CITY OF PRESCOTT
ARIZONA
Everybody's Hometown

Request for Multi- Step Sealed Bids for Water Line Stops and 14-inch Water Line Valve Installations for the Willow Creek Water Line Repair and Scour Protection

CITY OF PRESCOTT, ARIZONA

PREPARED BY: Public Works Department

Due Date: June 19, 2014

Request for Multi-Step Sealed Bids for
Water Line Stops and 14-inch Water Line Valve Installations for the Willow Creek Water Line Repair and Scour Protection

The City of Prescott, Arizona, requests multi-step sealed bids from qualified firms to provide complete design, engineering, and equipment repair and replacement.

Proposals must be received prior to **2:00 pm on Thursday, June 19, 2014**, at the office of the City Clerk, City of Prescott, 201 N. Cortez Street, Prescott, AZ 86303, at which time all proposals will be publicly opened. Any proposals received at or after 2:00 p.m. on the above-stated date will be returned unopened. Proposals must conform to a prepared scope of work available from the office of the Public Works Director at (928) 777-1130 voice; (928) 777-1100 TDD or on the City of Prescott website at www.cityofprescott.net/business/bids The City of Prescott reserves the right to reject any and all proposals and the City assumes no liability for the cost of preparing a response to this request.

A **mandatory** pre-proposal meeting will be held on Thursday, June 12, 2014 at 10:00 am in the Public Works Conference Room located at 433 N. Virginia St., Prescott, Arizona 86301.

The outside of the statement envelope shall indicate the name and address of the respondent shall be addressed to the City Clerk, City of Prescott at the above address and shall be marked: Multi- Step Sealed Bids for Water Line Stops and 14-inch Water Line Valve Installations for the Willow Creek Water Line Repair and Scour Protection.

Crista Clevenger

Crista Clevenger, Contract Specialist
Published: 2TC, June 1, and June 8, 2014

Multi-Step Sealed Bids for Water Line Stops and 14-inch Water Line Valve Installations for the Willow Creek Water Line Repair and Scour Protection

SECTION 1. PURPOSE

1.1 Purpose

The City of Prescott Public Works Department intends to award a single contract for performing design, water line stops and two valve installations on a welded-steel 14-inch water line in the project area.

The selection process will be a two-step process. Firms are invited to submit Un-priced Technical Proposals in Step One. Firms that have been determined to have met the criteria described below will be invited to submit a Priced Bid in Step Two.

1.2 General Submission Information

A. The City of Prescott invites Un-priced Technical Proposals from qualified firms to provide a complete process to perform the design, a water stop method, welded flanges and valve installations on a 14-inch steel water line. The anticipated work will include:

i. Complete water line stops at potentially two locations by freezing or other methodology recommended by the selected firm.
ii. Sever the existing 14" welded steel water line.
iii. Furnish and install two welded flanges, and resilient wedge gate valves, MAG SD 391 and Per AWWA and ASTM Standards at selected locations detailed in **Attachment A.**

B. Water Line Information for Water Stops

i.	Pipe Diameter:	14-inch
ii.	Year Built:	1947
iii.	Pipe Type:	Steel
iv.	Inner Coating:	Irregular Cement Coating*
v.	Outer Coating:	Tar
vi.	Depth below grade:	4 to 5 feet
vii.	Running Line Pressure	180 PSI

* - Inner Pipe coating is cement lining that has thickness variations from an 1/8" on the top, ¼" on the sides and a thicker coat on the bottom about 1 ¼".

C. Priced Bid packages shall NOT be submitted until requested to do so. Any Un-priced Technical Proposals that are submitted with cost or pricing information shall be rejected and returned.

D. This is a multi-step sealed bid procurement and Priced Bid packages shall only be opened in the second phase and only from requested proposers who's Un-priced Technical Proposal has been determined to have met the criteria.

E. The criteria to be used in the evaluation of the Un-priced Technical Proposal shall be as described in Section 4.

1.3 Preferred Qualifications

A. The firm shall have a minimum of three (5) years of experience with line stop / pipeline freezing and valve installation work.

B. The firm shall provide a list of past projects including project descriptions, references with contact information.
C. The firm shall complete the work within 30 calendar days after receiving the notice to proceed.
D. The proposed system shall utilize parts and materials that are standardized and modular to the fullest extent possible and for which replacement parts are readily available.
E. The firm shall provide a minimum two (2) year warranty for parts and installation and shall include replacement parts, service, repair and re-installation if necessary. Warranties in excess of the minimum will be considered in evaluating the best value for the City by the Review Committee.

1.4 Questions

Questions regarding the project shall be submitted to:

City of Prescott Public Works
Jeff Low
433 N. Virginia Street
Prescott, AZ 86301
(928) 777-1130

jeff.low@prescott-az.gov

Answers to questions that result in a clarification or an addendum will be sent to all Two Step Request Proposers

Questions will not be taken less than 5 business days prior to deadline.

1.5 Preparation Costs

The City shall not be responsible for statement preparation costs, or for costs including attorney fees associated with any challenge (administrative, judicial or otherwise) to the determination of the qualified bidders, award of contract or rejection of any proposal. By submitting a proposal each Proposer agrees to be bound in this respect and waives all claims to such costs and fees.

1.6 Proprietary Material

A Proposer shall clearly mark any proprietary information contained in its proposal with the words "proprietary information." Proposer shall not mark any Solicitation Form (materials contained within the Priced Bid Package) as proprietary.

Proposers should be aware that the City is required by law to make its records available for public inspection. The Proposer, by submission of materials marked proprietary, acknowledges and agrees that the City will have no obligation to advocate for non-disclosure in any forum or any liability to the Proposer in the event that the City must legally disclose these materials.

1.7 Multiple Proposals

A Proposer may submit multiple proposals for any solicitation however; each proposal must be submitted separately (in its own complete package) from the others.

SECTION 2. RULES GOVERNING COMPETITION

2.1 Examination of Un-priced Technical Proposals

Proposers should carefully examine the entire Invitation to Bid, any addenda thereto, and all related materials and data referenced in the Invitation to Bid. Proposers should become fully aware of the nature of the work and the conditions likely to be encountered in performing the work.

2.2 Signature Requirements

All proposals and bid submittals must be signed. An officer or other agent of a corporate firm, if authorized to sign Contracts on its behalf; a member of a partnership; the owner of a privately-owned firm; or other agent if properly authorized by a Power of Attorney or equivalent document may sign the proposal. The name and title of the individual(s) signing the proposal must be clearly shown immediately below the signature.

2.3 Multi-Step Sealed Bids Submission

Firms must submit one (1) envelope or package. That envelope or package shall contain:

1) Six (6) copies of the Un-priced Technical Proposal

Un-priced Technical Proposals must be received by the City prior to 2:00 pm Thursday, June 19, 2014, at the office of the City Clerk. The proposal must be plainly identified as "Multi- Step Sealed Bids for Water Line Stops and 14-inch Water Line Valve Installations for the Willow Creek Water Line Repair and Scour Protection" and delivered or mailed to:

The City Clerk, City Hall
201 N. Cortez Street
Prescott, AZ 86303

2.4 News Releases

News releases pertaining to the award resulting from request for statements of qualifications shall not be made without prior written approval of the Public Works Director.

2.5 Disposition of Proposals

All materials submitted in response to this request for statement of qualification become the property of the City of Prescott. One copy shall be retained for the official files of Public Works and will become public record after award of the Contract.

2.6 Modification/Withdrawal of Proposals

A respondent may withdraw a response to this invitation at any time prior to the final submission date by sending written notification of its withdrawal, signed by an agent authorized to represent the agency. The respondent may thereafter submit a new or modified statement of qualification prior to the final submission date. Modifications offered in any other manner, oral or written, will not be considered. A final Un-priced Technical Proposal or Priced Bid cannot be changed or withdrawn after the time designated for receipt, except for modifications requested by Public Works after the date of receipt.

2.7 Oral Change/Interpretation

No oral change or interpretation of any provision contained in this request for bids are valid whether issued at a pre-proposal conference or otherwise. Written addenda will be issued when changes, clarifications, or amendments to proposal documents are deemed necessary by Public Works.

2.8 Late Submissions

UN-PRICED TECHNICAL PROPOSALS RECEIVED AFTER THE DEADLINE WILL NOT BE CONSIDERED AND WILL BE RETURNED UNOPENED.

2.9 Rejection of Statements of Qualifications

The City reserves the right to reject any or all Multi-Step Sealed Bids if determined to be in the best interest of the City.

2.10 Incorporation of Solicitation and Response in Agreement

This solicitation, including all attachments and addenda, and all promises, warranties, commitments and representations in the successful proposal shall be binding and shall become obligations of the agreement.

Section 3.0 Un-priced Technical Proposal Format

3.1 The Un-priced Technical Proposal shall include:

A. The firm's location.
B. The names of the Field Service Engineer and members of the project team that will perform the repairs.
C. A brief description of project(s) of a similar nature which the project team has been involved in.
D. A brief resume of each of the project team members describing their experience and background.
E. A listing of all sub-consultants to be utilized on the project, and a description of their role (percentage of work, tasks to be completed, etc.).
F. Technical drawings and/or shop drawings of the equipment the firm is proposing to use. These shall be in sufficient detail to allow the City to properly evaluate the function and suitability of the equipment.
G. Material submittals of the proposed including valves and details methodology for line stoppage.
H. Product Brochures as may be necessary to provide clear understanding of the method, materials and construction techniques that will be used.
I. List of assumptions and exclusions

3.2 As part of the Un-priced technical proposal, the firm shall clearly indicate the line stop methodology they are proposing and how long the total work project is anticipated to require.

Section 4 Priced Bid Package Format

4.1 The Priced Bid Package shall be submitted only upon request and notified that their Un-priced Technical Proposal has been determined to have met the criteria set forth herein.

4.2 Priced bids shall be completely filled out in conformance with the documents and shall be signed by a duly authorized representative of the company.

4.3 Priced Bids shall include a Bid Security in conformance with the contract documents.

4.4 Contract Allowance

A. The Priced Bid shall also include a Contract allowance amount that has been pre-determined by the City for its use in authorizing the Contractor to perform additional work desired by the City.

B. Contract allowance items are provided for the purpose of encumbering funds to cover the costs of possible contract amendment work. The amount of the allowance item is determined by the Engineer and is not subject to individual bid pricing. All bidders shall incorporate the amount pre-entered in the bid proposal and shall reflect the same in the total amount bid for this project.

C. This allowance item provides an estimated funding to cover unforeseen changes that may be encountered and corresponding extra work needed to complete the contract per plan. Unforeseen extra work, if any, shall be in accordance with the Contract Amendment section of the General Conditions.

D. It shall be understood that this allowance item is an estimate only and is based on contract amendment history of similar projects. It shall not be utilized without an approved contract amendment. It is further understood that authorized extra work, if any, may be less than the allowance item.

4.5 The Priced Bid package shall include the Priced Bid Schedule, Proposal form, Bidder's Affidavit, and the Bid Security all properly filled out signed and notarized in the appropriate places.

Section 5 Evaluation of Un-priced Technical Proposal (Step I)

5.1 Un-priced Technical Proposals will be evaluated by a Review Committee appointed by the City for this project according to the following criteria:

A. Specific experience of the firm with comparable projects in other municipalities.

B. Experience of the proposed project team

C. Proposed project approach

D. Maintenance costs and ease of maintenance

E. Overall quality of the Proposal, evidencing interest in the project

F. Identification of technical information as required by 3.2.

5.2 The Review Committee will evaluate the Un-priced Technical Proposals and rank them only as "Meets Criteria" or "Does Not Meet Criteria". Only those firms that "Meet Criteria" will move to Step II.

Section 6 Priced Bid Package Opening (Step II)

After completion of the evaluation process, the City will notify firms whether they have been determined to have met the criteria and will request Priced Bid Packages from selected firms. Upon notification, firms will have fourteen (14) calendar days to submit their Priced Bids.

The Review Committee will evaluate those Priced Bids and will recommend the Priced Bid for award of a contract which has the Best Value when the price, warranty, maintenance and other factors have been taken into account.

City Council approval is required for the award of any individual contract in the amount of $10,000 or more.

Priced Bid Schedule (To be submitted only upon request)

Priced Bid Schedule
Water Line Stops and 14-inch Water Line Valve Installations for the
Willow Creek Water Line Repair and Scour Protection

Item	Description	Quantity	Unit	Unit Cost	Total
1	Water Line Stops	2	Ea		
2	14-inch Resilient Wedge Gate Valves	2	Ea		
	Contract Allowance	1	LS	$ 10,000.00	$10,000.00

Total _____

Total Bid:

_____ Dollars
(Written Words)

_____ Signature of Company Official

_____ Title

_____ Company Name

_____ Phone Number

_____ Address

_____ Fax Number

_____ City/State

_____ Zip Code

Proposal form, (To be submitted only upon request)

Proposal

Place:_____

Date: _____

Proposal of _____
(Name)

Corporation organized and existing under the laws of the State of Arizona; a partnership consisting of _____ or an individual trading as _____

TO THE HONORABLE MAYOR AND COUNCIL
CITY OF PRESCOTT
PRESCOTT, ARIZONA
Ladies and Gentlemen:

The Undersigned hereby proposes and agrees to furnish any and all required labor, material, construction equipment, transportation, and services for completion of the Water Line Stops and 14-inch Water Line Valve Installations for the Willow Creek Water Line Repair and Scour Protection, in strict conformity with the plans and specifications, at the total bid price of:
_____Dollars
($_____).

