) plan sets (black & white), One (1) half-size (11" X 17" bond) plan set (black & white), One (1) copy of Engineer's Opinion of Probable Construction Costs, and Four (4) copies of Technical Special Provisions.

- Final Design Submittal - 90% Permit Submittal comments and comment resolution form, One (1) copy 3 mil, double matte mylars, full-size (22" X 34") (black & white) professionally sealed, Four (4) full size (22" X 34" bond) plan sets (black & white). Four (4) copies 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 files (on CD-ROM) of all Final Design documents.

**Task 4: Permitting**

Annual Consultant will prepare application and submittal packages for the following permitting agencies:

- City of Chandler Engineering Permit Review

Annual Consultant will coordinate submittal of plans to the City Engineering department for review with the City's project manager. City of Chandler will be responsible for plan review and permitting fees associated with any documents reviewed by the City.

Annual Consultant will incorporate all review comments unless otherwise directed by the City.

**Task 5: Bidding Phase Services**

It is our understanding that the construction of this project will be competitively bid. 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.

Annual Consultant shall provide the following bidding phase services:

- Attend the pre-bid meeting.
- Respond to bidder's questions as directed.
- Prepare bid addendum, if required.

**Estimated Design Schedule**

The following schedule estimates project milestone submittal timeframes relative to the Notice to Proceed. Submittal schedule is contingent upon an anticipated two (2) week review time by the City. A final schedule will be provided for review and approval at the project kickoff meeting.

| | |
|---|---|
| 60% Design Submittal: | NTP + 8 weeks |
| Chandler Engineering Review (2 wks) | NTP + 10 weeks |
| 90% Permit Submittal: | NTP + 14 weeks |
| Chandler Engineering Approval (2 wks) | NTP + 16 weeks |
| Final Design Submittal: | NTP + 18 weeks |

**Allowances**

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

- Utility Investigations: A contract allowance is provided for utility potholing in the vicinity of the valve replacement locations. Utility potholing during design does not guarantee utility clearance, but provides the CITY with a greater level of confidence regarding the location and configuration of existing utilities within the project corridor. Utility potholes, if authorized, will be completed by a specialty subconsultant and invoiced on a per-hole basis. Each pothole location will be Bluestake located to minimize dry holes. Dry holes will be invoiced at the unit price per pothole.

- Field Survey: An allowance is provided for survey collection of existing water valve location and elevation information, surface utility features and horizontal survey control data as deemed necessary for design completion. Annual Consultant will determine valve locations where survey is necessary and obtain approval from City prior activation of this allowance.

- 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. The City is evaluating additional valve replacements at the approximate locations shown on Figure 1.

**Direct Cost Reimbursement**

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

**EXCLUSIONS**

- Geotechnical Investigation
- Utility no-conflict review/clearance letter coordination, except as noted in Task 2.3
- MCESD Coordination/Permitting
- Irrigation District Permitting
- Hydraulic Modeling
- Environmental Evaluation/Clearance
- Historical/Archaeological Clearances
- Legal Descriptions
- Profiles on Plans
- Preparation of Meeting Agendas and Minutes
- Preparation of Bid Tabulation and Recommendation of Award
- Detailed Field Survey (topographic or control)

# EXHIBIT B
# FEE SCHEDULE

| Task No. | Task | Senior Project Manager | QA/QC | Project Engineer | Assistant Engineer | CAD Technician | Admin | Total Task Hours | Total Task Fee |
|---|---|---|---|---|---|---|---|---|---|
| | Contract Billing Rate | $ 175.00 | $ 155.00 | $ 140.00 | $ 110.00 | $ 90.00 | $ 60.00 | | |
| | **Design Phase Services** | | | | | | | | |
| 1 | Project Management and Meetings | 12 | | 16 | 4 | 8 | 4 | 44 | $ 5,740 |
| **2** | **Utility Coordination & Investigations** | | | | | | | | |
| 2.1 | Utility Coordination & Investigations | 4 | | 12 | 12 | 24 | 4 | 56 | $ 6,100 |
| 2.2 | Utility Base Mapping | 4 | | 20 | 36 | 96 | 4 | 160 | $ 16,340 |
| **3** | **Construction Plans & Specifications** | | | | | | | | |
| 3.1 | Preliminary Engineering | 12 | 8 | 64 | 80 | 96 | 8 | 268 | $ 30,220 |
| 3.2 | Final Engineering | 8 | 6 | 40 | 48 | 64 | 4 | 170 | $ 19,210 |
| 3.2 | Construction Documents | 6 | 4 | 24 | 32 | 54 | 4 | 124 | $ 13,650 |
| 4 | Permitting | 2 | | 8 | 8 | | | 18 | $ 2,350 |
| 5 | Bidding Phase Services | 4 | | 16 | | 4 | | 24 | $ 3,300 |
| | | | | | | | | | |
| | **TOTAL** | **52** | **18** | **200** | **220** | **346** | **28** | **864** | **$ 96,910** |

**Allowances**

| | Unit | Cost/Unit | No. of Units | Total |
|---|---|---|---|---|
| Utility Investigations | ALLOW | $ 1,000 | 10 | $ 10,000 |
| Field Survey | ALLOW | $ 5,000 | 1 | $ 5,000 |
| Owner's Allowance | ALLOW | $ 5,000 | 1 | $ 15,000 |
| **Subtotal, Allowances** | | | | **$ 30,000** |

**Direct Expenses**

| | Unit | Cost/Unit | No. of Units | Total |
|---|---|---|---|---|
| Reproduction / Mileage | LS | $ 1,000 | 1 | $ 1,000 |
| **Subtotal, Direct Costs** | | | | **$ 1,000** |

**Fee Summary**

| | Fee |
|---|---|
| Dibble Engineering Labor | $ 96,910 |
| Allowances | $ 30,000 |
| Direct Expenses | $ 1,000 |
| **TOTAL FEE** | **$127,910** |