



Arizona Water Company Water Plan Checklist

- Project Name: _____
- Prepared for: _____
- Prepared by: _____
- Stamped by registered Arizona Professional Engineer

Cover Sheet

- Show project name
- Show vicinity map
- Show quarter section with township and range near the top of the cover sheet
- Show assessor parcel number(s) near the top center of the cover sheet
- Show quantity list on cover sheet
- Show domestic and landscape demand on the plans in average gallons per day and peak gallons per day (GPD).
- Include project owner company name, contact name, address, phone number, and email address
- Include engineering firm, contact name, address, phone number, and email address

Construction Notes

- Arizona Water Company Construction Specifications Section E-8-1, includes E-8-1-1 through E-8-1-13, and additional signed letters by Arizona Water Company for material
- Include Arizona Water Company General Notes
- Include permitting agencies notes

Construction Specification Details

- Arizona Water Company Standard Specification Drawings, include all applicable water details specific to the water design
- Include permitting agency details

Design Plan View Criteria

- Key Map
- North Arrow
- To scale. (Example: 1"=20', 1"=30', 1"=40', 1"=60' are acceptable)
- Show immediate surrounding development (Example: neighboring parcels, alleys, streets, trees, electrical boxes, fences, etc.)
- Show and dimension public right-of-way or public utility easement

- Notate jurisdiction and document reference granting the right-of-way or easement
- Arizona Water Company facilities must be installed within existing public right-of-way, or dedicated to public right of way through recorded plat and said plat has been accepted and acknowledged by the county or city
- With the exception of water meter boxes, Arizona Water Company will not own or maintain facilities located outside of a dedicated public right-of-way or public utility easement
- Show road, sidewalk, curb and gutter, landscape tracts
- Show the size and material type of the existing waterlines
- Show the size and material type of the proposed waterline
- Show the size and type, and indicate the location of all new and existing utilities
- Show size and type of services required. (Example: domestic, fire, landscape, etc.)
- Water meter boxes must be located a maximum of 2 feet on the customers property or in the PUE behind the sidewalk and not in right-of-way
- Label stationing for all water fittings, bends, fittings, joint restraint, air release valves, etc
- Show all air release valves on the plans at all high points
- Show proper backflow prevention device at meter connection
- Show Arizona Water Company scope of work limits
- Show callouts for Arizona Water Company scope of work
- Show list of constructions notes for Arizona Water Company scope of work specifying the construction detail numbers
- Show type of connection to the water system
 - Cut in tees on CA water mains and replace additional 10' on each side with ductile iron pipe.
 - No size on size tapping sleeve and valve, cut in tee required
- Show joint restraint dimensions (LR) on plan view for the limits of the joint restraint in accordance with Arizona Water Company Standard Detail E-9-5-3-1 and E-9-5-3-2
 - Show on all bends, tees, crosses, dip sections, dead ends
 - Call out stationing
 - MAXIMUM JOINT DEFLECTION FOR 6" MECHANICAL JOINT DUCTILE IRON PIPE IS 7°-7' OR 27" FOR 18 FOOT LENGTH PIPE, FOR A MAXIMUM CURVE OF 145 FEET.
 - MAXIMUM JOINT DEFLECTION FOR 6", 8", & 12" PUSH-ON JOINT DUCTILE IRON PIPE IS 5° OR 19" FOR 18 FOOT LENGTH PIPE, FOR A MAXIMUM CURVE OF 205 FEET.
 - MAXIMUM JOINT DEFLECTION FOR 8" & 12" MECHANICAL JOINT DUCTILE IRON PIPE IS 5°-21' OR 20" FOR 18 FOOT LENGTH PIPE, FOR A MAXIMUM CURVE OF 195 FEET.
- Gate valve requirements:
 - Be spaced not more than 500 feet in commercial districts, variations may be required for transmission water mains.
 - Sufficient valving required at crossings with streams, railroads and major highways.
 - Valves on all sides of tees and crosses
- Water mains under asphalt and 5' from edge of curb and in right of way
- No other utility will be permitted in the water pipeline trench or within 5-feet of the company's waterlines when running parallel with the water pipelines. The distance is measured from the outside of the pipe. No joint trench

- Backfill and compaction requirements shall be in accordance with Arizona Water Company specifications. Engineer must also contact permitting agency for backfill, compaction, and asphalt replacement requirements, and adjust plans accordingly.
- Engineer shall contact permitting agency or local jurisdiction to confirm if open cut of the road are allowed for installation of water facilities, and adjust plans accordingly.