The Undersigned hereby declares that he has visited the site and has carefully examined the Contract Documents relating to the work covered by the above bid or bids.

The Bid Security (Certified Check, Cashier's Check, or Bid Bond) attached, payable to the City of Prescott in the sum of not less than ten percent (10%) of the total bid price bid for the complete project, to insure that the undersigned, if his bid is accepted, shall enter into contract and give the bonds and certificates of insurance required. In the event that the contract and bonds and certificates of insurance required are not furnished to the City within the time required, then and in that event the City may retain from the bid bond an amount, not to exceed the amount of the bid bond, representing the difference between the amount specified in the proposal or bid, and such larger amount that the City in good faith contracts with another party to perform the work covered by the proposal or bid.

The project shall be completed within ** (**) calendar days after the starting date set forth in the NOTICE TO PROCEED.

The undersigned hereby declares, as bidder, that the only persons or parties interested in this PROPOSAL as principals are those named herein; that no elected official or employee of the City is in any manner interested directly or indirectly in this PROPOSAL or in the profits to be derived from the Contract proposed to be taken, other than as permitted by law; that this bid is made without any connection with any other person or persons making a separate bid for the same purpose; that the bid is in all respects fair and without collusion or fraud; that he has read the NOTICE INVITING BIDS and the INFORMATION FOR BIDDERS hereto attached, and as more fully described in the attached contract and specifications, and agrees to furnish the items

and perform the work called for in accordance with the provisions of said form of Contract and the Specifications and to deliver the same within the time stipulated herein, and that he will accept in full payment therefore the total bid price named in this Proposal.

The bidder shall be an A-General Engineering contractor properly licensed at the time of bidding to perform construction in connection with fixed works, including streets, roads, power and utilities plants, dams, hydroelectric plants, sewage and waste disposal plants, bridges, tunnels, and overpasses and shall also be licensed to perform work within residential and commercial property lines, or shall be properly licensed to sub-contract residential or commercial work, as may be required in the Scope of Work.

Any bid submitted without the proper contracting license to perform the required work shall be considered non-responsive and rejected.

The bidder further agrees that, upon receipt of written notice of the acceptance of this PROPOSAL, he will execute the Contract in accordance with the PROPOSAL as accepted and furnish the required bonds TEN (10) days from the date of mailing of said notice of award to him at his address as given below, or within such additional time as may be allowed by the City; and that upon his failure or refusal to do so within said time, then the certified or cashier's check or bid bond accompanying this bid shall be cashed or enforced and the money payable pursuant thereto shall be forfeited to and become the property of the City as liquidated damages for such failure or refusal; provided that if said bidder shall execute the Contract and furnish the required bonds within the aforesaid time, his certified or cashier's check, if furnished, shall be returned to him within three (3) days thereafter, and the bid bond, if furnished, shall become void.
Bidder understands and agrees that the City reserves the right to reject any or all bids and to waive any informality in the bidding.
The bidder agrees that this bid shall be good and may not be withdrawn for a period of sixty (60) calendar days after the scheduled closing time for receiving bids.
Bidder acknowledges receipt of the following Addenda: _____

The undersigned is the holder of Arizona State Contractor's License No(s). and Classification(s):

_____

Respectfully submitted,

_____

Bidder

orporate Seal

By: _____
Title: _____

Bidders Address, Telephone and Fax Number:

_____
_____
_____
_____

Names and addresses of all members of the firm or names and titles of all officers of the corporation:

Bidders Affidavit

State of _____)
) ss.
County of_____)
_____, being first duly sworn, deposes and says:

That he/she is_____ of _____
(Title) (Bidder)
who submits herewith to the City of Prescott, Arizona, a proposal:
That all statements of fact in such proposal are true;
That said proposal was not made in the interest of or on behalf of any undisclosed person, partnership, company, association, organization or corporation;
That said bidder has not, directly or indirectly by agreement, communication or conference with anyone attempted to induce action prejudicial to the interest of the City of Prescott, Arizona, or of any bidder or anyone else interested in the proposed contract; and further,
That prior to the public opening and reading of proposal, said bidder:

1. Did not directly or indirectly, induce or solicit anyone else to submit a false or sham proposal;
2. Did not directly or indirectly collude, conspire, connive or agree with anyone else that said bidder or anyone else would submit a false or sham proposal, or that anyone should refrain from bidding or withdraw his proposals;
3. Did not in any manner, directly or indirectly, seek by agreement, communication or conference with anyone to raise or fix the proposal price of said bidder or of anyone else, or to raise or fix any overhead, profit or cost element of his proposal price, or of that of anyone else;
4. Did not, directly or indirectly, submit his proposed price or any breakdown thereof, or the contents thereof, or divulge information or data relative thereto, to any corporation, partnership, company, association organization, bid depository or to any member or agent thereof, or to any individual or group of individuals, except the City of Prescott, Arizona, or to any person or persons who have a partnership or other financial interests with said bidder in his business.

_____

By: _____

SUBSCRIBED AND SWORN to before me by _____

this _____ day of _____, 2014.

_____ _____
Notary Public Commission Expires

Insurance Requirements

INSURANCE

A. Contractor and subcontractors shall procure and maintain until all of their obligations have been discharged, including any warranty periods under this Contract are satisfied, insurance against claims for injury to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors.

The insurance requirements herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract.

The City in no way warrants that the minimum limits contained herein are sufficient to protect the Contractor from liabilities that might arise out of the performance of the work under this Contract by the Contractor, his agents, representatives, employees, or subcontractors. Contractor is free to purchase such additional insurance as may be determined necessary.

ADDITIONAL INSURANCE REQUIREMENTS: The policies shall include, or be endorsed to include, the following provisions:

1. On insurance policies where the City of Prescott is named as an additional insured, the City of Prescott shall be an additional insured to the full limits of liability purchased by the Contractor even if those limits of liability are in excess of those required by this Contract.
2. The Contractor's insurance coverage shall be primary insurance and non-contributory with respect to all other available sources.

NOTICE OF CANCELLATION: With the exception of a ten (10) day notice of cancellation for non-payment of premium, any changes material to compliance with this contract in the insurance policies above shall require a thirty (30) day written notice.

ACCEPTABILITY OF INSURERS: Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A-VII, unless otherwise approved by the City of Prescott. General liability, automobile liability, and worker's compensation insurance is to be placed with an insurer admitted in the state in which operations are taking place.

VERIFICATION OF COVERAGE:

A. Contractor shall furnish the City with certificates of insurance (ACORD form or equivalent approved by the City) as required by this Contract. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.

All certificates and any required endorsements are to be received and approved by the City before work commences. Each insurance policy required by this Contract must be in effect at or prior to commencement of work under this Contract and remain in effect for the duration of the project and warranty period as set forth in Paragraph 3 of the "Contractor's Affidavit Regarding Settlement of Claims and Certification of Completion of Warranties". Failure to maintain the insurance policies as required by this Contract or to provide evidence of renewal is a material breach of contract.

All certificates required by this Contract shall be sent directly to the Public Works Department, 433 N. Virginia Street, Prescott, AZ 86301. The City project/contract number and project description shall be noted on the certificate of insurance. The City reserves the right to require complete, certified copies of all insurance policies required by this Contract at any time.

B. MAG Specifications, Sections 103.1 through 103.8, including: Unless otherwise specifically required by the Special Conditions, the minimum limits of public liability and property damage liability shall be as follows:

C. Contractor shall provide coverage with limits of liability not less than those stated below. An excess liability policy or umbrella liability policy may be used to meet the minimum liability requirements provided that the coverage is written on a following form basis.

Commercial General Liability – Occurrence Form –

Policy shall include bodily injury, property damage, broad form contractual liability and XCU coverage.

- General Aggregate $ 3,000,000
- Products – Completed Operations Aggregate $ 3,000,000
- Personal and Advertising Injury $ 1,000,000
- Each Occurrence $ 1,000,000
- Fire Legal Liability (Damage to Rented Premises)(if applicable)$ 100,000

The policy shall be endorsed to include the following additional insured language:

"The Contractor agrees to endorse the City of Prescott as an Additional Insured on the Commercial General Liability with the following Additional Insured endorsement, or similar endorsement providing equal or broader Additional Insured coverage, the CG 2010 10 01 Additional Insured - Owners, Lessees, or Contractors, or CG2010 07 04 Additional Insured – Owners, Lessees, or Contractors – Scheduled Person or Organization endorsement in combination with the additional endorsement of GC2037 10 01 Additional Insured – Owners, Lessees, or Contractors – Completed Operations shall be required to provide back coverage for the contractor's "your work" as defined in the policy and liability arising out of the products-completed operations hazard."

Business Automobile Liability: Bodily Injury and Property Damage for any owned, hired, and/or non-owned vehicles used in the performance of this Contract.

Combined Single Limit (CSL) $ 1,000,000

The policy shall be endorsed to include the following additional insured language:

"The City of Prescott shall be named as additional insured with respect to liability arising out of the activities performed by or on behalf of the Contractor, involving automobiles, owned, leased, hired, or borrowed by the Contractor."

Worker's Compensation and Employer's Liability

Workers' Compensation	Statutory
Employer's Liability	
Each Accident -	$1,000,000
Disease – each employee -	$1,000,000
Disease – policy limit -	$1,000,000

Policy shall contain a waiver of subrogation against the City of Prescott for losses arising from work performed by or on behalf of the Contractor.

Professional Liability (Errors and Omissions Liability) – *if applicable*

Each Claim	$ 1,000,000
Annual Aggregate	$ 2,000,000

1. In the event that the professional liability insurance required by this Contract is written on a claims-made basis, Contractor warrants that any retroactive date under the policy shall precede the effective date of this Contract and that either continuous coverage will be maintained or an extended discovery period will be exercised for a period of two (2) years at the time work under this contract is completed.

2. The policy shall cover professional misconduct or lack of ordinary skill for those positions defined in the Scope of Work of this contract.

Notice of Cancellation: With the exception of a ten (10) day notice of cancellation for non-payment of premium, any changes material to compliance with this contract in the insurance policies above shall require a thirty (30) day written notice.

D. Such policy shall not exclude coverage for the following:
   1. Injury to or destruction of any property arising out of the collapse of/or structural injury to any building or structure due to grading of land, excavation, borrowing, filling, backfilling, tunneling, pile driving, cofferdam work or caisson work.
   2. Injury to or destruction of wires, conduits, pipes, mains, sewers, or other similar property or any apparatus in connection therewith, below the surface of the ground, if such injury or destruction is caused by and occurs during the use of mechanical equipment for the purpose of grading of land, paving, excavating, drilling; or injury to or destruction of any property at any time resulting there from.
   3. Injury to or destruction of any property arising out of blasting or explosion.
   4. Motor vehicle public liability and property damage insurance to cover each automobile, truck, and other vehicle used in the performance of the Contract in an amount of not less than $1,000,000.00 for one person, and $1,000,000.00 for more than one person, and property damage in the sum of $1,000,000.00 resulting from any one accident which may arise from the operations of the Contractor in performing the work provided for herein.

E. The Contractor shall carry and maintain fire and extended coverage with an endorsement for vandalism and malicious mischief in Contractor's name and also in the name of the City in an amount of at least ONE HUNDRED PERCENT (100%) of the Contract amount (if applicable).

F. The Contractor shall secure "all risk"-type builder's risk insurance for work to be performed. Unless specifically authorized by the City, the amount of such insurance shall not be less than ONE HUNDRED PERCENT (100%) of the contract price. Such policy shall include coverage for earthquake, landslide, flood, collapse, or loss due to the results of faulty workmanship, during the contract time and until final acceptance of work by the City (if applicable).

NOTICE TO PROCEED. The Contractor or subcontractor shall not work on any part of the project or incur any expenses or obligations until a Notice to Proceed has been issued by the City. The Notice to Proceed will be sent to the Contractor by first class mail or delivered to him in person.

ASSIGNMENT OF PAYMENTS. MAG Specifications, Section 109.3, including assignment of contract clause included in the "Information for Bidders" in this set of specifications.

"SAMPLE" Construction Contract

THIS AGREEMENT, made and entered into this _____ day of _____, 2014, by and between _____ of the City of _____, County of _____, State of Arizona, hereinafter designated "Contractor", and the City of Prescott, a municipal corporation, organized and existing under and by virtue of the laws of the State of Arizona, hereinafter designated "City".

WITNESSETH: That the said Contractor, for and in consideration of the sum to be paid him by the said City, and of the other covenants and agreements herein contained, and under the penalties expressed in the bonds provided, hereby agrees, for himself, his heir, executors, administrators, successors and assigns as follows:

ARTICLE I - SCOPE OF WORK: The Contractor shall furnish any and all labor, materials, equipment, transportation, utilities, services and facilities, required to perform all work for the construction of the project described as City of Prescott: Water Line Stops and 14-inch Water Line Valve Installations for the Willow Creek Water Line Repair and Scour Protection and install the material therein for the City, in a good and workmanlike and substantial manner and to the satisfaction of the City through its Engineers and under the direction and supervision of the Public Works Director, or his properly authorized agents and strictly pursuant to and in conformity with the Plans and Specifications prepared by the engineers for the City, and with such written modifications of the same and other documents that may be made by the City through the Public Works Director or his properly authorized agents, as provided herein.

ARTICLE II - CONTRACT DOCUMENTS: The Notice Inviting Bids, Plans, Technical Specifications, Special Provisions, Addenda, if any, Proposal and Insurance Requirements as accepted by the Mayor and Council per Council Minutes of _____, 2014, Performance Bond, Payment Bond, Bid Bond, Certificate of Insurance and Contract Amendments, if any, are by this reference made a part of this Contract to the same extent as if set forth herein in full.

