



**Planning & Development  
Department  
Drainage Clearance Review Requirements  
Commercial, Subdivision and Multi-Family**



FORM INDEX

FREQUENTLY ASKED QUESTIONS	715
ENGINEERED PLAN SUBMITTAL (COMMERCIAL/SUBDIVISION/MULTI-FAMILY CHECKLIST	712B
COMMERCIAL/SUBDIVISION GENERAL NOTES AND CONDITIONS	722
COMMERCIAL/SUBDIVISION SPECIAL NOTES AND CONDITIONS	720
PRECISE PLAN	703
PRELIMINARY PLAT	706
FINAL PLAT	705
MASTER PLAN	707
MINOR ACCESSORY CONSTRUCTION	718
FEE SCHEDULE – SECTION 1605	710



## Planning & Development Department



### DRAINAGE REVIEW

---

#### LIST OF TOP 10 QUESTIONS ASKED REGARDING PLAN SUBMITTALS

**1. What needs to be shown on the plans?**

Review the attached requirements for the specific project.

**2. Where do I obtain a building permit or submit my plans?**

The Planning and Development Department issues building permits at 501 N. 44<sup>th</sup> Street, Suite 200, Phoenix, 85008. You may submit plans at this location.

**3. When do I call for a stem inspection?**

Prior to pouring the stem walls. Have the contractor set up the height of the stemwalls for our inspector's visit. Call our inspection line at (602) 506-3692. Inspections for the next day need to be called in prior to 2:30 p.m. (This is an automated system).

**4. When do I call for a final inspection?**

After everything has been completed, all the concrete has been poured, all trenches have been filled, stockpiles/berms removed, and the site has been rough graded.

**5. Do I need a site inspection?**

Whether a site inspection is needed or not depends on the location of the site and the potential drainage and flooding hazard for the site. County reviewers will determine if a site inspection is needed at the time of the plan submittal.

**6. Am I in a floodplain?**

Check the Federal Emergency Management Agency's Flood Insurance Maps or if the property is located in the Unincorporated Areas of Maricopa County you can call the Flood Control District's Floodplain Division at (602) 506-2939 and ask for floodplain determination. Prior to calling, make sure you have the Tax Assessor Number.

**7. What will the fees be?**

Fees will be determined by County Plan Reviewers at the time of the submittal in conformance with the adopted fee schedules.

**8. Do I need an engineer to prepare my plans?**

Refer to the Grading Matrix Tool to help determine if a Civil Engineer is needed for a residential project. This tool is provided to help to determine when engineered plans may be required. <http://www.maricopa.gov/planning/OnlineServices/GradingAndDrainagePlan.aspx>.

**9. How far away from the wash does my non-habitable structure need to be?**

The location on the structure in proximity to a wash is dependent on the size of the wash, the amount of flow the wash carries, and if any bank stabilization is required. County Plan Reviewers will determine if a location is acceptable during the plan review process. In general, stay away from all major washes. A good rule for proposed structures within twenty feet of minor washes, would be to provide bank protection and set the footers 3 feet below the bottom elevation of the wash. For larger washes, a civil engineer will need to determine appropriate erosion control.



# Planning & Development Department



## ENGINEERED PLAN SUBMITTAL REQUIREMENTS COMMERCIAL, MULTI-FAMILY, AND SUBDIVISION

Please check your plan against the listed items for compliance. The following checklist should be used as a guideline. Additional data may be required based upon complexity of the design and location. Submit the checklist with your revised grading and drainage plan.

