



## City of Phoenix Water Services Department

## Requirements for Acceptable Sewer Plan Record Drawings

The following items must be provided by the developer or his representative for plans to be accepted as record drawings by the Water Services Department. Three sets of acceptable blackline prints are required.

- Easement and rights-of-way shown on the drawings must be shown on a recorded plat or map of dedication. Easements dedicated by separate instruments and described by metes and bounds must be recorded. The Water Services Department must receive a copy that has been approved by City Council before the City accepts the main for service.
- Prints must be blacklines on white background, having dark, clean crisp, clear line work, symbols, and annotation. These items must be of sufficient boldness and size, and be free from background obscuring, so as to be legible and easily read. No shading or tinting is acceptable.
- Minimum acceptable height for all record drawing lettering is 1/8 inch. Larger lettering is preferred, especially for dimensioning, stationing, size, material, slope, and elevation callouts. Standard bold block lettering is required.
- 4. All items changed or unchanged must have a bold (AB) lettered next to them. Required, minor as-built changes to the approved plans must be shown clearly by boldly striking through the item changed and placing the as-built information next to or as near as possible to it. All as-built annotation changes must be larger and bolder than the original and free from background obscuring.
  - Note: This includes abandoned pipe. Must note if abandoned pipe is physically removed from ground or remained in place.
- 5. For the purposes of the record drawing, every manhole, cleanout, pipe plug, and building connection tap must be located by stationing based upon the nearest downstream manhole always being designated as Station 0+00. Cumulative stationing along the length of the pipe run is not acceptable. In addition, the building connection station must give the location of the tap at the mainline measured perpendicular or radial to the sewer main centerline. Where the building connection service line is not constructed perpendicular to the sewer main, both the tap station and the distance of the service line from the nearest side lot line of the lot (or area) it serves must be given.
- New manholes built on existing lines require showing its station from the nearest existing downstream manhole and its distance to the nearest existing upstream manhole.
- 7. Where construction begins with removal of an existing pipe plug or cleanout, 0+00 stationing always begins at the nearest existing downstream manhole. Pipe length measurement and stationing is always from the centerline of the downstream manhole to the centerline of the upstream manhole or cleanout. Do not give partial pipe lengths in plan or profile at match lines. Always indicate the distance between manholes or to cleanouts or pipe ends.

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- All as-built adjustments to manhole, cleanout and pipe information must be shown in both plan and profile and repeated on every sheet in every instance that refers to the same information.
- A complete list of all materials installed and abandoned must be shown on the cover sheet.
  The specific size and material type of each pipeline installed must be shown at every
  construction reference to that pipe. Any changes to the record drawing must be reflected on
  the materials list.
- 10. On phased projects, the phase lines must be clearly shown on the key map and on the plan and profile sheets, and their locations clearly identifiable. Actual pipe end locations relative to phasing lines must be shown by dimensioning or stationing.
- Benchmark(s) location(s) and elevation(s) must be shown on the cover sheet. Only City datum is acceptable.
- The record drawing must be an approved plan with the Maricopa County Health Delegate signature.
- 13. The cover sheet must show the name, address, and phone number of the engineer that certifies the record drawing with the following statement:

"I hereby certify this record drawing was made correct to the best of my knowledge and belief."		sion or as note	ed and are
Registered Professional Engineer (Civil)	Reg No.	Date	

14. Each additional plan sheet must contain the signature and seal of an Arizona registrant.

The following must be shown on the cover sheet by the City of Phoenix department responsible for construction inspection.

- Name of the contractor.
- Permit number (identify phase if applicable)
- Date of approval by City of Phoenix inspector.
- Name of City of Phoenix inspector who witnessed the construction.

Carles Padilla, P.E.

Assistant Director for Water Services Department