



KIVA #: _____ Project Name: _____

Reviewed By: _____ Phone: _____ Date: _____

Engineer: _____ Phone: _____

The applicant is responsible for providing the following information to the Development Services Department, Civil Engineering Counter, 200 West Washington Street, 2nd Floor, Phoenix, Arizona 85003. For additional information on this fire line, please call (602) 262-6551 or Fax number (602) 534-2642. Please make all submittals for review, revised review and updates to Central Log-In Center, 2nd floor.

The purpose of this checklist is to offer guidelines for design and comments on plans for construction of fire lines from the water main tap to termination on private property.

This checklist serves to minimize redline comments on the check prints and to maintain consistency among plan reviewers. Plan approval, issuing permits, and certain grading clearances depend on compliance with the comments made on the check prints and this checklist. The engineer of record shall satisfy themselves of the completeness and accuracy of the design.

City Water Services Department Policy for design and construction of private fire lines is described in Publication P-54; standard notes in Publication FL-1.

Onsite fire line permits shall be obtained, through the City of Phoenix Fire Department, under separate plan submittal.

Please complete and return this checklist and the check prints with your next submittal. Discussion of redline comments on plans or this checklist should be directed to the plan reviewer listed above.

Engineer of record must fill out all boxes in the first column as either (Addressed) or (N/A) (Not Applicable).

Civil plan reviewer shall check the second column as (X) (Required) when requirements have not been properly addressed.

This publication can be made available in alternate formats (Braille, large print, computer diskette, or audiotape) upon request. Contact the Development Services Department at (602) 262-7811 voice or (602) 534-5500 TTY.

I. Coversheet Requirements

Eng Rev

- Affix a project title block with name and address of project. If the fire line services two or more buildings with separate addresses, the fire line will be required to have its own address.
- Show the owner's name, address, and telephone number. Show the contact person's name, address and telephone number if different than the owner.
- Show the plan preparer's name, address, and telephone number.
- Show a complete, accurate legal description of the site.
- Blue stake notification decal is required.
- Provide appropriate processing numbers including: KIVA#, SDEV#, CCPR#, and City Quarter Section Number.
- Materials list of offsite and onsite quantities is required on the plan.
- Vicinity map, properly oriented with north up or to the right is required.
- A Key Map, properly oriented with north up or to the right, is required on plans with two (2) or more plan sheets.
- Signature Block (lower right corner):

APPROVED: FOR THE CITY OF PHOENIX – FOR THAT PORTION IN PUBLIC RIGHT-OF-WAY OR PUBLIC UTILITY EASEMENT ONLY

COUNTY HEALTH DELEGATE
DEVELOPMENT SERVICES DEPARTMENT

DATE

II. Notes for Fireline Plans

Eng Rev

- All construction in City Of Phoenix R.O.W. is to conform to M.A.G. Specifications and Details and City of Phoenix Supplement to M.A.G. Specifications and Details, unless modified on the plans.
- Development Services Department's Field Inspections shall be notified 48 hours before any construction begins, telephone (602) 262-7811.
- It is required that a formal written request for a fire line turn-on be received by Civil Engineering of the Development Services Department from City of Phoenix Fire Prevention upon completion of the fire line work. This job is not complete until this has been done and the line turned on by the Water Services Department.
- The following M.A.G. details are specifically not approved:
 - 390 Curb stop with flushing pipe
 - 391-1 Valve box installation
- (Size of tap) X 2" tapped cap with 2" corp. stop at the end of offsite work is required if onsite work is not concurrent with offsite construction. The tapped cap must be installed before the backflow prevention device.
- Fire line connection to City mains shall be used for fire protection system only. No metered services can be connected to a fire line.

- Backflow preventers are required on all fire lines. Connections are to be in accordance with University of Southern California – Manual of Cross-Connection Control. See Building Safety for details. Backflow devices are to be shown on the offsite plan. Fire lines that are proposed with backflow preventers shall be required to provide a certificate of approval from the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research (USC – FCCCHR), prior to fire line permit issuance, per Arizona Administrative Code R18-4-115D.
- Backflow preventers shall not be located in driveways, visibility triangles, or other locations where accidental damage or visibility obstruction would be a likely consequence.
- Backflow preventers shall be installed at (or near) the property line (point of service) and shall be fully accessible for the periodic testing, repairs, and replacement. There shall be an unobstructed radius of no less than three (3) feet from the outer perimeter of the backflow preventer.
- The size of the individual backflow devices shall be no less than the diameter of the largest required piping connected downstream of the device.
- Looped onsite fire line systems shall be provided a backflow preventer at each point of connection to the public water system, per UPC 603.3.11.
- All work must comply with requirements of the current City of Phoenix Traffic Barricade Manual.
- Pavement replacement thickness and type are to be per M.A.G. Section 336 and C.O.P. Detail P1200 - Type B. Curb and gutter replacement shall be a minimum of one (1) full section, per M.A.G. Standard Detail 220. Sidewalk replacement shall be a minimum of one (1) full panel per C.O.P. Detail P1230. At the discretion of the City Of Phoenix Development Services offsite inspector, tunneling under existing curb and gutter, in City Of Phoenix R.O.W., will be allowed. Tunneling under existing sidewalk will not be allowed in the City Of Phoenix R.O.W.
- Minimum coverage over the top of pipe shall be four (4) feet if the main is located in a major street or the main is 12" or larger. Otherwise, three (3) feet of cover over the top of the pipe is required.
- Compaction shall comply with M.A.G. Sec. 601, 95% minimum in a public street.
- A pavement cut surcharge may be assessed on this project for new pavement cuts for trenching in new asphalt pavement.
- Approval of these plans shall not prevent the City from requiring correction of errors in the plans where such errors are subsequently found to be in violation of any law, ordinance or other health/safety issue.
- All plan approvals are valid for one year from the date of signature.