ARTICLE III - TIME OF COMPLETION: The Contractor hereby agrees to commence work on or before the tenth (10th) day after written notice to do so, and to fully complete the same within ** (**) calendar days after the date of the written notice to commence work, subject to such extensions of time as are provided by the General Conditions.

ARTICLE IV - COMPENSATION: Contractor shall be paid, pursuant to the provisions as set forth in the Contract documents, the total sum of _____ Dollars ($_____), plus any approved contract amendments, for the full and satisfactory completion of all work as set forth in the Project Specifications and Contract Documents. Retention shall be in accordance with Arizona Revised Statutes Section 34-221.

ARTICLE V - CONFLICT OF INTEREST: Pursuant to ARS Section 38-511, the City of Prescott may cancel this contract, without penalty or further obligation, if any person significantly involved in initiating, negotiation, securing, drafting or creating the contract on behalf of the City of Prescott is, at any time while the contract or any extension of the contract is in effect, an employee or agent 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. In the event of the foregoing, the City of Prescott further elects to recoup any fee or commission paid or due to any person significantly involved in initiating, negotiation, securing, drafting or creating this contract on behalf of the City of Prescott from any other party to the contract, arising as a result of this contract.

ARTICLE VI - AMBIGUITY: This Agreement is the result of negotiations by and between the parties. Although it has been drafted by the Prescott City Attorney, it is the result of the negotiations between the parties. Therefore, any ambiguity in this Agreement is not to be construed against either party.

ARTICLE VII - NONDISCRIMINATION: The Contractor, with regard to the work performed by it after award and during its performance of this contract, will not discriminate on the grounds of race, color, national origin, religion, sex, disability or familial status in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The Contractor will not participate either directly or indirectly in the discrimination prohibited by or pursuant to Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Section 109 of the Housing and Community Development Act of 1974, the Age Discrimination Act of 1975, the Americans With Disability Act (Public Law 101-336, 42 U.S.C. 12101-12213) and all applicable federal regulations under the Act, and Arizona Governor Executive Orders 99-4, 2000-4 and 2009-09 as amended.

ARTICLE VIII - INDEPENDENT CONTRACTOR STATUS: It is expressly agreed and understood by and between the parties that the Contractor is being retained by the City as an independent contractor, and as such the Contractor shall not become a City employee, and is not entitled to payment or compensation from the City or to any fringe benefits to which other City employees are entitled other than that compensation as set forth in Article IV - Compensation above. As an independent contractor, the Contractor further acknowledges that he is solely responsible for payment of any and all income taxes, FICA, withholding, unemployment insurance, or other taxes due and owing any governmental entity whatsoever as a result of this Agreement. As an independent contractor, the Contractor further agrees that he will conduct himself in a manner consistent with such status, and that he will neither hold himself out nor claim to be an officer or employee of the City by reason thereof, and that he will not make any claim, demand or application to or for any right or privilege applicable to any officer or employee of the City, including but not limited to workmen's compensation coverage, unemployment insurance benefits, social security coverage, or retirement membership or credit.

ARTICLE IX - CITY FEES: Prior to final payment to the Contractor, the City shall deduct therefrom any and all unpaid privilege, license and other taxes, fees and any and all other unpaid moneys due the City from the Contractor, and shall apply to those moneys to the appropriate account. Contractor shall provide to the City any information necessary to determine the total amount(s) due.

ARTICLE X - LIQUIDATED DAMAGES: All time limits stated in the contract documents are of the essence and should the Contractor fail to complete the work required to be done on or before the time of completion as set forth in these contract documents, including any authorized extension of time, it is mutually agreed and understood by and between the parties that the public will suffer great damages; that such damages, from the nature of the project, will be extremely difficult and impractical to fix; that the parties hereto wish to fix the amount of said damages in advance; and that the sum of $**.00 per day for each and every day's delay in completion and acceptance of the work required to be done by the Contractor subsequent to the time of completion, including any authorized extensions of time, is the nearest and most exact measure of damages for such breach that can be fixed now or could be fixed at or after such breach and that, therefore, the Owner and Contractor agree to fix said sum of $**.00 per day for each and every said day's delay as liquidated damages, and not as a penalty or forfeiture for the breach of the agreement to complete the work required to be done by the Contractor on or before the time of completion and acceptance and, in the case of such breach, the Owner shall deduct said amount from the amount due the Contractor under the contract. In the event the remaining balance due the Contractor is insufficient to cover the full amount of assessed liquidated damages, then the Contractor or the surety on the bonds shall pay the difference due the Owner.

ARTICLE XI – OTHER WORK IN PROJECT AREA

The City of Prescott, any other contractors, whether under contract with the City, a third party, and/or utilities, may be working within the project area while this Contract is in progress. The Contractor herein acknowledges that delays and disruptions may, and in all likelihood, will occur due to other work. The Contractor's bid shall be deemed to have recognized and included costs arising from and associated with

other work in the project area disclosed by the Contract Documents or which would be apparent to an experienced contractor exercising due diligence during inspection of the project documents, the question and answer session in the pre-bid process or during site inspection. No payment will be made for any delays or disruptions in the work schedule that are wholly the fault of the contractor, its agents, employees or any of the contractor's subcontractors. In the event that the contractor encounters delay or disruption in the project schedule due to factors not wholly the fault of the contractor or within the contractors control then the Contract may be adjusted pursuant to the Delay's and Extension of Time provisions of this Contract and a timely request submitted for Contract Amendment. Failure to submit a timely request for Contract Amendment shall be deemed a waiver of any entitlement to additional compensation.

ARTICLE XII - BONDS

A. On or before the execution of the contract, the Contractor shall obtain in an amount equal to the full contract price a performance bond pursuant to ARS Section 34-222, conditioned upon the faithful performance of this contract in accordance with the plans, specifications and conditions herein. Such bond shall be solely for the protection of the City of Prescott. A copy of this bond shall be filed with the Prescott City Clerk.

B. Contractor shall also obtain a payment bond, pursuant to the provisions of ARS Section 34-222, in an amount equal to this full contract price herein, said bond to be solely for the protection of claimants supplying labor or materials to the Contractor or his subcontractors in the prosecution of the work provided for in this contract. A copy of this bond shall be filed with the Prescott City Clerk.

C. All bonds must be written by an insurance company authorized to do business in the State of Arizona, to be evidenced by a Certificate of Authority as defined in ARS Section 20-217, a copy of which certificate is to be attached to the applicable bid bond, payment bond and performance bond. In addition, depending upon the nature of the contract and amount thereof, the City Manager may also require insurance companies and/or bonding companies to have an "A" rating or better with Moody's or A.M. Best Company, and/or to be included on the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (as amended) by the audit staff, Bureau of Accounts, US Treasury Department.

ARTICLE XIII - MISCELLANEOUS

A. The parties hereto expressly covenant and agree that in the event of a dispute arising from this Agreement, each of the parties hereto waives any right to a trial by jury. In the event of litigation, the parties hereby agree to submit to a trial before the Court. The Contractor further agrees that this provision shall be contained in all subcontracts related to the project, which is the subject of this Agreement.

B. The parties hereto expressly covenant and agree that in the event of litigation arising from this Agreement, neither party shall be entitled to an award of attorney fees, either pursuant to the Contract, pursuant to ARS Section 12-341.01 (A) and (B), or pursuant to any other state or federal statute, court rule, case law or common law. The Contractor further agrees that this provision shall be contained in all subcontracts related to the project that is the subject of this Agreement.

C. Any notices to be given by either party to the other must be in writing, and personally delivered or mailed by prepaid postage, at the following addresses:

Public Works Director	**
City of Prescott	**
433 N. Virginia Street	**
Prescott, AZ 86301	(PH #)

D. This Agreement shall be construed under the laws of the State of Arizona.

E. This Agreement represents the entire and integrated Agreement between the City and the Contractor and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by written instrument signed by both the City and the Contractor. Written and signed amendments shall automatically become part of the Agreement, and shall supersede any inconsistent provision therein; provided, however, that any apparent inconsistency shall be resolved, if possible, by construing the provisions as mutually complementary and supplementary.

F. In the event any provision of this Agreement shall be held to be invalid and unenforceable, the remaining provisions shall be valid and binding upon the parties. One or more waivers by either party of any provision, term, condition or covenant shall not be construed by the other party as a waiver of a subsequent breach of the same by the other party.

G. No oral order, objection, claim or notice by any party to the other shall affect or modify any of the terms or obligations contained in this Agreement, and none of the provisions of this Agreement shall be held to be waived or modified by reason of any act whatsoever, other than by a definitely agreed waiver or modification thereof in writing. No evidence of modification or waiver other than evidence of any such written notice, waiver or modification shall be introduced in any proceeding.

H. In the event of a discrepancy between this Agreement and other documents incorporated into this Agreement, this Agreement shall control over Exhibit "A".

I. Non-Availability of Funds: Fulfillment of the obligation of the City under this Agreement is conditioned upon the availability of funds appropriated or allocated for the performance of such obligations. If funds are not allocated and available for the continuance of this Agreement, this Agreement may be terminated by the City at the end of the period for which the funds are available. No liability shall accrue to the City in the event this provision is exercised, and the City shall not be obligated or liable for any future payments as a result of termination under this paragraph.

IN WITNESS WHEREOF, three (3) identical counterparts of this Contract, each of which shall for all purposes be deemed an original thereof, have been duly executed by the parties herein above named, on the date and year first above written.

ATTEST:

Witness, if Contractor is an Individual	Contractor By:_____ Title:_____
	City of Prescott, a municipal corporation
	Marlin D. Kuykendall, Mayor
Attest:	Approved as to Form:
Dana R. DeLong, City Clerk	Jon M. Paladini, City Attorney

Attachment A

ESTIMATED QUANTITIES:	(PUBLIC WATER MAIN)	
1.	24" DIP WATER MAIN	267 LF
2.	18" DIP WATER MAIN	32 LF
3.	14" DIP WATER MAIN	44 LF
4.	18" GATE VALVE	2 EA
5.	14" GATE VALVE	2 EA
6.	HALF VERTICAL REALIGNMENT	1 EA
7.	24" WATER CONCRETE ENCASEMENT	246 LF
8.	EX 12" SEWER CONCRETE ENCASEMENT	35 LF
9.	REMOVE EXISTING PIPE	1 LS
10.	12" DIP SEWER MAIN	12 LF
11.	MAINTENANCE ROAD	560 SY

14" Waterline Valve Connection

14" Waterline Valve Connection

WATER KEY

CONNECT TO EXISTING PUBLIC WATER MAIN WITH WELDED FLANGE PER MANUFACTURER'S STANDARDS AND COP REQUIREMENTS WITH COORDINATED SHUT-DOWN. FIELD VERIFY PIPE SIZE, MATERIAL, LOCATION AND INVERT PRIOR TO CONSTRUCTION.

W2 FURNISH AND INSTALL CLASS 350 RESTRAINED JOINT DUCTILE IRON WATER MAIN (SIZE AS NOTED), WITH TRACER WIRE PER COP SD 3-18P. WATER MAIN TRENCH PER COP SD 2-02P.

W3 FURNISH AND INSTALL WATER VALVE, BOX AND COVER, SIZE AS NOTED, PER COP SD 3-03P, 3-13P AND MAG SD 391 AND PER AWWA AND ASTM STANDARDS.

W4 FURNISH AND INSTALL ALL FITTINGS AS NOTED, WITH MEGA-LUG AND FIELD LOCK GASKETS (OR APPROVED EQUAL) PER COP REQUIREMENTS AND PER AWWA AND ASTM STANDARDS.

W5 CONSTRUCT WATER MAIN VERTICAL REALIGNMENT PER COP SD 3-11P.

W6 FURNISH AND INSTALL CONCRETE ENCASEMENT PER MAG SD 404.

NOTES:

THIS MAP DOES NOT REPRESENT A LAND BOUNDARY SURVEY.

ALL EASEMENTS OF RECORD MAY NOT BE PLOTTED HEREON.

UTILITIES AS SHOWN HEREON ARE BASED ON PHYSICALLY APPARENT ABOVE GROUND FEATURES AND DO NOT REPRESENT A "BLUE-STAKED" SURVEY.

