



KIVA #: _____ **Project Name:** _____

Reviewed By: _____ **Phone:** _____ **Date:** _____

The purpose of this checklist is to offer comments on record drawings for residential grading and drainage plans. This checklist serves to minimize redline comments on record drawing submittals and to maintain consistency among reviewers on record drawing submittal requirements. Plan approval and civil permit closeout depends on compliance with the comments made on the plans and this checklist.

Please return this checklist and the check prints with your next submittal. Please direct any discussions of redline comments on plans or questions about this checklist to the reviewer listed above.

The following symbols are used to identify changes needed to the plans. **REQUIRE**

General Requirements

- All as-built information shall be completed on the most current set of city-approved and stamped plans with the P&D Plan Reviewer initials for the specific work permitted.
- Plans (3 sets) must be black lines on white background, having dark, clean, crisp line work, symbols, and annotation. These items must be sufficient boldness and size, and be free from background obscuring, to be legible and easy to read. No shading or tinting is acceptable.
- A Federal Emergency Management Agency (FEMA) Elevation Certificate based on finished construction must be reviewed and approved by Floodplain Management for each new and substantial improvement structure constructed in a Special Flood Hazard Area (SFHA) prior to issuing a Certificate of Occupancy. A copy of the elevation certificate must be submitted to the General or Structural Inspector.
- Minimum acceptable height for all record drawing lettering is 1/8 inch. Large lettering is preferred, especially for dimensioning, stationing, size, material, slope, and elevation callout. Standard bold block lettering is required.
- 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.
- Benchmark(s) location(s) and elevation(s) must be shown on the cover sheet. Only city datum elevations are acceptable.
- The cover sheet must show the name, address, and phone number of the engineer or surveyor that certifies the record drawing with the following statement (indicate which phase, if applicable):

“I hereby certify this record drawing was made under my supervision or as noted and is correct to the best of my knowledge and belief.”

Registered Professional Engineer (Civil) or Land Surveyor Reg. No. Date

- Each additional plan sheet must contain the signature and seal of the certifying Arizona registrant.

Grading and Drainage Record Drawing Requirements

- As-built top and bottom elevation and volume provided of all retention basins.
- As-built flow line elevations in swales, valley gutters and curb openings.
- As-built enough spot elevations to verify the design intentions are met (i.e. grade breaks, high/low points/scuppers, extreme storm outfall, etc.).
- As-built flow line elevations and/or size, length, slope, and inverts of pipe, grate elevations for catch basins, underground retention storage tanks, and all other drainage structures.
- As-built length, top of retaining wall, and top of footing for each section of retaining wall at each step.
- As-built weep holes in fence blocks. If fence blocks are called out to be turned sideways to allow flow through the fence, as-built the elevations of the fence blocks.
- As-built pad or finish floor elevation. Elevations shall not exceed +/- 0.2' of design elevations. If in a flood plain or adjacent to a wash or channel, plus 0.1 feet, but not lower than design. Maximum driveway slopes are required to be in accordance with City Supplemental Detail P-1164.