Applicant **GRADING & DRAINAGE PLAN**  
Check

- 1. TITLE BLOCK WITH PROJECT NAME, PLAN TYPE, AND SITE ADDRESS.
- 2. A METES AND BOUNDS LEGAL DESCRIPTION OF THE SITE WITH LOT LINES ANNOTATED.
- 3. ASSESSOR'S PARCEL NUMBER (APN), SITE GROSS AND NET AREA, TOTAL DISTURBED AREA, EXISTING AND PROPOSED ZONING, TOTAL NUMBER OF LOTS, COUNTY TRACKING/PERMIT NUMBER.
- 4. A SITE LOCATION MAP WITH NORTH ARROW, INDICATING THE SITE LOCATION IN RELATION TO THE NEAREST CROSS STREETS.
- 5. THE OWNER/APPLICANT NAME, ADDRESS, PHONE NUMBER, AND EMAIL ADDRESS.
- 6. THE ENGINEER'S NAME, ADDRESS, PHONE NUMBER, AND E-MAIL ADDRESS.
- 7. FEMA FLOOD INSURANCE RATE MAP (FIRM) INFO.
- 8. AN ONSITE TEMPORARY BENCH MARK (TBM) REFERENCED TO NAVD 88 OR NGVD 29 DATUM.
- 9. A PLAN LEGEND IDENTIFYING LINETYPES, SYMBOLS, AND ABBREVIATIONS USED ON PLAN.
- 10. SITE MAP WITH SHEET INDEX AND DESCRIPTION (COVER, SECTION, G&D, PROFILE, ETC).
- 11. PROVIDE A SITE RETENTION BASIN TABLE WITH THE FOLLOWING COLUMNS: BASIN ID, VOLUME REQUIRED (CF), VOLUME PROVIDED (CF), AND "AS-BUILT" VOLUME (CF).
- 12. MARICOPA COUNTY P&D COMMERCIAL GENERAL NOTES AND CONDITIONS.
- 13. A CURRENT TOPOGRAPHIC SURVEY OF THE PROPERTY, ACCURATELY DEPICTING EXISTING SITE CONDITIONS AND TOPOGRAPHY, WITH ANNOTATION FOR MAJOR CONTOURS AT A MINIMUM.
- 14. THE DATE OF THE FIELD SURVEY ON WHICH THE PLANS ARE BASED.
- 15. LABEL USE OF ADJACENT PARCELS ON ALL SIDES WITH APN# - VACANT, RESIDENTIAL, ETC.
- 16. DISTANCE TO SHARED WELL.
- 17. DEDICATED STREET ACCESS INCLUDING STREET NAME AND RIGHT-OF-WAY DIMENSIONS.
- 18. NORTH ARROW.
- 19. PLAN SCALE WITH A GRAPHIC SCALE BAR. PLANS MUST BE DRAWN/ PLOTTED TO SCALE, AND BASED ON A STANDARD ENGINEERING SCALE (1 INCH EQUAL TO 10, 20, 30, or 40 FEET). MAX 40 SCALE TO BE USED ON ALL CONSTRUCTION PLANS, UNLESS OTHERWISE APPROVED BY COUNTY STAFF.
- 20. STATEMENT IDENTIFYING ALL SPECIFIC MANUALS AND STANDARDS WITH EDITION DATE TO BE USED FOR THE PLAN (I.E., MAG STANDARD DETAILS, 2012 EDITION).
- 21. THE SIZE OF LETTERING AND SYMBOLS SHALL BE A ONE-TENTH (1/10) OF AN INCH MINIMUM. PLANS SHALL BE SUFFICIENTLY CLEAR TO ALLOW LEGIBLE REPRODUCTION.
- 22. THE MAXIMUM PLAN SHEET SIZE SHALL BE 24X36".
- 23. LOCATION(S) OF DRAINAGE TRACTS, EASEMENTS (DRAINAGE AND PUBLIC UTILITY EASEMENTS), AND FLOODPLAIN LIMITS WITH FLOODPLAIN DESIGNATION.
- 24. FINISHED FLOOR ELEVATION(S).