SCALES: 1"=20' HORIZONTAL, 1"=4' VERTICAL — SECTION AA

SCALES: 1"=20' HORIZONTAL, 1"=4' VERTICAL — SECTION BB

SCALES: 1"=20' HORIZONTAL, 1"=4' VERTICAL — EXISTING SEWER ALIGNMENT

DALL TWO WORKING DAYS BEFORE YOU DIG (602) 263-1100 1-800-STAKE-IT (WORK NUMBER ONLY)

PRELIMINARY - NOT FOR CONSTRUCTION

EXPIRES 06/30/15

CITY OF PRESCOTT
WILLOW CREEK WATER MAIN CROSSING

KELLEY / WEBB ENGINEERING, INC.
144 GROVE AVENUE
PRESCOTT, ARIZONA 86301
(928) 771-1730
FAX 778-8230

DRAWN	BWT	REVISED
DESIGN	BWT	
CHECK	GWK	
DATE	11/6/13	
JOB	12-088.1	
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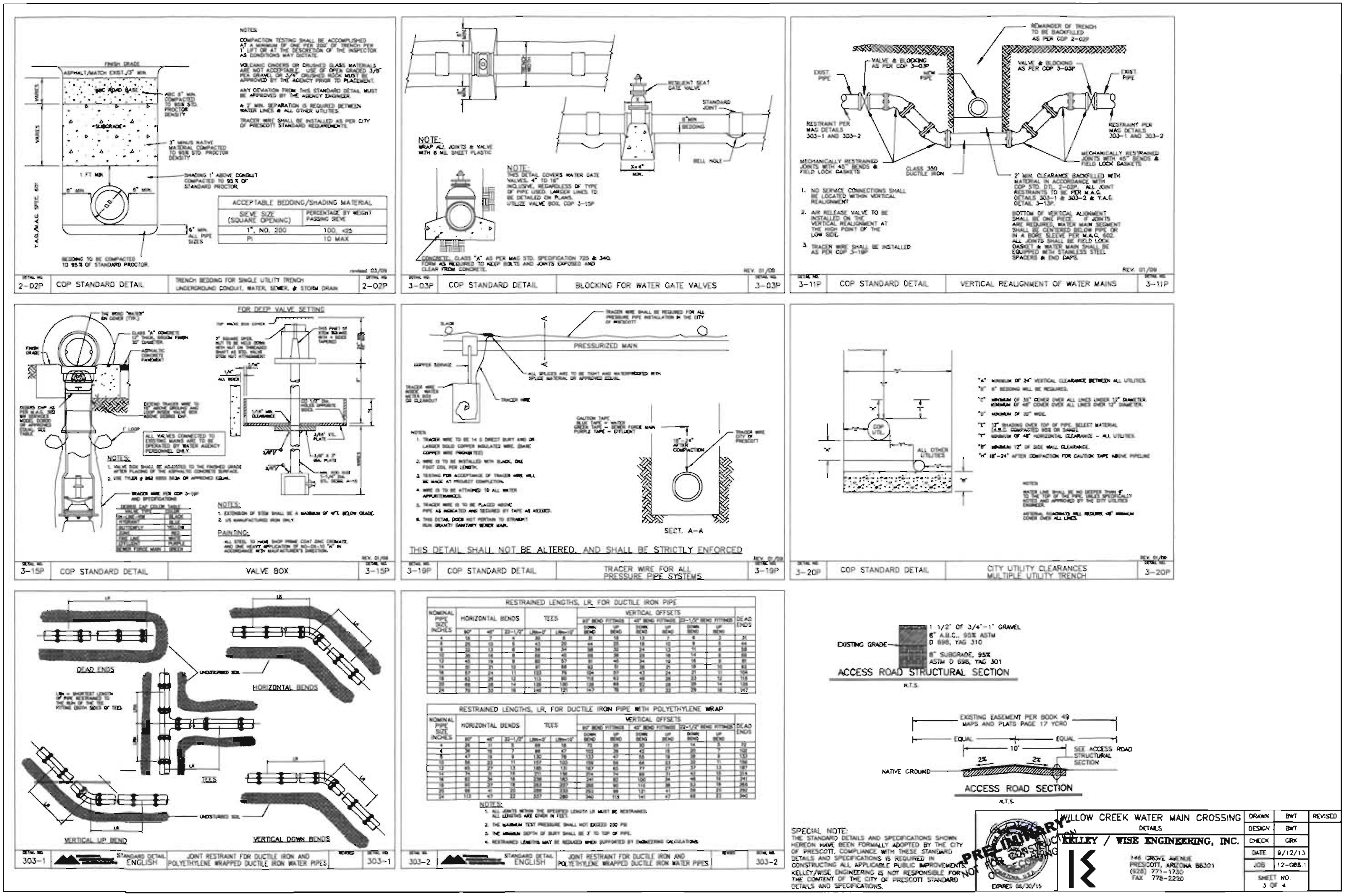
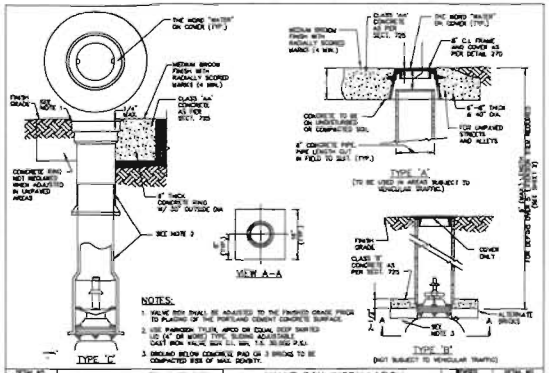
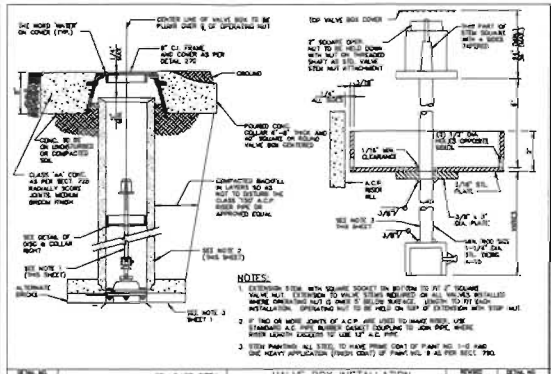


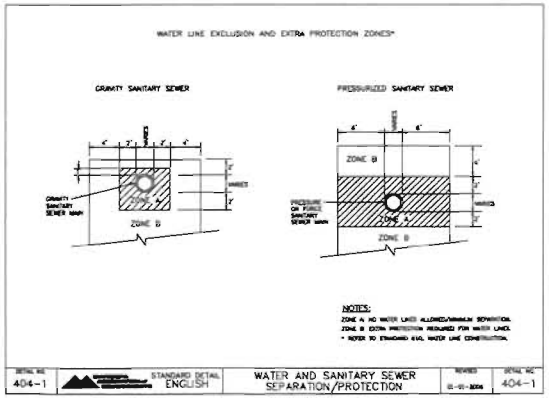
COP STANDARD DETAIL
2-02P
TRENCH BEDDING FOR SINGLE UTILITY TRENCH
UNDERGROUND CONDUIT, WATER, SEWER, & STORM DRAIN
revised 03/09
NOTES:
COMPACTION TESTING SHALL BE ACCOMPLISHED AT A MINIMUM OF ONE PER 200' OF TRENCH PER 1' LIFT OR AT THE DISCRETION OF THE INSPECTOR AS CONDITIONS MAY DICTATE.
VOLCANIC CINDERS OR CRUSHED GLASS MATERIALS ARE NOT ACCEPTABLE. USE OF OPEN GRADED 3/8" PEA GRAVEL OR 3/4" CRUSHED ROCK MUST BE APPROVED BY THE AGENCY PRIOR TO PLACEMENT.
ANY DEVIATION FROM THIS STANDARD DETAIL MUST BE APPROVED BY THE AGENCY ENGINEER.
A 2' MIN. SEPARATION IS REQUIRED BETWEEN WATER LINES & ALL OTHER UTILITIES.
TRACER WIRE SHALL BE INSTALLED AS PER CITY OF PRESCOTT STANDARD REQUIREMENTS.
FINISH GRADE
ASPHALT/MATCH EXIST./3" MIN.
ABC ROAD BASE
ABC 6" MIN. COMPACTED TO 95% STD. PROCTOR DENSITY
SUBGRADE
3" MINUS NATIVE MATERIAL COMPACTED TO 95% STD. PROCTOR DENSITY
SHADING 1' ABOVE CONDUIT COMPACTED TO 95% OF STANDARD PROCTOR
1 FT MIN
6" MIN.
6" MIN. ALL PIPE SIZES
VARIES
Y.A.G./M.A.G. SPEC 601
BEDDING TO BE COMPACTED TO 95% OF STANDARD PROCTOR.
ACCEPTABLE BEDDING/SHADING MATERIAL
SIEVE SIZE (SQUARE OPENING) | PERCENTAGE BY WEIGHT PASSING SIEVE
1", NO. 200 | 100, <25
PI | 10 MAX
COP STANDARD DETAIL
3-03P
BLOCKING FOR WATER GATE VALVES
REV. 01/09
NOTE:
WRAP ALL JOINTS & VALVE WITH 8 MIL SHEET PLASTIC
NOTE:
THIS DETAIL COVERS WATER GATE VALVES, 4" TO 18" INCLUSIVE, REGARDLESS OF TYPE OF PIPE USED. LARGER LINES TO BE DETAILED ON PLANS. UTILIZE VALVE BOX COP 3-15P
CONCRETE, CLASS "A" AS PER MAG STD. SPECIFICATION 725 & 340, FORM AS REQUIRED TO KEEP BOLTS AND JOINTS EXPOSED AND CLEAR FROM CONCRETE.
RESILIENT SEAT GATE VALVE
STANDARD JOINT
6" MIN. BEDDING
BELL HOLE
X+4" MIN.
COP STANDARD DETAIL
3-11P
VERTICAL REALIGNMENT OF WATER MAINS
REV. 01/09
REMAINDER OF TRENCH TO BE BACKFILLED AS PER COP 2-02P
VALVE & BLOCKING AS PER COP 3-03P
EXIST. PIPE
NEW PIPE
RESTRAINT PER MAG DETAILS 303-1 AND 303-2
MECHANICALLY RESTRAINED JOINTS WITH 45° BENDS & FIELD LOCK GASKETS
CLASS 350 DUCTILE IRON
2' MIN. CLEARANCE BACKFILLED WITH MATERIAL IN ACCORDANCE WITH COP STD. DTL. 2-02P. ALL JOINT RESTRAINTS TO BE PER M.A.G. DETAILS 303-1 & 303-2 & Y.A.G. DETAIL 3-13P.
BOTTOM OF VERTICAL ALIGNMENT SHALL BE ONE PIECE. IF JOINTS ARE REQUIRED, WATER MAIN SEGMENT SHALL BE CENTERED BELOW PIPE OR IN A BORE SLEEVE PER M.A.G. 602. ALL JOINTS SHALL BE FIELD LOCK GASKET & WATER MAIN SHALL BE EQUIPPED WITH STAINLESS STEEL SPACERS & END CAPS.
1. NO SERVICE CONNECTIONS SHALL BE LOCATED WITHIN VERTICAL REALIGNMENT
2. AIR RELEASE VALVE TO BE INSTALLED ON THE VERTICAL REALIGNMENT AT THE HIGH POINT OF THE LOW SIDE.
3. TRACER WIRE SHALL BE INSTALLED AS PER COP 3-19P
COP STANDARD DETAIL
3-15P
VALVE BOX
REV. 01/09
FOR DEEP VALVE SETTING
THE WORD "WATER" ON COVER (TYP.)
CLASS "A" CONCRETE
ASPHALTIC CONCRETE PAVEMENT
FINISH GRADE
EXTEND TRACER WIRE TO 12" ABOVE GROUND
ALL VALVES CONNECTED TO EXISTING MAINS ARE TO BE OPERATED BY WATER AGENCY PERSONNEL ONLY.
1' LOOP
NOTES:
1. VALVE BOX SHALL BE ADJUSTED TO THE FINISHED GRADE AFTER PLACING OF THE ASPHALTIC CONCRETE SURFACE.
2. USE TYLER # 562 6850 563A OR APPROVED EQUAL.
TRACER WIRE PER COP 3-19P AND SPECIFICATIONS
NOTES:
1. EXTENSION OF STEM SHALL BE A MAXIMUM OF 4FT. BELOW GRADE.
2. US MANUFACTURED IRON ONLY.
PAINTING:
ALL STEEL TO HAVE SHOP PRIME COAT ZINC CROMATE AND ONE HEAVY APPLICATION OF NO-OX-ID "A" IN ACCORDANCE WITH MANUFACTURER'S DIRECTION.
COP STANDARD DETAIL
3-19P
TRACER WIRE FOR ALL PRESSURE PIPE SYSTEMS
PRESSURIZED MAIN
TRACER WIRE
SECT. A-A
THIS DETAIL SHALL NOT BE ALTERED, AND SHALL BE STRICTLY ENFORCED
COP STANDARD DETAIL
3-20P
CITY UTILITY CLEARANCES MULTIPLE UTILITY TRENCH
REV. 01/09
COP UTIL.
ALL OTHER UTILITIES
STANDARD DETAIL ENGLISH
303-1
JOINT RESTRAINT FOR DUCTILE IRON AND POLYETHYLENE WRAPPED DUCTILE IRON WATER PIPES
DEAD ENDS
HORIZONTAL BENDS
TEES
VERTICAL UP BEND
VERTICAL DOWN BENDS
UNDISTURBED SOIL
STANDARD DETAIL ENGLISH
303-2
JOINT RESTRAINT FOR DUCTILE IRON AND POLYETHYLENE WRAPPED DUCTILE IRON WATER PIPES
RESTRAINED LENGTHS, LR, FOR DUCTILE IRON PIPE
RESTRAINED LENGTHS, LR, FOR DUCTILE IRON PIPE WITH POLYETHYLENE WRAP
NOMINAL PIPE SIZE INCHES
HORIZONTAL BENDS
TEES
VERTICAL OFFSETS
DEAD ENDS
NOTES:
1 1/2" OF 3/4"-1" GRAVEL
6" A.B.C., 95% ASTM D 698, YAG 310
8" SUBGRADE, 95% ASTM D 698, YAG 301
EXISTING GRADE
ACCESS ROAD STRUCTURAL SECTION
N.T.S.
EXISTING EASEMENT PER BOOK 49 MAPS AND PLATS PAGE 17 YCRD
EQUAL
10'
EQUAL
2%
2%
SEE ACCESS ROAD STRUCTURAL SECTION
NATIVE GROUND
ACCESS ROAD SECTION
N.T.S.
SPECIAL NOTE:
THE STANDARD DETAILS AND SPECIFICATIONS SHOWN HEREON HAVE BEEN FORMALLY ADOPTED BY THE CITY OF PRESCOTT. COMPLIANCE WITH THESE STANDARD DETAILS AND SPECIFICATIONS IS REQUIRED IN CONSTRUCTING ALL APPLICABLE PUBLIC IMPROVEMENTS. KELLEY/WISE ENGINEERING IS NOT RESPONSIBLE FOR THE CONTENT OF THE CITY OF PRESCOTT STANDARD DETAILS AND SPECIFICATIONS.
PRELIMINARY NOT FOR CONSTRUCTION OR RECORDING
EXPIRES 06/30/15
WILLOW CREEK WATER MAIN CROSSING
DETAILS
KELLEY / WISE ENGINEERING, INC.
146 GROVE AVENUE
PRESCOTT, ARIZONA 86301
(928) 771-1730
FAX 778-2220
DRAWN BWT
DESIGN BWT
CHECK GRK
DATE 9/12/13
JOB 12-088.1
SHEET NO. 3 OF 4
REVISED

