



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

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

Engineer: _____ **Phone:** _____

The purpose of this checklist is to offer comments on plan design for on-site grading. The source of the Grading and Drainage design policy is City Code Chapter 32 and City of Phoenix Storm Drain Design Manual.

This checklist serves to minimize redline comments on the check prints and to maintain consistency among plan reviewers on plans for cuts, fill, drainage swales, drainage structures and pipes, and retention areas. Plan approval, issuing permits, and certain grading clearances depend on compliance with the comments made on the check prints and this checklist. The Arizona registrant of record shall satisfy themselves of the completeness and accuracy of the design.

A completed checklist must be attached to the plot plans when submitted for first review. The following Certification Statement must be signed by the Arizona Registrant of record certifying that all applicable requirements on this checklist have been met.

Plan review correction cycles and/or approvals are valid for 12 months. Additional review fees (see Fee Schedule – Phoenix City Code, Chapter 9, Appendix A.2) shall be charged for extensions/reinstatements to update expired plan reviews.

CERTIFICATION

I CERTIFY THAT THE REFERENCED PLANS COMPLY WITH ALL APPLICABLE CITY ORDINANCES AND STANDARDS, INCLUDING FEDERAL, STATE AND COUNTY REQUIREMENTS AND REGULATIONS. IN ADDITION, I CERTIFY THAT THIS CHECKLIST HAS BEEN COMPLETED ENSURING ALL ITEMS LISTED ARE PROPERLY ADDRESSED. I UNDERSTAND THAT IF I FAIL TO ADDRESS ALL APPLICABLE ITEMS IN THIS CHECKLIST, THE PLANS MAY BE IMMEDIATELY RETURNED TO ME WITHOUT ANY FORMAL REVIEW BEING PERFORMED.

Arizona Registrant (Civil or Architect): _____

Arizona Registrant's Signature: _____ Date: _____

Please 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.

An Arizona Registrant (REG) must fill out all boxes in the first column as either (Addressed) or (Not Applicable).

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

The following three (3) conditions must be met in order to submit a Plot Plan:

1. Vacant lot in a previously approved subdivision, infill lots (vacant lots in which the proposed site is surrounded by existing homes), accessory structure, or addition to an existing dwelling unit.
2. A permanent excavation of less than two feet in depth, a filling of earth of less than one foot in depth, or a filling of earth of less than 100 cubic yards.
3. Less than 0.5 acres, and not in a hillside or floodplain.

If this lot is located within a Floodplain, is greater than 0.5 acres, is a custom home site, is a hillside lot with grading limitations, is a lot that will require retaining walls, a lot that contains a natural wash, drainage way, or protected by drainage easements, a Grading and Drainage single lot Plan will be required.

REQUIRED SUBMITTALS

REG RVW

- 1. Plan sheets shall be 24" X 36" or 8 ½" X 11"; submit three (3) sets of the Grading and Drainage (G&D) Plot plan.
- 2. A sealed drainage report or a drainage statement with drainage calculations may be substituted for projects with no offsite flows (A separate drainage memo will be required to substantiate that the site is isolated from off-site flows).
- 3. A completed and signed Grading and Drainage (G&D) Plot Plan Checklist.

Note: If submitting through the Electronic Plan Review system, multiple copies of submittal documents are not required.

GENERAL REQUIREMENTS

- 1. Original plan sheets shall be sufficiently clear to allow legible prints to be reproduced from microfilm. The size of lettering and symbols shall be 1/8 inch minimum.
- 2. If required, refer to the City of Phoenix Storm Drain Design Manual for drainage design policy, details, and calculations showing retention volumes to be provided for the required on-site retention. Provide all retention calculations and storm event type on the plot plan. Show maximum side slopes, top and bottom elevations, high water elevation, and the volume of each retention basin. The City of Phoenix storm water retention requirement is for the 100 year/2 hour storm event unless otherwise authorized by the Planning & Development Department.
- 3. Drainage reports should include hydrology parameters and assumptions and include methodology for developing quantities. Also include computer runs from HEC-1 or other programs utilized to develop flows from contributing area. Storm water routing through channels should include HEC-2 or other programs used to model the hydraulics including backwater computations. A disk with input data should be furnished with your plan review submittal when a computer program is utilized in the design.
 - a. A drainage statement and memo may be used in lieu of a complete drainage study provided the professional has determined there is no offsite flow impacting the site and the property does not lie within a floodplain. The drainage statement must include the extreme outfall location and elevation. State the storm event retention that is being provided.
- 4. Provide a drainage statement that includes the following:

REG RVW

- a. Site is in a Special Flood Hazard Area: Y N
 - b. Offsite flows affect this site: Y N
 - c. Retention provided is for the _____ storm event.
 - d. Extreme storm outfalls the site at the elevation of _____.
- 5. Provide a drainage memo for sites not impacted by offsite flows that includes the following:
 - a. Refer to the appropriate Area Drainage Master Plan that may be affecting the site. ADMP information can be obtained on Maricopa County's Flood Control District's website. <https://gis.maricopa.gov/flo-2dmodels/map.html>
 - b. Existing site conditions (engineer's site visit)
 - c. Distribution on estimated flows (peak flow based on per acre basis and peak flow from Flo-2D)
 - d. Street capacity calculations (flow contained within the right-of-way and do not flow