## Planning & Development Department



### ENGINEERED PLAN SUBMITTAL REQUIREMENTS COMMERCIAL, MULTI-FAMILY, AND SUBDIVISION

---

- 25. FINISHED GRADE ELEVATIONS AT THE CORNERS OF THE BUILDING(S) AND ALL ENTRY POINTS.
- 26. EXISTING AND PROPOSED CONTOUR LINES, DRAINAGE PATTERNS, FLOW DIRECTION ARROWS, AND GRADE BREAKS. EXISTING CONTOUR LINES SHALL BE REPRESENTED BY DASHED LINES AND PROPOSED CONTOURS MUST BE REPRESENTED BY BOLDER, SOLID LINES.
- 27. FINISHED GRADE ELEVATION OF ALL GRADE BREAKS.
- 28. LOCATION AND LIMITS OF INUNDATION OF ALL WASHES, CHANNELS, AND SWALES ENTERING AND EXITING THE SITE, AND ASSOCIATED Q100 PEAK FLOW RATES.
- 29. TYPICAL SECTIONS OF NEW DRAINAGE IMPROVEMENTS (CHANNELS, SWALES, BASINS, ETC.) AND ONSITE STREETS, WITH PROPOSED CROSS SLOPES AND SECTION DIMENSIONS.
- 30. RETENTION BASIN LOCATION(S), WITH BASIN ID, SIDE SLOPE GRADE, BASIN HIGHWATER ELEVATION (HW), BASIN BOTTOM ELEVATION (BTM), BASIN PONDING DEPTH (D), VOLUME REQUIRED, (Vr) AND VOLUME PROVIDED (Vp).
- 31. CROSS SECTIONAL (PROFILE) VIEWS OF NEW CULVERT, STORM DRAIN, AND UNDERGROUND RETENTION SYSTEMS, INDICATING HEADWATER ELEVATION(S) AND INLET/OUTLET PROTECTION DETAILS WHERE APPLICABLE.
- 32. PERPENDICULAR CROSS SECTIONS THROUGH THE SITE AND AT ALL PROPERTY BOUNDARIES DEMONSTRATING BOUNDARY CONDITIONS. THE CROSS SECTIONS SHALL ENCOMPASS THE AREA OF NEW DEVELOPMENT ON THE SITE. THE CROSS SECTIONS MUST BE DRAWN TO SCALE (VERTICAL 10X THE HORIZONTAL SCALE) AND SHOW EXISTING AND PROPOSED GRADE ELEVATIONS. PROVIDE HORIZONTAL AND VERTICAL STATIONING WITH A SCREENED-BACK GRID IN THE SECTIONS FOR CLEAR DEMONSTRATION OF ELEVATION.
- 33. SITE INGRESS/EGRESS LOCATION(S) WITH DRIVEWAY MATERIAL NOTED (CONCRETE, ASPHALT, ABC, ETC.).
- 34. FENCE LOCATIONS AND DETAILS SHALL INCLUDE ELEVATION AND SECTION VIEWS AND INDICATE REQUIRED DRAINAGE OPENINGS. FOR MASONRY SCREEN WALLS, THE STANDARD DRAINAGE REQUIREMENT IS TO PROVIDE A TURNED CMU BLOCK AT GRADE, EVERY OTHER BLOCK, AND A STATEMENT PROHIBITING THE USE OF DECORATIVE BLOCKS FOR DRAINAGE OPENINGS.
- 35. RETAINING WALL DETAILS, WITH PLAN VIEW WALL CALLOUTS FOR TOP OF RETAINING WALL (TRW), FINISH GRADE (FG) AND TOP OF FOOTING (TF) AT ALL ELEVATION CHANGES ALONG ENTIRE SPAN OF WALL. WALL PROFILE MAY BE REQUIRED BASED ON SITE CONDITIONS.
- 36. LOCATION OF THE SEPTIC TANK AND LEACH FIELD.
- 37. ARIZONA REGISTERED PROFESSIONAL CIVIL ENGINEER SIGNATURE, SEAL AND DATE ON ALL PLAN SHEETS. THE ENGINEER SHALL HAND WRITE THE "DATE SIGNED" AREA WITHIN THE PE SEAL. ELECTRONIC SIGNATURES ARE REQUIRED TO MEET ARS 41-132 REQUIREMENTS. COPIES OF THE ELECTRONIC FILES ARE REQUIRED TO BE SUBMITTED FOR VERIFICATION OF THE ELECTRONIC SIGNATURE WITHIN THE FILE.
- 38. TYPICAL LOT GRADING DETAIL FOR SUBDIVISION, SHOWING LOT DRAINAGE OUT TO STREET, FF/PAD ELEVATIONS AND MINIMUM 0.5% ON-LOT SLOPE, UNLESS OTHERWISE APPROVED BY COUNTY STAFF.
- 39. SITE ULTIMATE OUTFALL LOCATION AND ELEVATION.
- 40. DRYWELL DETAIL AND SPECIFICATIONS.



# Planning & Development Department



## ENGINEERED PLAN SUBMITTAL REQUIREMENTS COMMERCIAL, MULTI-FAMILY, AND SUBDIVISION

---

- 41. EXISTING/PROPOSED UTILITIES WITH ANY PROPOSED CROSSINGS, CALLOUT ELEVATIONS, AND MINIMUM SEPARATION DISTANCE.
- 42. FINISHED FLOOR ELEVATION & STATEMENT AS FOLLOWS:

### **FINISH FLOOR CERTIFICATION**

FINISHED FLOORS ARE SAFE FROM INUNDATION DURING A 100-YEAR PEAK RUN-OFF EVENT IF CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS.