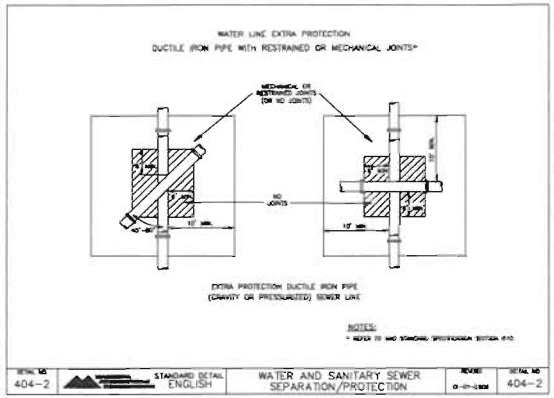


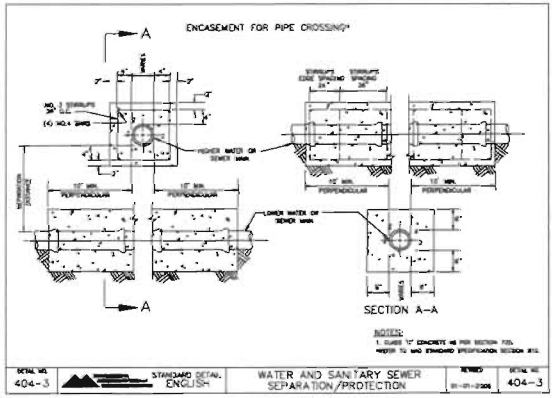


1. ALL WORK SHALL CONFORM TO MARICOPA ASSOCIATION OF GOVERNMENTS (MAG), YAVAPAI ASSOCIATION OF GOVERNMENTS (YAG) & CITY OF PRESCOTT (COP) ADOPTED YAG CONSTRUCTION STANDARDS & SPECIFICATIONS, WHICH ARE ON FILE IN THE OFFICE OF THE CITY ENGINEER.
2. ALL FRAMES, COVERS, VALVE BOXES, & MANHOLES SHALL BE ADJUSTED TO FINISH GRADE UPON COMPLETION OF FRAMING, UTILITY, OR RELATED CONSTRUCTION.
3. ANY QUANTITIES SHOWN ON PLANS ARE NOT VERIFIED BY THE PUBLIC WORKS UTILITIES DIRECTOR.
4. ACCEPTANCE OF THE COMPLETED WORK WILL NOT BE GIVEN UNTIL 3 MIL MYLAR & CAD FORMAT DIGITAL AS-BUILT PLANS ON CITY OF PRESCOTT SURVEY DATUM & COORDINATES HAVE BEEN SUBMITTED BY A REGISTERED PROFESSIONAL ENGINEER AND APPROVED BY THE PUBLIC WORKS DEPARTMENT.
5. CITY OF PRESCOTT PUBLIC WORKS UTILITIES SHALL BE NOTIFIED 24 HOURS PRIOR TO THE START OF ANY WORK.
6. ALL WORK & MATERIALS WHICH DO NOT CONFORM TO THE SPECIFICATIONS ARE SUBJECT TO REMOVAL & REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
7. ANY WORK PERFORMED WITHOUT THE KNOWLEDGE OF THE AGENCY INSPECTOR OR HIS REPRESENTATIVE IS SUBJECT TO REMOVAL & REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
8. THE CONTRACTOR SHALL PROVIDE SUFFICIENT MEN & EQUIPMENT ON THE JOB AT ALL TIMES DURING CONSTRUCTION TO COMPLY WITH SPECIFICATIONS & TO COMPLETE THE WORK.
9. INSPECTION TO BE DONE BY THE CITY OF PRESCOTT PUBLIC WORKS DEPARTMENT OR THEIR REPRESENTATIVE.
10. CONTRACTOR TO NOTIFY PROJECT ENGINEER 72 HOURS (3 WORKING DAYS) IN ADVANCE OF CONSTRUCTION TO SCHEDULE CONSTRUCTION STAKING.
11. THE CONTRACTOR IS TO UNCOVER ALL EXISTING LINES BEING TIED INTO AND VERIFY GRADES & ELEVATIONS BEFORE ANY OTHER CONSTRUCTION.
12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UNDERGROUND PIPELINES, TELEPHONE & ELECTRICAL CONDUITS & STRUCTURES IN ADVANCE OF ANY CONSTRUCTION IN ORDERING ALL POSSIBLE SITUATIONS TO AVOID ANY DAMAGE TO SUCH. THE ENGINEER &/OR OWNER WILL NOT GUARANTEE ANY LOCATIONS AS SHOWN ON THESE PLANS, OR THOSE OMITTED FROM SAME.
13. CONTRACTOR SHALL NOTIFY BLUE STAKE AT 1-800-STAKE (1-800-782-5348) AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
14. CONTRACTOR SHALL VERIFY ALL QUANTITIES SHOWN & MAKE HIS BID BASED UPON THESE NOTIFICATIONS. IF ANY DISCREPANCY IN QUANTITIES IS FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON.
15. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIREMENTS SHALL BE COMPLIED WITH.
16. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIREMENTS SHALL APPLY WHICH MORE STRINGENT THAN THE MAG OR YAG STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
17. ALL PLANS SIGNED BY THE CITY UTILITY ENGINEER ARE NULL & VOID ONE YEAR FROM DATE OF SIGNATURE IF CONSTRUCTION HAS NOT STARTED.
18. PROJECT ENGINEER SHALL BE RESPONSIBLE FOR SUBMITTING TRAFFIC CONTROL PLANS WHICH SHALL BE MADE A PART OF THE PLAN REVIEW REQUEST TO THE CITY ENGINEER FOR APPROVAL.
19. ALL WATER LINES & APPURTENANCES SHALL BE PROVIDED WITH 14 GAUGE AWG INSULATED, SINGLE STRAND, DIRECT BURY, COPPER TRACE WIRE. TRACE WIRE SHALL BE SUBJECT TO A CONTINUITY TEST. EARLY ACCESSIBLE. & ANY DEFICIENCIES SHALL BE CORRECTED.
20. WATER-SEWER SEPARATION SHALL BE PURSUANT TO AAC R-18-5-502C.
21. WATER MAINS SHALL BE SUBJECT TO A PRESSURE & LEAKAGE TEST IN ACCORDANCE WITH AWWA C-600 STANDARD.
22. WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH ADEQ DWINSTRING BULLETIN NO. 8 "DISINFECTION OF WATER SYSTEMS".
23. OPERATION OF VALVES TO BE DONE BY CITY PERSONNEL ONLY.
24. DUCTILE IRON PIPE TO BE INSTALLED PER MANUFACTURER'S REQUIREMENTS. ALL MATERIALS USED IN THE INSTALLATION OF DUCTILE IRON PIPE SHALL BE PURSUANT TO AAC R-18-4-304.
25. ALL MATERIALS & PRODUCTS THAT COME INTO CONTACT WITH DRINKING WATER (IN DRINKING WATER TREATMENT CHEMICALS MUST COMPLY WITH NSF STANDARD 61. ANY OR EQUAL SUBSTITUTION SHALL ALSO MEET NSF STANDARD 61.
26. ALL TRENCHES & BEDDING SHALL BE PER MODIFIED COP DETAILS 2-01P & 2-02P & TECHNICAL SPECIFICATIONS.
27. ALL MATERIALS USED IN THE INSTALLATION OF WATER MAINS SHALL BE PURSUANT TO AAC R-18-4-115, & SHALL BE NSF APPROVED FOR POTABLE WATER.
28. ALL REVISIONS TO ORIGINAL PLANS MUST BE APPROVED BY THE PUBLIC WORKS UTILITIES DIRECTOR PRIOR TO CONSTRUCTION. ANY UNAPPROVED REVISIONS ARE SUBJECT TO REMOVAL & REPLACEMENT AT OWNER'S EXPENSE.
29. ALL DUCTILE IRON PIPERS, & BRASS FITTINGS SHALL BE ENCASED IN POLYETHYLENE PROTECTIVE WRAPPING IN ACCORDANCE WITH MAG SECTION 610.3. UNLESS CONTAMINATED BY GEOTECHNICAL REPORT.
30. WATER LINES SHALL BE INSTALLED WITH FIELD LOCK GASKETS & WORM LOCK WHERE JOINT RESTRAINT IS REQUIRED.
31. WATER SERVICE INTERRUPTION NOTICES SHALL BE GIVEN TO AFFECTED RESIDENTS BY THE CONTRACTOR AT NO EXPENSE USING A METHOD APPROVED BY THE PUBLIC WORKS UTILITIES DIRECTOR.