III. Plan Sheet Requirements

Eng Rev

- North arrow is to be shown up or to the right. Scale shall be called out.
- Identify size of existing water main and type of material (ACP, CIP, etc.).
- Show all valves, in the area of construction, and their assigned numbers as shown on the quarter section map.
- All public right-of-way and existing easements shall be shown and dimensioned.
- Provide the existing and proposed paving with dimensions.
- Station the fire line tap from nearest existing street monument (intersection) beginning with station 0+00.
- All fire line pipes must be minimum class 50 DIP within public right-of-way or public easements and on-site to the customer's side of the backflow preventers.
- Pipe on customer side of backflow preventer shall conform to the Uniform Plumbing Code. Show the size and pipe material to be used onsite.

- Fire line tap is to be called out as follows:
Install _____" X _____" tapping sleeve and valve. Abbreviation is acceptable: TS & V, B & C. Specify type of valve box to be used. An example: 12" X 8" TS & V, B & C per M.A.G. Detail 340 and City of Phoenix Supplement Detail P1391.
- A valve is required at all fire line connections to public water main. The proposed valve shall not be located in a sidewalk, driveway, or curb and gutter.
- Thrust blocks will not be allowed in the City Of Phoenix R.O.W. Joint restraint per M.A.G. Standard Details 302-1, 302-2, 303-1, and 303-2 shall be used when bends are allowed in City Of Phoenix R.O.W.
- Pressure zone jumps on looped fire line systems are not allowed for any reason.
- Provide top and bottom elevations for any fire lines crossing wet utilities (water, sewer, storm drain, irrigation, etc.) in City Of Phoenix R.O.W. Separation is to be maintained per M.A.G. Standard Detail 404. The fire line may have to be realigned per C.O.P. Detail P1370 to meet vertical separation requirements. The fire line must have 6' minimum horizontal clearance from sewer, storm drain & irrigation lines. Fire lines must have a minimum of three feet (3') separation from water services.

IV. General Requirements

Eng Rev

- Plan shall be on 24" X 36" sheets.
- PLAT approval is required prior to permit issuance.
- Symbols shall be per M.A.G. Standards supplemented by Water Services Department Details.
- Orientation of each plan sheet shall be shown by showing a north arrow and the scale called out.
- Call out the standard M.A.G. and City supplemental specifications applicable to construction.
- Each sheet shall be identified by sheet number and project name.
- Engineer's signed registration seal is not required for fire line plans, but may be retained.
- All plan sheets shall be sufficiently clear to allow legible prints to be printed from as-built microfilm. The size of lettering and symbols shall be 1/8 inch minimum. Shading or zip tape is not permitted. Cross-hatching is permitted.
- The plans shall show the following information at the proper scale:
- Streets shall be identified by name. Streets, alleys, and easements shall be dimensioned at least once and at all breaks. Monument line of streets shall be shown, as well as any monuments found existing.
- All abutting lots shall be identified by lot number, tract, subdivision, or shown un-subdivided.
- The location of all existing utilities, structures, paving, and other topographic features affected by construction are to be dimensioned from the monument line or easement line.
- Scale shall not be more than 1" = 40. In major streets and cases of unusual topography or complex situations where more detail is necessary, then the scale shall be 1 in. = 20 ft.
- City Code and policy requires that all sites shall tie directly into city services without sharing common fire lines. Proposed onsite fire lines are not permitted to be served through adjacent properties or cross interior property lines to serve interior lots or lots fronting the public right-of-way.
- Utility Conflict notices are required on all major street crossings and elsewhere as determined by the Project Engineering plan reviewer. A disclaimer note to the City sealed and signed from the engineer is an alternative.

Disclaimer: I hereby certify that all utility companies with facilities in the area of the project have been contacted and the data provided is shown on this plan. I agree to indemnify, defend, save and hold harmless the City of Phoenix, its officers, officials, agents, employees and volunteers from any and all claims, demands, actions, liabilities, damages, losses, or expenses incurred for any utility conflict that may arise.

Signature and seal if applicable

Date


Eng Rev

- This project may front a water main which has a repayment agreement. For questions, phone Project Engineering Permit Counter at (602) 262-6551.
- A Pavement Cut Surcharge may be assessed on this project for new pavement cuts for trenching in new asphalt pavement.
- For on-site fire hydrants that are installed on public schools, charter schools, and Federal, County, and Municipal building sites, the State Fire Marshall will review and approve a copy prior to final submittal. The engineer is to provide a copy of the approved plan with the final submittal.
- Return four (4) corrected sets of plans, with the redline check prints, with your next submittal.
- Discussion of redline comments on plans or in this checklist should be directed to the plan reviewer.

Plans For Revision

All plans being revised after the original approval shall be re-approved as follows:

Eng Rev

- The nature of the revision must be called out on the bottom of the cover sheet and on the sheet(s) being revised. The revision number itself shall consist of a numeral within a triangle. The revised work shall be clouded and be numbered in a delta such as: 
- Affix a signature block as shown on the bottom of page 2 with a delta and a number on the left of the signature line.

Plans For Update

For plans submitted for update approval without revisions to the plans, the following is required:

Eng Rev

- Plans shall be resealed if previously sealed. Add a note on the bottom of page one that states submitted for update only and add the date. If any revisions have been done, also follow directions under Plans for Revision above.