- 43. AS-BUILT STATEMENT AS FOLLOWS:

### **ENGINEER'S AS-BUILT CERTIFICATION**

I, (*NAME OF ENGINEER*), STATE THAT I HAVE REVIEWED THE AS-BUILT DRAWING(S) FOR THE (*PROJECT NAME, PERMIT #*) AND CERTIFY THAT THE DEVELOPMENT HAS BEEN CONSTRUCTED ACCORDING TO THE APPROVED GRADING AND DRAINAGE PLANS AND IMPROVEMENT PLANS AND THAT IT SHALL FUNCTION AS DESIGNED; AND THE BASINS SHALL FUNCTION AS DESIGNED TO DRAIN WITHIN 36 HOURS PER MARICOPA COUNTY REQUIREMENTS.

\_\_\_\_\_  
NAME

\_\_\_\_\_  
DATE

- 44. THE DECLARATION OF RESPONSIBLE CHARGE AS FOLLOWS:

### **DECLARATION OF RESPONSIBLE CHARGE**

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION R4-30-301 OF THE RULES OF THE ARIZONA STATE BOARD OF TECHNICAL REGISTRATION, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE REVIEW OF THE PROJECT DRAWINGS AND SPECIFICATIONS BY MARICOPA COUNTY IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR THE PROJECT DESIGN.



## Planning & Development Department



### ENGINEERED PLAN SUBMITTAL REQUIREMENTS COMMERCIAL, MULTI-FAMILY, AND SUBDIVISION

---

#### DRAINAGE REPORT

- 1. DRAINAGE REPORT SIGNED, SEALED, AND DATED BY AN ARIZONA LICENSED CIVIL ENGINEER.
- 2. DRAINAGE REPORT PREPARED IN ACCORDANCE WITH MARICOPA COUNTY DRAINAGE POLICIES AND STANDARDS STANDARD 6.13 AND/OR 6.14 AS APPROPRIATE.
- 3. SCALED DRAINAGE AREA MAP INDICATING OFFSITE FLOW AREA(S) TO THE SITE.
- 4. HYDROLOGIC ANALYSIS OF THE OFFSITE WATERSHED THAT DRAINS TO THE SITE.
- 5. ANALYSIS SUBSTANTIATING THE DESIGN OF ANY NEW CULVERTS(S) AND THEIR ON/OFFSITE EFFECTS.
- 6. ANALYSIS OF CHANNELS/WASHES SUBSTANTIATING THEIR HYDRAULIC CAPACITY AND STABILIZATION.
- 7. CALCULATIONS SUBSTANTIATING THE DESIGN/SIZING OF ALL RIP RAP OR OTHER STABILIZATION MEASURES.
- 8. RETENTION BASIN VOLUME CALCULATIONS (VOLUME REQUIRED AND VOLUME PROVIDED).
- 9. RETENTION BASIN DRAIN-DOWN TIME CALCULATIONS.
- 10. RETENTION BASIN SPILLWAY CALCULATIONS.
- 11. NUMBER AND LOCATION OF DRYWELLS AND/OR SOIL PERCOLATION TEST RESULTS PREPARED IN ACCORDANCE WITH MARICOPA COUNTY DRAINAGE POLICIES AND STANDARD 6.10.12.
- 12. SCOUR DEPTH AND EROSION SETBACK REQUIREMENTS (SSA 5-96 & SSA 7-98).
- 13. DIGITAL COPIES OF ALL ELECTRONIC CALCULATIONS, INCLUDING SPREADSHEETS, AND EXECUTABLE COPIES OF HEC-1 (HEC-HMS) AND HEC-RAS MODELS.
- 14. A STATEMENT INDICATING THAT THE DRAINAGE REPORT HAS BEEN PREPARED IN ACCORDANCE WITH THE CURRENT VERSIONS OF THE MARICOPA COUNTY DRAINAGE POLICIES AND STANDARDS, DRAINAGE DESIGN MANUALS FOR MARICOPA COUNTY, VOLUME 1 – HYDROLOGY AND VOLUME 2 – HYDRAULICS AND SECTION 1205 OF THE MARICOPA COUNTY ZONING ORDINANCE.