DETAIL NO. 3-A-P | COP STANDARD DETAIL | WATER PLAN GENERAL NOTES | REV. 01/06 | DETAIL NO. 3-AP







1. ALL WORK SHALL CONFORM TO MARICOPA ASSOCIATION OF GOVERNMENTS (MAG), YAVAPAI ASSOCIATION OF GOVERNMENTS (YAG) & CITY OF PRESCOTT (COP) ADOPTED YAG CONSTRUCTION STANDARDS & SPECIFICATIONS, WHICH ARE ON FILE IN THE OFFICE OF THE CITY ENGINEER.
2. ALL FRAMES, COVERS, VALVE BOXES, & MANHOLES SHALL BE ADJUSTED TO FINISH GRADE UPON COMPLETION OF FRAMING, UTILITY, OR RELATED CONSTRUCTION.
3. ANY QUANTITIES SHOWN ON PLANS ARE NOT VERIFIED BY THE PUBLIC WORKS UTILITIES DIRECTOR.
4. ACCEPTANCE OF THE COMPLETED WORK WILL NOT BE GIVEN UNTIL 3 MIL MYLAR & CAD FORMAT DIGITAL AS-BUILT PLANS ON CITY OF PRESCOTT SURVEY DATUM & COORDINATES HAVE BEEN SUBMITTED BY A REGISTERED PROFESSIONAL ENGINEER AND APPROVED BY THE PUBLIC WORKS DEPARTMENT.
5. CITY OF PRESCOTT PUBLIC WORKS UTILITIES SHALL BE NOTIFIED 24 HOURS PRIOR TO THE START OF ANY WORK.
6. ALL WORK & MATERIALS WHICH DO NOT CONFORM TO THE SPECIFICATIONS ARE SUBJECT TO REMOVAL & REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
7. ANY WORK PERFORMED WITHOUT THE KNOWLEDGE OF THE AGENCY INSPECTOR OR HIS REPRESENTATIVE IS SUBJECT TO REMOVAL & REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
8. THE CONTRACTOR SHALL PROVIDE SUFFICIENT MEN & EQUIPMENT ON THE JOB AT ALL TIMES DURING CONSTRUCTION TO COMPLY WITH SPECIFICATIONS & TO COMPLETE THE WORK.
9. INSPECTION TO BE DONE BY THE CITY OF PRESCOTT PUBLIC WORKS DEPARTMENT OR THEIR REPRESENTATIVE.
10. CONTRACTOR TO NOTIFY PROJECT ENGINEER 72 HOURS (3 WORKING DAYS) IN ADVANCE OF CONSTRUCTION TO SCHEDULE CONSTRUCTION STAKING.
11. THE CONTRACTOR IS TO UNCOVER ALL EXISTING LINES BEING TIED INTO AND VERIFY GRADES & ELEVATIONS BEFORE ANY OTHER CONSTRUCTION.
12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UNDERGROUND PIPELINES, TELEPHONE & ELECTRICAL CONDUITS & STRUCTURES IN ADVANCE OF ANY CONSTRUCTION IN ORDERING ALL POSSIBLE SITUATIONS TO AVOID ANY DAMAGE TO SUCH. THE ENGINEER &/OR OWNER WILL NOT GUARANTEE ANY LOCATIONS AS SHOWN ON THESE PLANS, OR THOSE OMITTED FROM SAME.
13. CONTRACTOR SHALL NOTIFY BLUE STAKE AT 1-800-STAKE (1-800-782-5348) AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
14. CONTRACTOR SHALL VERIFY ALL QUANTITIES SHOWN & MAKE HIS BID BASED UPON THESE NOTIFICATIONS. IF ANY DISCREPANCY IN QUANTITIES IS FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON.
15. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIREMENTS SHALL BE COMPLIED WITH.
16. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIREMENTS SHALL APPLY WHICH MORE STRINGENT THAN THE MAG OR YAG STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
17. ALL PLANS SIGNED BY THE CITY UTILITY ENGINEER ARE NULL & VOID ONE YEAR FROM DATE OF SIGNATURE IF CONSTRUCTION HAS NOT STARTED.
18. PROJECT ENGINEER SHALL BE RESPONSIBLE FOR SUBMITTING TRAFFIC CONTROL PLANS WHICH SHALL BE MADE A PART OF THE PLAN REVIEW REQUEST TO THE CITY ENGINEER FOR APPROVAL.
19. ALL WATER LINES & APPURTENANCES SHALL BE PROVIDED WITH 14 GAUGE AWG INSULATED, SINGLE STRAND, DIRECT BURY, COPPER TRACE WIRE. TRACE WIRE SHALL BE SUBJECT TO A CONTINUITY TEST. EARLY ACCESSIBLE. & ANY DEFICIENCIES SHALL BE CORRECTED.
20. WATER-SEWER SEPARATION SHALL BE PURSUANT TO AAC R-18-5-502C.
21. WATER MAINS SHALL BE SUBJECT TO A PRESSURE & LEAKAGE TEST IN ACCORDANCE WITH AWWA C-600 STANDARD.
22. WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH ADEQ DWINSTRING BULLETIN NO. 8 "DISINFECTION OF WATER SYSTEMS".
23. OPERATION OF VALVES TO BE DONE BY CITY PERSONNEL ONLY.
24. DUCTILE IRON PIPE TO BE INSTALLED PER MANUFACTURER'S REQUIREMENTS. ALL MATERIALS USED IN THE INSTALLATION OF DUCTILE IRON PIPE SHALL BE PURSUANT TO AAC R-18-4-304.
25. ALL MATERIALS & PRODUCTS THAT COME INTO CONTACT WITH DRINKING WATER (IN DRINKING WATER TREATMENT CHEMICALS MUST COMPLY WITH NSF STANDARD 61. ANY OR EQUAL SUBSTITUTION SHALL ALSO MEET NSF STANDARD 61.
26. ALL TRENCHES & BEDDING SHALL BE PER MODIFIED COP DETAILS 2-01P & 2-02P & TECHNICAL SPECIFICATIONS.
27. ALL MATERIALS USED IN THE INSTALLATION OF WATER MAINS SHALL BE PURSUANT TO AAC R-18-4-115, & SHALL BE NSF APPROVED FOR POTABLE WATER.
28. ALL REVISIONS TO ORIGINAL PLANS MUST BE APPROVED BY THE PUBLIC WORKS UTILITIES DIRECTOR PRIOR TO CONSTRUCTION. ANY UNAPPROVED REVISIONS ARE SUBJECT TO REMOVAL & REPLACEMENT AT OWNER'S EXPENSE.
29. ALL DUCTILE IRON PIPERS, & BRASS FITTINGS SHALL BE ENCASED IN POLYETHYLENE PROTECTIVE WRAPPING IN ACCORDANCE WITH MAG SECTION 610.3. UNLESS CONTAMINATED BY GEOTECHNICAL REPORT.
30. WATER LINES SHALL BE INSTALLED WITH FIELD LOCK GASKETS & WORM LOCK WHERE JOINT RESTRAINT IS REQUIRED.
31. WATER SERVICE INTERRUPTION NOTICES SHALL BE GIVEN TO AFFECTED RESIDENTS BY THE CONTRACTOR AT NO EXPENSE USING A METHOD APPROVED BY THE PUBLIC WORKS UTILITIES DIRECTOR.
32. ALL REVISIONS TO ORIGINAL PLANS MUST BE APPROVED BY THE PUBLIC WORKS UTILITIES DIRECTOR PRIOR TO CONSTRUCTION. ANY UNAPPROVED REVISIONS ARE SUBJECT TO REMOVAL & REPLACEMENT AT OWNER'S EXPENSE.
33. SEWER FORCE MAIN (MF) SHALL BE DESIGNED AND CONSTRUCTED OF A MATERIAL SUITABLE FOR SANITARY PRESSURE PIPE AS APPROVED BY THE CITY UTILITIES ENGINEER. SEWER LINES SHALL BE PRESSURE TESTED TO A MINIMUM OF 50 PSI FOR 30 MINUTES WITHOUT LOSS OF PRESSURE OR A MAXIMUM OF 5 PSI LOSS IN 30 MINUTES.
34. SEWER LINE ACCEPTANCE SHALL BE BASED ON 100% OF ALL LINES BEING TESTED (EACH SEGMENT OF LINE) SHALL BE TESTED LINE FOR LEAKAGE USING AIR APPLICATION AND MEETS BELOW AND BEYOND AIR RESULTS.
35. "A SUMMARY TEST METHOD FOR INSTALLATION OF ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING LOW PRESSURE AIR" PNTT-WP87 PUBLISHED BY THE AMERICAN SOCIETY FOR TESTING AND MATERIALS.
36. SEWER MANHOLES SHALL BE TESTED BOTH SHALL BE DONE ON 100% OF ALL LINES. VACUUM TESTING IN ACCORDANCE WITH ASTM STANDARDS MAY BE USED AS AN ALTERNATIVE TO AIR TESTING. ALL MANHOLES SHALL TEST EACH MANHOLE SEPARATELY. ALL MANHOLES SHOULD TEST EACH MANHOLE SEPARATELY. PLUG THE MANHOLE C WITH WATER. THE CONTRACTOR SHALL BE PLUGGED THE MANHOLE IN WATER LEVEL, FOLLOWING PRECEDING DOES NOT EXCEED 0.0004 OF TOTAL MANHOLE VOLUME PER HOUR.
37. NEGATIVE AIR PRESSURE TESTING SHALL BE DONE THE "STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY NEGATIVE AIR PRESSURE (VACUUM)" ASTM C1244-93(2003) PUBLISHED BY THE AMERICAN SOCIETY FOR TESTING AND MATERIALS. A TEST SHALL BE PERFORMED AFTER BACKFILL HAS BEEN COMPACTED. ALL PIPE PENETRATIONS BY MATERIAL SHALL BE MADE OF MORE OF THE MANHOLE MATERIAL. ALL TEST IS MANDATORY, EXCEPTION AN ERROR OR DEFAULT FROM THE AMERICAN SOCIETY FOR TESTING & MATERIALS INTERNATIONAL. THE SAME RANGE SHALL MEET MANUFACTURER'S TO TRACER CODE.
38. SEWER LINE ACCEPTANCE SHALL BE DONE ON 100% OF ALL LINES BEING TESTED FOR ACCEPTANCE.
39. ALL SEWER LINES SHALL BE TESTED FOR LEAKAGE AFTER BACKFILL HAS BEEN COMPLETED. A MINIMUM OF 24 HOURS SHALL BE ALLOWED FOR THE CITY'S VIDEO ACCEPTANCE INSPECTION AND TO REDUCE RELEASE. THE TOTAL LENGTH OF THE SEWER LINE SHALL BE TESTED FOR UNIFORM SLOPE AND STRAIGHTNESS. ALL SEWER LINES SHALL BE TESTED APPROVED BY THE CITY ENGINEER.
40. CONCRETE ENCASEMENT OVER LINE WITH AT LEAST 2 FEET OF EARTH COVER & COMPACTION REQUIREMENTS BEYOND EXCAVATION. BACKFILLING SHALL BE PERFORMED IN ACCORDANCE WITH MAG STANDARD SPECIFICATIONS SECTION 601. PROVIDE TEST PIPE FOR SANITARY SEWER LINES WITH A MINIMUM OF 2 FEET OF COVER. ALL TOOLS & FLEXIBLE PIPE SHALL BE PROVIDED BY THE CONTRACTOR.
41. ALL SEWER PLANS SHALL BE SUBMITTED TO PRESCOTT WATER & WASTEWATER MANAGEMENT.
42. PRESSURE SEWER SERVICE LATERALS SHALL BE TESTED FOR A PRESSURE & LEAKAGE TEST IN ACCORDANCE WITH AWWA C-600 STANDARDS. TEST PRESSURE SHALL BE 100 PSI, OR 50 PSI OVER MORNING PRESSURE, WHICHEVER IS GREATER.

DETAIL NO. 4-A-P | C.O.P. STANDARD DETAIL | SEWER PLAN GENERAL NOTES | REV. 01/06 | DETAIL NO. 4-AP

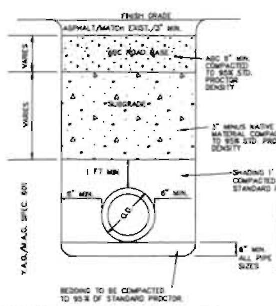
SPECIAL NOTE:
THE STANDARD DETAILS AND SPECIFICATIONS SHOWN HEREON HAVE BEEN FORMALLY ADOPTED BY THE CITY OF PRESCOTT COMPLIANCE WITH THESE STANDARD DETAILS AND SPECIFICATIONS IS REQUIRED IN CONSTRUCTING ALL APPLICABLE PUBLIC IMPROVEMENTS. KELLEY/WISE ENGINEERING IS NOT RESPONSIBLE FOR NOT THE CONTEXT OF THE CITY OF PRESCOTT STANDARD DETAILS AND SPECIFICATIONS.

PRELIMINARY NOT FOR CONSTRUCTION RECORDING

EXPIRES 06/30/15

WILLOW CREEK WATER MAIN CROSSING	DRAWN	BWT
DETAILS	DESIGN	BWT
KELLEY / WISE ENGINEERING, INC.	CHECK	CRK
146 GROVE AVENUE PRESCOTT, ARIZONA 86301 (928) 771-1730 FAX 778-2220	DATE	9/12/13
	JOB	12-066.1
	SHEET NO.	4 OF 4

REVISED



NOTES:

COMPACTION TESTING SHALL BE ACCOMPLISHED AT A MINIMUM OF ONE PER 200' OF TRENCH PER 1' LIFT OR AT THE DISCRETION OF THE INSPECTOR AS CONDITIONS MAY DICTATE.

VOLCANIC CINDERS OR CRUSHED GLASS MATERIALS ARE NOT ACCEPTABLE. USE OF OPEN GRADED 3/8" PEA GRAVEL OR 3/4" CRUSHED ROCK MUST BE APPROVED BY THE AGENCY PRIOR TO PLACEMENT.

ANY DEVIATION FROM THIS STANDARD DETAIL MUST BE APPROVED BY THE AGENCY ENGINEER.

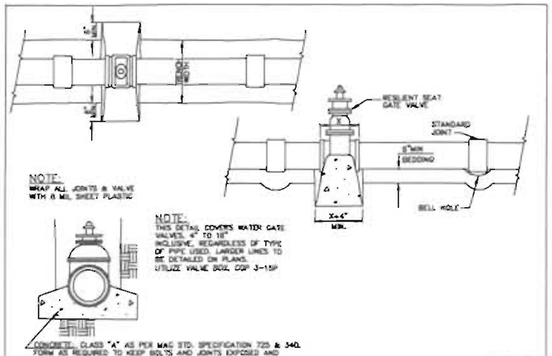
A 2' MIN. SEPARATION IS REQUIRED BETWEEN WATER LINES & ALL OTHER UTILITIES.

TRACER WIRE SHALL BE INSTALLED AS PER CITY OF PRESCOTT STANDARD REQUIREMENTS.

ACCEPTABLE BEDDING/SHADING MATERIAL	
SIEVE SIZE (SQUARE OPENING)	PERCENTAGE BY WEIGHT PASSING SIEVE
1", NO. 200	100, <25
PI	10 MAX

revised 03/09

DETAIL NO. 2-02P	COP STANDARD DETAIL	TRENCH BEDDING FOR SINGLE UTILITY TRENCH UNDERGROUND CONDUIT, WATER, SEWER, & STORM DRAIN	2-02P



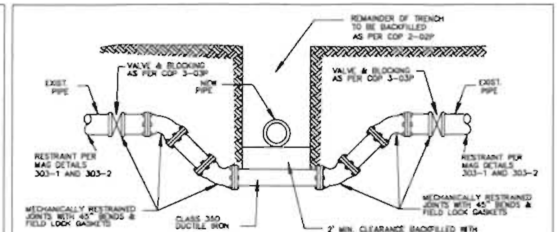
NOTE:
WRAP ALL JOINTS & VALVE WITH 8 MIL SHEET PLASTIC

NOTE:
THIS DETAIL COVERS WATER GATE VALVES, 4" TO 18" INCLUSIVE, REGARDLESS OF TYPE OF PIPE USED. LARGER LINES TO BE DETAILED ON PLANS. UTILIZE VALVE BOX, COP 3-15P

CONCRETE: CLASS "A" AS PER MAG STD. SPECIFICATION 725 & 340. FORM AS REQUIRED TO KEEP BOLTS AND JOINTS EXPOSED AND CLEAR FROM CONCRETE.

REV. 01/09

DETAIL NO. 3-03P	COP STANDARD DETAIL	BLOCKING FOR WATER GATE VALVES	3-03P



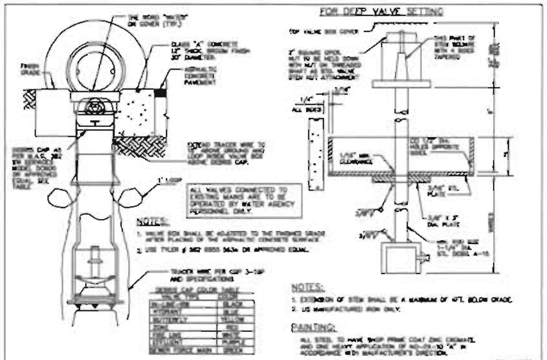
1. NO SERVICE CONNECTIONS SHALL BE LOCATED WITHIN VERTICAL REALIGNMENT
2. AIR RELEASE VALVE TO BE INSTALLED ON THE VERTICAL REALIGNMENT AT THE HIGH POINT OF THE LOW SIDE.
3. TRACER WIRE SHALL BE INSTALLED AS PER COP 3-19P

2' MIN. CLEARANCE BACKFILLED WITH MATERIAL IN ACCORDANCE WITH COP STD. DTL. 2-02P. ALL JOINT RESTRAINTS TO BE PER M.A.G. DETAILS 303-1 & 303-2 & Y.A.G. DETAIL 3-13P.