- through the site)
- e. Reference any as-built information available
 - f. Provide a conclusion

REG RVW

- 6. If the property is flood irrigated:
 - a. Show the location of all existing and proposed berms.
 - b. Provide the elevations at the high berm and along the berm at regular intervals (minimum finish floor elevation is 6" above top of high berm).
 - c. The suggested slope for berms is 1 ½:1.
- 7. Sidewalks are required when:
 - a. 50% of the lots on the same block on the same side of the street have existing sidewalks.
 - b. The lot on either side the property has an existing sidewalk.
 - c. The lot is located adjacent to an intersection.
- 8. Provide the address, APN#'s and legal description of the site.
- 9. Provide a project description of all proposed work
- 10. Provide the total net sq. footage lot area and the disturbed area.
- 11. Provide the year the existing house was built. If the lot is vacant, list the year the plat was recorded.
- 12. Provide the total building area under roof.
- 13. Provide the patio area in square feet. Show allowed/provided percentage.
- 14. Provide the total lot coverage. Show the allowed/provided percentage.

PLOT PLAN REQUIREMENTS

- 1. Indicate plan types:
 - a. G&D Plot Plan
- 2. Provide the standard plan number, if applicable.
- 3. Provide the appropriate processing numbers including: KIVA#, CPGD#, RPRC#, PRDV#, and City quarter section number in lower right corner.
- 4. Provide a north arrow and scale, 1" = 20', for the plot plan, unless it makes you unable to fit on an
 - a. 8 ½" X 11" paper.
- 5. Provide all retention calculations and storm event type. Show the location of all existing or required retention basins.
- 6. Provide elevation datum and benchmarks (City datum required). Please dial (602) 495-2050 extension 265 Voice or (602) 534-5500 TTY for existing benchmark closest to the project site. Equations are not acceptable.
- 7. Finish floor elevation is to be noted on the plan and sealed by a licensed Arizona registrant (Civil Engineer or Architect). Finish floor elevation is required to be referenced to a City of Phoenix benchmark.
- 8. Provide existing and proposed elevations at all lot corners.
- 9. Provide the type of curb along the property frontage. (6" vertical curb, roll curb, etc.) or edge of pavement if no curb.

REG RVW

10. Provide the low and high top of curb elevations and pavement crown elevations along the lot frontage. (Minimum finish floor elevation shall be 14" above the top of the low curb and 6" above the top of the high curb elevation or pavement crown)
11. Provide the elevation and location of the extreme storm outfall. Provide directional arrows that display the storm water has an unobstructed path to the outfall location.
12. Provide the property boundary dimensions.
13. Provide the proposed or existing screen fence type, height, and location. (Note all weep hole locations and provide detail)
14. Provide all building and zoning setback lines.
15. Show garage setback (18' minimum door from the back of sidewalk) or curb with no sidewalk.
16. Provide eave setback and roof overhangs (show overhang with dashed line).
17. Verify site is not in an eligible historical district, designated structure, etc. or provide the blue HP stamp.
18. Show cross-sections of side yards with positive flows to the street.
19. Show Pad elevations and FFE for all proposed buildings.
20. Show all existing and proposed easements, dedications, right-of-way, streets, visibility triangles and alleys with dimensions and offsets. Streets shall be identified by name. Streets, alleys, and easements shall be dimensioned. Monument line of streets shall be shown.
21. Show existing utilities and drainage facilities, including private or S.R.V.W.U.A. irrigation within and adjacent to the property boundaries shall be shown. Any work on Salt River Project irrigation system requires SRP permit and approved plans. All utilities shall be dimensioned from street monument lines.
22. Show the location and size of the electrical service.
23. Provide a footprint of all accessory structures including swimming pools and equipment. If detached structure is **livable**, per building code, the FFE must meet current 6 inches of high curb and 14 inches above low curb requirement.

NOTES FOR PLOT PLAN

(To appear on cover sheet)

1. A finish floor elevation certificate shall be provided by the registrant, to the field inspector, prior to the rough frame inspection.
2. The minimum finish floor elevation shown is safe from a 100 year flood of the minimum specified in the City of Phoenix Storm Water Policies and Standards Manual.
3. A separate permit is required for any work in the City of Phoenix right-of-way.

PLANS FOR REVISION

1. All original plan approvals, signatures, and seals are to remain on the revised plans.
2. All plans revised after the original approval shall be resubmitted for review and approval. The nature of the revisions must be called out on the cover sheet and on the sheet(s) which have been revised. The revision number itself shall consist of a numeral within a triangle next to each revision. Δ Changes on each plan sheet shall be highlighted with "clouding".
3. All revised sheets, including the cover sheet are to be re-sealed, signed and dated.

EXTENSIONS

1. All plan extensions must have prior approval by completing the Plan Review Extension Application. The Plan Review Extension Application can be found at the following site: <http://www.phoenix.gov/development/siteandcivil/civil/>. Provide a copy of the approved application with the plan submittal.
2. Plan approvals for extension are valid for a period of 180 days from the date of plan approval.