**THE FOLLOWING NOTES SHALL APPEAR ON THE COVER SHEET OF  
ALL COMMERCIAL and SUBDIVISION PROJECTS  
IN UNINCORPORATED MARICOPA COUNTY.  
TEXT SHALL NOT BE MODIFIED WITHOUT THE EXPRESS WRITTEN  
PERMISSION OF THE APPLICABLE COUNTY DEPARTMENT.**

**MARICOPA COUNTY P&D COMMERCIAL/ SUBDIVISION GENERAL NOTES AND CONDITIONS**

1. REFERENCE MARICOPA COUNTY PERMIT AND ADDENDUMS FOR ADDITIONAL CONDITIONS.
2. ANY WORK PERFORMED WITHOUT APPROVAL OF THE APPLICABLE COUNTY DEPARTMENT OR AFFECTED UTILITY COMPANY AND/OR ALL WORK AND MATERIAL NOT IN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE OWNER'S EXPENSE.
3. THE ISSUANCE OF ANY CONSTRUCTION PERMIT SHALL NOT RELIEVE THE OWNER OR OWNER'S AGENT FROM COMPLIANCE WITH ALL OTHER GOVERNMENTAL REGULATIONS AND ORDINANCES INCLUDING BUT NOT LIMITED TO ZONING & BUILDING REQUIREMENTS.
4. AS SPECIFIED IN THE PERMIT CONDITIONS, CONTACT MARICOPA COUNTY TO SCHEDULE AN IN-PROGRESS INSPECTION FOR ALL HEADWALLS, CUT OFF WALLS, AND WEIRS AFTER EXCAVATION AND FORM PLACEMENT BUT PRIOR TO PLACEMENT OF ANY MATERIAL.
5. AS SPECIFIED IN THE PERMIT CONDITIONS, CONTACT MARICOPA COUNTY TO SCHEDULE AN IN-PROGRESS INSPECTION FOR ALL GABION MATTRESSES, RIP-RAP, FILTER FABRIC, AND/OR GRAVEL UNDERLAYMENT AFTER EXCAVATION BUT PRIOR TO PLACEMENT OF ANY MATERIAL.
6. AS SPECIFIED IN THE PERMIT CONDITIONS, CONTACT MARICOPA COUNTY TO SCHEDULE AN IN-PROGRESS INSPECTION FOR ALL RETAINING WALLS AFTER EXCAVATION BUT PRIOR TO PLACEMENT OF CONCRETE, BLOCK, OR OTHER RETAINING WALL MATERIAL.
7. ADDITIONAL INSPECTIONS AND/OR RE-INSPECTIONS SHALL BE ASSESSED ADDITIONAL FEES IN CONFORMANCE WITH ADOPTED FEE SCHEDULES.
8. RIP-RAP AREAS SHALL BE OVER-EXCAVATED SUCH THAT TOP OF RIP-RAP WILL MEET ADJACENT GRADE.
9. CERTIFIED AS-BUILT PLANS, PREPARED IN CONFORMANCE WITH MARICOPA COUNTY AS-BUILT SUBMITTAL REQUIREMENTS SHALL BE SUBMITTED TO MARICOPA COUNTY FOR APPROVAL PRIOR TO FINAL DRAINAGE CLEARANCE.
10. PRIOR TO FINAL DRAINAGE CLEARANCE EACH RETENTION BASIN WITH DEPTHS GREATER THAN 1-FOOT OR AS DETERMINED BY MARICOPA COUNTY SHALL BE TESTED PER THE DRAINAGE POLICIES AND STANDARDS FOR MARICOPA COUNTY STANDARD 6.10.12. THE TEST RESULTS, BORING LOGS, AND REVISED DRAIN-DOWN TIME CALCULATIONS.  
DEMONSTRATING THAT ALL RETENTION BASINS DRAIN WITHIN 36-HOURS, SIGNED AND SEALED BY AN ARIZONA REGISTERED PROFESSIONAL ENGINEER, SHALL BE SUBMITTED FOR APPROVAL WITH THE AS-BUILT PLAN DOCUMENTATION. SOIL INFILTRATION TESTING OBTAINED DURING DESIGN PHASE ARE ACCEPTABLE.
11. ALL DRYWELL PERCOLATION RATES SHALL BE DE-RATED IN ACCORDANCE WITH MARICOPA COUNTY STANDARD 6.10.13. THE DRYWELL TEST RESULTS, BORING LOGS, PROOF OF DRYWELL REGISTRATION, AND REVISED DRAIN-DOWN CALCULATIONS SEALED BY AN ARIZONA REGISTERED PROFESSIONAL ENGINEER DEMONSTRATING THAT ALL RETENTION BASINS DRAIN WITHIN 36-HOURS SHALL BE SUBMITTED FOR APPROVAL WITH THE AS-BUILT PLAN DOCUMENTATION.
12. REQUIRED DRAINAGE OPENINGS FOR CMU WALLS SHALL BE AS PER THE APPROVED PLAN DETAIL. IF NO DETAIL IS SHOWN, PROVIDE NON-DECORATIVE TURNED BLOCK, EVERY OTHER BLOCK AT GRADE. IF TWO BLOCKS NEXT TO EACH OTHER ARE NOT TURNED, TWO TURNED BLOCKS NEXT TO EACH OTHER SHALL THEN FOLLOW.
13. SHOULD ANY PROPOSED DEVELOPMENT REQUIRE CLARIFICATION AS DETERMINED BY MARICOPA COUNTY, A PLAN ADDENDUM SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER SHALL BE SUBMITTED FOR