BOTTOM OF VERTICAL ALIGNMENT SHALL BE ONE PIECE. IF JOINTS ARE REQUIRED, WATER MAIN SEGMENT SHALL BE CENTERED BELOW PIPE OR IN A BORE SLEEVE PER M.A.G. 602. ALL JOINTS SHALL BE FIELD LOCK GASKET & WATER MAIN SHALL BE EQUIPPED WITH STAINLESS STEEL SPACERS & END CAPS.

REV. 01/09

DETAIL NO. 3-11P	COP STANDARD DETAIL	VERTICAL REALIGNMENT OF WATER MAINS	3-11P



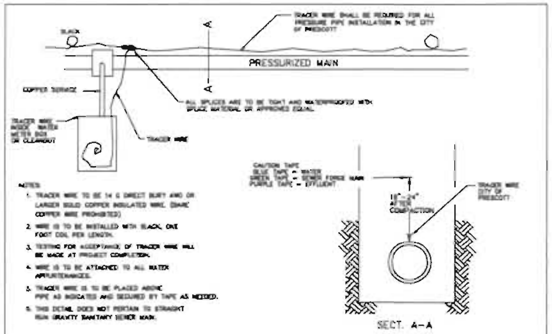
NOTES:
1. VALVE BOX SHALL BE ADJUSTED TO THE FINISHED GRADE AFTER PLACING OF THE ASPHALTIC CONCRETE SURFACE.
2. USE TYLER # 562 6855 563A OR APPROVED EQUAL.

NOTES:
1. EXTENSION OF STEM SHALL BE A MAXIMUM OF 4FT. BELOW GRADE.
2. US MANUFACTURED IRON ONLY.

PAINTING:
ALL STEEL TO HAVE SHOP PRIME COAT ZINC CHROMATE, AND ONE HEAVY APPLICATION OF NO-OX-ID "A" IN ACCORDANCE WITH MANUFACTURER'S DIRECTION.

REV. 01/09

DETAIL NO. 3-15P	COP STANDARD DETAIL	VALVE BOX	3-15P

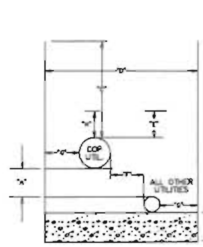


NOTES:
1. TRACER WIRE TO BE 14 G DIRECT BURY AND OR LARGER SOLID COPPER INSULATED WIRE. (BARE COPPER WIRE PROHIBITED)
2. WIRE IS TO BE INSTALLED WITH SLACK, ONE FOOT COIL PER LENGTH.
3. TESTING FOR ACCEPTANCE OF TRACER WIRE WILL BE MADE AT PROJECT COMPLETION.
4. WIRE IS TO BE ATTACHED TO ALL WATER APPURTENANCES.
5. TRACER WIRE IS TO BE PLACED ABOVE PIPE AS INDICATED AND SECURED BY TAPE AS NEEDED.
6. THIS DETAIL DOES NOT PERTAIN TO STRAIGHT RUN GRAVITY SANITARY SEWER MAIN.

THIS DETAIL SHALL NOT BE ALTERED, AND SHALL BE STRICTLY ENFORCED

REV. 01/09

DETAIL NO. 3-19P	COP STANDARD DETAIL	TRACER WIRE FOR ALL PRESSURE PIPE SYSTEMS	3-19P



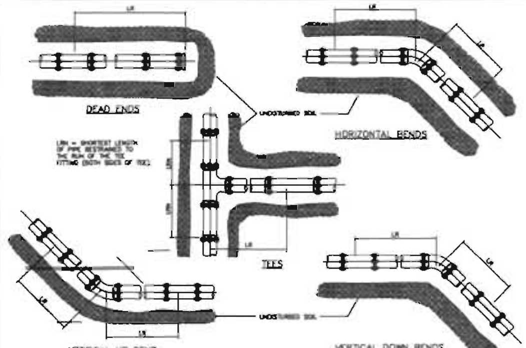
"A" MINIMUM OF 24" VERTICAL CLEARANCE BETWEEN ALL UTILITIES.
"B" 6" BEDDING WILL BE REQUIRED.
"C" MINIMUM OF 36" COVER OVER ALL LINES UNDER 12" DIAMETER. MINIMUM OF 48" COVER OVER ALL LINES OVER 12" DIAMETER.
"D" MINIMUM OF 30" WIDE.
"E" 12" SHADING OVER TOP OF PIPE, SELECT MATERIAL (A.B.C. COMPACTED 95% OR SAND).
"F" MINIMUM OF 48" HORIZONTAL CLEARANCE - ALL UTILITIES.
"G" MINIMUM 12" OF SIDE WALL CLEARANCE.
"H" 18"-24" AFTER COMPACTION FOR CAUTION TAPE ABOVE PIPELINE.

NOTES:
WATER LINE SHALL BE NO DEEPER THAN 6' TO THE TOP OF THE PIPE, UNLESS SPECIFICALLY NOTED AND APPROVED BY THE CITY UTILITIES ENGINEER.

ARTERIAL ROADWAYS WILL REQUIRE 48" MINIMUM COVER OVER ALL LINES.

REV. 01/09

DETAIL NO. 3-20P	COP STANDARD DETAIL	CITY UTILITY CLEARANCES MULTIPLE UTILITY TRENCH	3-20P



DETAIL NO. 303-1	STANDARD DETAIL ENGLISH	JOINT RESTRAINT FOR DUCTILE IRON AND POLYETHYLENE WRAPPED DUCTILE IRON WATER PIPES	303-1

RESTRAINED LENGTHS, LR, FOR DUCTILE IRON PIPE

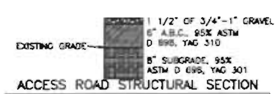
NOMINAL PIPE SIZE INCHES	HORIZONTAL BENDS			TEES		VERTICAL OFFSETS						DEAD ENDS
						90° BEND FITTINGS		45° BEND FITTINGS		22-1/2° BEND FITTINGS		
	90°	45°	22-1/2°	LRH=0'	LRH=10'	DOWN BEND	UP BEND	DOWN BEND	UP BEND	DOWN BEND	UP BEND	
4	16	7	4	30	8	31	18	13	7	4	2	31
6	23	10	5	43	20	44	25	18	10	9	3	44
8	32	13	6	56	34	58	30	24	12	11	6	58
10	38	16	8	69	45	69	36	29	16	14	8	69
12	45	19	9	80	57	81	46	34	19	16	8	81
14	51	21	10	91	68	92	51	38	21	18	10	92
16	57	24	11	103	79	104	57	43	24	21	11	104
18	62	26	12	113	90	115	63	48	26	23	12	115
20	68	28	14	128	100	126	68	52	28	25	14	126
24	79	33	16	148	121	147	79	61	33	29	16	147

RESTRAINED LENGTHS, LR, FOR DUCTILE IRON PIPE WITH POLYETHYLENE WRAP

NOMINAL PIPE SIZE INCHES	HORIZONTAL BENDS			TEES		VERTICAL OFFSETS						DEAD ENDS
						90° BEND FITTINGS		45° BEND FITTINGS		22-1/2° BEND FITTINGS		
	90°	45°	22-1/2°	LRH=0'	LRH=10'	DOWN BEND	UP BEND	DOWN BEND	UP BEND	DOWN BEND	UP BEND	
4	26	11	5	48	18	72	26	30	11	14	5	72
6	36	15	7	69	47	102	36	42	15	20	7	102
8	47	19	9	130	76	133	47	55	19	26	9	133
10	56	23	11	157	103	159	56	66	23	32	11	159
12	65	27	13	185	131	187	65	77	27	37	13	187
14	74	31	15	211	158	214	74	88	31	42	15	214
16	83	34	16	238	183	241	83	100	34	48	16	241
18	90	37	18	263	207	268	90	112	38	53	18	268
20	98	41	20	289	233	292	98	121	41	58	20	292
24	113	47	22	337	280	340	113	141	47	68	23	340

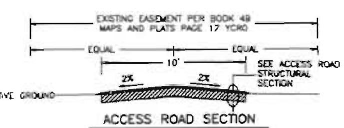
NOTES:
1. ALL JOINTS WITHIN THE SPECIFIED LENGTH LR MUST BE RESTRAINED. ALL LENGTHS ARE GIVEN IN FEET.
2. THE MAXIMUM TEST PRESSURE SHALL NOT EXCEED 200 PSI.
3. THE MINIMUM DEPTH OF BURY SHALL BE 3' TO TOP OF PIPE.
4. RESTRAINED LENGTHS MAY BE REDUCED WHEN SUPPORTED BY ENGINEERING CALCULATIONS.

DETAIL NO. 303-2	STANDARD DETAIL ENGLISH	JOINT RESTRAINT FOR DUCTILE IRON AND POLYETHYLENE WRAPPED DUCTILE IRON WATER PIPES	303-2



ACCESS ROAD STRUCTURAL SECTION

N.T.S.



ACCESS ROAD SECTION

N.T.S.

SPECIAL NOTE:
THE STANDARD DETAILS AND SPECIFICATIONS SHOWN HEREON HAVE BEEN FORMALLY ADOPTED BY THE CITY OF PRESCOTT. COMPLIANCE WITH THESE STANDARD DETAILS AND SPECIFICATIONS IS REQUIRED IN CONSTRUCTING ALL APPLICABLE PUBLIC IMPROVEMENTS. KELLEY/WISE ENGINEERING IS NOT RESPONSIBLE FOR THE CONTENT OF THE CITY OF PRESCOTT STANDARD DETAILS AND SPECIFICATIONS.

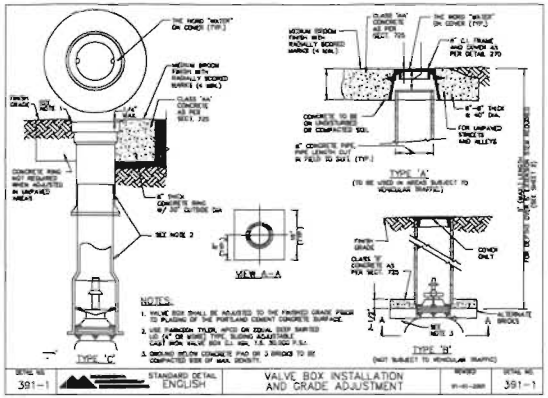
PRELIMINARY NOT FOR CONSTRUCTION OR RECORDING

EXPIRES 06/30/15

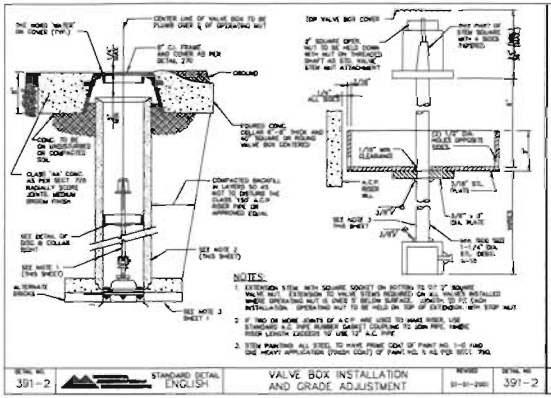
WILLOW CREEK WATER MAIN CROSSING
DETAILS

KELLEY / WISE ENGINEERING, INC.
146 GROVE AVENUE
PRESCOTT, ARIZONA 86301
(928) 771-1730
FAX 778-2220

DRAWN	BWT	REVISED
DESIGN	BWT	
CHECK	GRK	
DATE	8/12/13	
JOB	12-066.1	
SHEET NO. 3 OF 4		



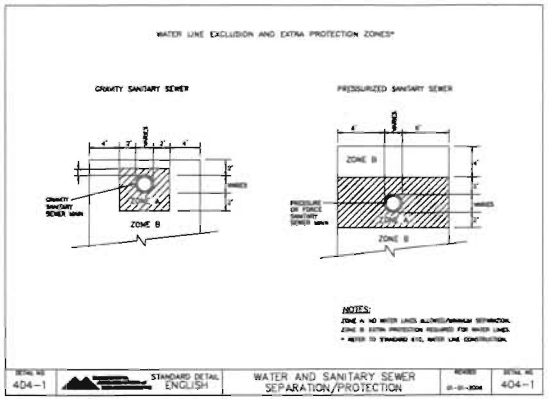
DETAIL NO.	STANDARD DETAIL ENGLISH	VALVE BOX INSTALLATION AND GRADE ADJUSTMENT	REVISED	DETAIL NO.
391-1			01-01-2001	391-1