Water Mains

- Size and type of distribution water main, must be in accordance with Arizona Water Company specifications book and Arizona Water Company Tariff No. TC-243.
 - Minimum 12-inch for sections line roads
 - Minimum 8-inch for mid-section line roads
 - Minimum 6-inch for all others
 - Water main extensions required on frontage of property boundaries
- Size and type of transmission water main, must be in accordance with Arizona Water Company specifications book.
 - Minimum 12-inch or larger dependent upon completed modeling
- Minimum depth of cover in accordance with Arizona Water Company specifications book.
 - FOR 8-INCH OR SMALLER PIPE: The depth of the trench prior to pipe laying shall be such that the finished pipeline shall have between thirty-six inches (36") and forty-two inches (42") of cover unless otherwise specified on the Construction Drawings.
 - FOR 12-INCH AND LARGER PIPE: The depth of the trench prior to pipe laying shall be such that the finished pipeline shall have between forty-eight inches (48") and sixty inches (60") of cover unless otherwise specified on the Construction Drawings.
- All lines shall be looped wherever possible in subdivisions or where required by local agencies having jurisdiction.
- Water and sewer separations and extra protection shall be in accordance with Arizona Water Company specifications book and Arizona Department of Environmental Quality bulletin No.10.
- If project consists of relocating existing water facilities, show the existing location and proposed location of the facilities.

Design Profiles

- Provide a profile view of all 12-inch and larger waterlines, include vertical and horizontal scales.
- Show elevation of water and sewer mains where they cross perpendicular to each other.
- Provide profile section view of all vertical realignment crossings in conflict with the water main.
 - Include vertical and horizontal scales
 - Call out stationing
 - Show all utilities
 - Show length of restraint
 - Show all fittings and gate valves

Fire Protection

- Size and type of private fire service line, must be in accordance with Arizona Water Company specifications book and Arizona Water Company Tariff No. PF-242.
 - The minimum diameter will be 4-inches. The maximum diameter shall not be larger than the diameter of the water main to which fire protection service is attached unless said main is circulating, in which case with the approval of the Company the maximum diameter may be larger than the diameter of said circulating main.
- Private fire hydrants must have its own dedicated private fire service to the Arizona Water Company system. Private fire hydrants to be installed, tested, and maintained by the customer.
- Public fire hydrants in right of way shall be installed on the same side of the street as the water main. Long fire hydrants are not permitted.

Backflow Prevention

- Services 2-inch or smaller including commercial, domestic, duplex and landscaping, must include approved and compliant backflow prevention device to be installed, tested, and maintained by the customer.
- Services with 3-inch meters or larger, and private fire service lines must use backflow prevention device per Arizona Water Company standard detail E-9-13-2. The backflow preventer shall be installed as close to the right-of-way as possible to end of connection with the Company, and to be installed, tested, and maintained by the customer.

Additional Documents

- Provide a hard copy, PDF, and CAD file of the recorded right-of-way dedication.
- Provide a hard copy, PDF, and CAD file copy of the recorded subdivision plat.
- Provide final CAD files.

NOTE: Use the above referenced items and Arizona Water Company Construction Specifications as a reference guideline in preparation of the water plan. To ensure proper design of plans, complete pothole and survey the vicinity of the area for the project for existing Arizona Water Company facilities.

Project Submittals To:

Arizona Water Company
Development Services
3805 N. Black Canyon Hwy
Phoenix, AZ 85015
developmentservices@azwater.com