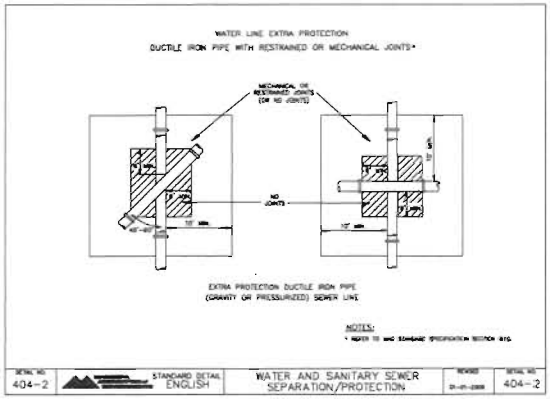
DETAIL NO.	STANDARD DETAIL ENGLISH	VALVE BOX INSTALLATION AND GRADE ADJUSTMENT	REVISED	DETAIL NO.
391-2			01-01-2001	391-2

1. ALL WORK SHALL CONFORM TO MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARD SPECIFICATIONS (MAG) & CITY OF PRESCOTT (COP) MODIFIED MAG CONSTRUCTION STANDARDS & SPECIFICATIONS, WHICH ARE ON FILE IN THE OFFICE OF THE CITY ENGINEER.
2. ALL FRAMES, COVERS, VALVE BOXES, & MANHOLES SHALL BE ADJUSTED TO FINISH GRADE UPON COMPLETION OF FRAME, UTILITY, OR RELATED CONSTRUCTION.
3. ANY QUANTITIES SHOWN ON PLANS ARE NOT VERIFIED BY THE PUBLIC WORKS UTILITIES DIRECTOR.
4. ACCEPTANCE OF THE COMPLETED WORK WILL NOT BE GIVEN UNTIL 3 MM MYLAR & CAD FORMAT DIGITAL AS-BUILT PLANS ON CITY OF PRESCOTT SURVEY DATUM & COORDINATES HAVE BEEN SUBMITTED BY A REGISTERED PROFESSIONAL ENGINEER AND APPROVED BY THE PUBLIC WORKS DEPARTMENT.
5. CITY OF PRESCOTT PUBLIC WORKS UTILITIES SHALL BE NOTIFIED 24 HOURS PRIOR TO THE START OF ANY WORK.
6. ALL WORK & MATERIALS WHICH DO NOT CONFORM TO THE SPECIFICATIONS ARE SUBJECT TO REMOVAL & REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
7. ANY WORK PERFORMED WITHOUT THE KNOWLEDGE OF THE AGENCY INSPECTOR OR HIS REPRESENTATIVE IS SUBJECT TO REMOVAL & REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
8. THE CONTRACTOR SHALL PROVIDE SUFFICIENT MEN & EQUIPMENT ON THE JOB AT ALL TIMES DURING CONSTRUCTION TO COMPLY WITH SPECIFICATIONS & TO COMPLETE THE WORK.
9. INSPECTION TO BE DONE BY THE CITY OF PRESCOTT PUBLIC WORKS DEPARTMENT OR THEIR REPRESENTATIVE.
10. CONTRACTOR TO NOTIFY PROJECT ENGINEER 72 HOURS (3 WORKING DAYS) IN ADVANCE OF CONSTRUCTION TO SCHEDULE CONSTRUCTION STAKING.
11. THE CONTRACTOR IS TO UNCOVER ALL EXISTING LINES BEING TIED INTO AND VERIFY GRADES & ELEVATIONS BEFORE ANY OTHER CONSTRUCTION.
12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UNDERGROUND PIPELINES, TELEPHONE & ELECTRICAL CONDUITS & STRUCTURES IN ADVANCE OF ANY CONSTRUCTION & OBSERVE ALL POSSIBLE PRECAUTIONS TO AVOID ANY DAMAGE. DUE TO BACK, THE ENGINEER OWNER DOES NOT GUARANTEE THAT LOCATIONS AS SHOWN ON THE PLANS, OR THOSE GIVEN FROM SAME.
13. CONTRACTOR SHALL NOTIFY PROJECT ENGINEER "STAKE" AT 1-800-782-5348(?) AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
14. CONTRACTOR SHALL VERIFY ALL QUANTITIES SHOWN & MAKE NO BID BASED UPON THESE NUMBERS. IF ANY DISCREPANCY IN QUANTITIES IS FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SUCH.
15. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIREMENTS SHALL BE COMPLIED WITH.
16. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIREMENTS SHALL APPLY WHEN WORK EXTENDS 1 YEAR THE MAG OR YAG STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
17. ALL PLANS SIGNED BY THE CITY UTILITY ENGINEER ARE NULL & VOID ONE YEAR FROM DATE OF SIGNATURE IF CONSTRUCTION HAS NOT STARTED.
18. PROJECT ENGINEER SHALL BE RESPONSIBLE FOR SUBMITTING TRAFFIC CONTROL PLANS WHICH SHALL BE MADE A PART OF THE PLAN REVIEW REQUEST TO THE CITY ENGINEER FOR APPROVAL.
19. ALL WATER LINES & APPURTENANCES SHALL BE PROVIDED WITH 14 GAUGE, AWG, INSULATED, SINGLE STRAND, DIRECT BURY COPPER TRACE WIRE. TRACE WIRE SHALL BE SUBJECT TO A TRACEABILITY TEST, EASILY ACCESSIBLE IN ANY DEPENDENCE SHALL BE CORRECTED.
20. WATER-SEWER SEPARATION SHALL BE PURSUANT TO AAC R-18-5-502C.
21. WATER MAINS SHALL BE SUBJECT TO A PRESSURE & LEAKAGE TEST IN ACCORDANCE WITH AWWA C-600 STANDARD.
22. WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH ADEQ ENGINEERING BULLETIN NO. 8 "DISINFECTION OF WATER SYSTEMS".
23. OPERATION OF VALVES TO BE DONE BY CITY PERSONNEL ONLY.
24. DUCTILE IRON PIPE TO BE INSTALLED PER MANUFACTURER'S REQUIREMENTS. ALL MATERIALS USED IN THE INSTALLATION OF DUCTILE IRON PIPE SHALL BE PURSUANT TO AAC R-18-4-604.
25. ALL MATERIALS & PRODUCTS THAT COME INTO CONTACT WITH DRINKING WATER OR DRINKING WATER TREATMENT CHEMICALS MUST COMPLY WITH NSF STANDARD 61. ANY OR EQUAL SUBSTITUTION SHALL ALSO MEET NSF STANDARD 61.
26. ALL TRENCHES & BEDDING SHALL BE PER MODIFIED COP DETAILS 2-09F & 2-09P & TECHNICAL SPECIFICATIONS.
27. ALL MATERIALS USED IN THE INSTALLATION OF WATER MAINS SHALL BE PURSUANT TO AAC R-18-4-115. & SHALL BE NSF APPROVED FOR POTABLE WATER.
28. ALL REVISIONS TO ORIGINAL PLANS MUST BE APPROVED BY THE PUBLIC WORKS UTILITIES DIRECTOR PRIOR TO CONSTRUCTION. ANY UNAPPROVED REVISIONS ARE SUBJECT TO REMOVAL & REPLACEMENT AT OWNER'S EXPENSE.
29. ALL DUCTILE IRON COPPER, & STEEL FITTINGS SHALL BE ENCASED IN POLYETHYLENE PROTECTIVE WRAPPING IN ACCORDANCE WITH AWWA SECTION 4105.5, UNLESS OTHERWISE SPECIFIED BY GEOTECHNICAL REPORT.
30. WATER LINES SHALL BE INSTALLED WITH FIELD LOCK GASKETS & MECHANICAL JOINTS WHERE ANY TERRAIN IS REQUIRED.
31. WATER SERVICE INTERRUPTION NOTICES SHALL BE GIVEN TO AFFECTED RESIDENTS BY THE CONTRACTOR AT HIS EXPENSE USING A METHOD APPROVED BY THE PUBLIC WORKS UTILITIES DIRECTOR.

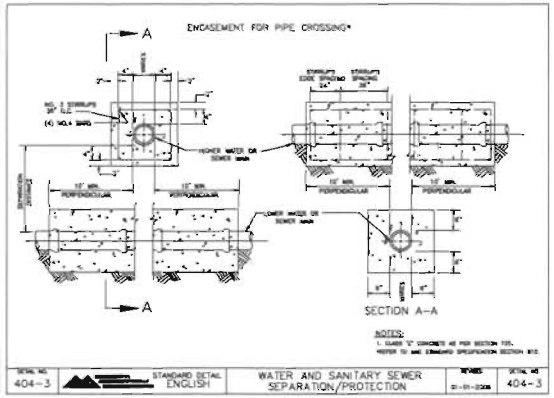
DETAIL NO.			REV. 01/09
3-A-P	COP STANDARD DETAIL	WATER PLAN GENERAL NOTES	3-AP



DETAIL NO.	STANDARD DETAIL ENGLISH	WATER AND SANITARY SEWER SEPARATION/PROTECTION	REVISED	DETAIL NO.
404-1			01-01-2004	404-1



DETAIL NO.	STANDARD DETAIL ENGLISH	WATER AND SANITARY SEWER SEPARATION/PROTECTION	REVISED	DETAIL NO.
404-2			01-01-2006	404-2



DETAIL NO.	STANDARD DETAIL ENGLISH	WATER AND SANITARY SEWER SEPARATION/PROTECTION	REVISED	DETAIL NO.
404-3			01-01-2006	404-3

1. ALL WORK SHALL CONFORM TO MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARD SPECIFICATIONS (MAG) & CITY OF PRESCOTT (COP) MODIFIED MAG CONSTRUCTION STANDARDS & SPECIFICATIONS, WHICH ARE ON FILE IN THE OFFICE OF THE CITY ENGINEER.
2. ALL FRAMES, COVERS, VALVE BOXES, & MANHOLES SHALL BE ADJUSTED TO FINISH GRADE UPON COMPLETION OF FRAME, UTILITY, OR RELATED CONSTRUCTION.
3. ANY QUANTITIES SHOWN ON PLANS ARE NOT VERIFIED BY THE PUBLIC WORKS UTILITIES DIRECTOR.
4. ACCEPTANCE OF THE COMPLETED WORK WILL NOT BE GIVEN UNTIL 3 MM MYLAR & CAD FORMAT DIGITAL AS-BUILT PLANS ON CITY OF PRESCOTT SURVEY DATUM & COORDINATES HAVE BEEN SUBMITTED BY A REGISTERED PROFESSIONAL ENGINEER AND APPROVED BY THE PUBLIC WORKS DEPARTMENT.
5. CITY OF PRESCOTT PUBLIC WORKS UTILITIES SHALL BE NOTIFIED 24 HOURS PRIOR TO THE START OF ANY WORK.
6. ALL WORK & MATERIALS WHICH DO NOT CONFORM TO THE SPECIFICATIONS ARE SUBJECT TO REMOVAL & REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
7. ANY WORK PERFORMED WITHOUT THE KNOWLEDGE OF THE AGENCY INSPECTOR OR HIS REPRESENTATIVE IS SUBJECT TO REMOVAL & REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
8. THE CONTRACTOR SHALL PROVIDE SUFFICIENT MEN & EQUIPMENT ON THE JOB AT ALL TIMES DURING CONSTRUCTION TO COMPLY WITH SPECIFICATIONS & TO COMPLETE THE WORK.
9. INSPECTION TO BE DONE BY THE CITY OF PRESCOTT PUBLIC WORKS DEPARTMENT OR THEIR REPRESENTATIVE.
10. CONTRACTOR TO NOTIFY PROJECT ENGINEER 72 HOURS (3 WORKING DAYS) IN ADVANCE OF CONSTRUCTION TO SCHEDULE CONSTRUCTION STAKING.
11. THE CONTRACTOR IS TO UNCOVER ALL EXISTING LINES BEING TIED INTO AND VERIFY GRADES & ELEVATIONS BEFORE ANY OTHER CONSTRUCTION.
12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UNDERGROUND PIPELINES, TELEPHONE & ELECTRICAL CONDUITS & STRUCTURES IN ADVANCE OF ANY CONSTRUCTION & OBSERVE ALL POSSIBLE PRECAUTIONS TO AVOID ANY DAMAGE. DUE TO BACK, THE ENGINEER OWNER DOES NOT GUARANTEE THAT LOCATIONS AS SHOWN ON THE PLANS, OR THOSE GIVEN FROM SAME.
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14. CONTRACTOR SHALL VERIFY ALL QUANTITIES SHOWN & MAKE NO BID BASED UPON THESE NUMBERS. IF ANY DISCREPANCY IN QUANTITIES IS FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SUCH.
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DETAIL NO.			REV. 01/09
4-A-P	C.O.P. STANDARD DETAIL	SEWER PLAN GENERAL NOTES	4-AP

SPECIAL NOTE:
THE STANDARD DETAILS AND SPECIFICATIONS SHOWN HEREON HAVE BEEN FORMALLY ADOPTED BY THE CITY OF PRESCOTT. COMPLIANCE WITH THESE STANDARD DETAILS AND SPECIFICATIONS IS REQUIRED IN CONSTRUCTING ALL APPLICABLE PUBLIC IMPROVEMENTS. KELLEY/WISE ENGINEERING IS NOT RESPONSIBLE FOR NOT THE CONTENT OF THE CITY OF PRESCOTT STANDARD DETAILS AND SPECIFICATIONS.

PRELIMINARY NOT FOR CONSTRUCTION OR RECORDING

EXPIRES 06/30/15

WILLOW CREEK WATER MAIN CROSSING
DETAILS

KELLEY / WISE ENGINEERING, INC.

148 GROVE AVENUE
PRESCOTT, ARIZONA 86301
(928) 771-1730
FAX 778-2220

DRAWN	BWT	REVISED
DESIGN	BWT	
CHECK	CRK	
DATE	9/12/13	
JOB	12-066.1	
SHEET NO.	4 OF 4	