APPROVAL. SUBMITTAL OF AN ADDENDUM MAY REQUIRE FORMAL PLAN MODIFICATION AS DEEMED BY MARICOPA COUNTY.

14. ALL CONSTRUCTION FILL SHALL MEET OR EXCEED MAG SPECIFICATION 211.

15. ALL CONSTRUCTION SHALL MEET OR EXCEED CURRENT MAG SPECIFICATIONS AND STANDARDS.

16. AN APPROVED SET OF PLANS SHALL BE MAINTAINED ON THE JOB SITE AT ALL TIMES PERMIT IS ACTIVE.

17. OMISSIONS OR CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE DRAWINGS, NOTES, AND DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD AND RESOLVED WITH MARICOPA COUNTY PRIOR TO PROCEEDING WITH THE WORK.

18. CONTACT BLUE STAKE AT 602-263-1100 A MINIMUM OF 2-DAYS PRIOR TO CONSTRUCTION.





**THE FOLLOWING NOTES SHALL APPEAR ON THE COVER SHEET OF  
RELEVANT COMMERCIAL OR SUBDIVISION PROJECTS ONLY  
IN UNINCORPORATED MARICOPA COUNTY.  
TEXT SHALL NOT BE MODIFIED WITHOUT THE EXPRESS WRITTEN PERMISSION  
OF THE APPLICABLE COUNTY DEPARTMENT.**

**MARICOPA COUNTY P&D COMMERCIAL/SUBDIVISION SPECIAL NOTES AND CONDITIONS**

**1. PRE-CONSTRUCTION MEETING**

PRIOR TO THE START OF WORK, SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE MARICOPA COUNTY INSPECTIONS DEPARTMENT.

**2. FINISHED FLOOR INSPECTION**

CONTACT MARICOPA COUNTY TO SCHEDULE A FINISHED FLOOR INSPECTION AFTER EXCAVATION, PLACEMENT OF SUBGRADE AND FORM WORK, BUT PRIOR TO PLACEMENT OF CONCRETE OR OTHER FINISHED FLOOR MATERIAL.

**3. THIRD PARTY INSPECTIONS**

THE NAME AND QUALIFICATIONS OF THE 3RD PARTY INSPECTOR SHALL BE SUBMITTED TO MARICOPA COUNTY FOR APPROVAL PRIOR TO START OF WORK ON IMPROVEMENTS REQUIRING 3RD PARTY INSPECTIONS AS SPECIFIED BY PERMIT CONDITIONS. 3RD PARTY INSPECTOR SHALL NOT BE THE OWNER, APPLICANT, ENGINEER, OR CONTRACTOR UNLESS APPROVED BY MARICOPA COUNTY. WEEKLY REPORTS SHALL BE SUBMITTED TO THE COUNTY AS AN ADDENDUM SEALED BY AN ARIZONA REGISTERED PROFESSIONAL ENGINEER, DOCUMENTING PROGRESS, COMPACTION, MATERIAL TESTING, AND OVERALL PLAN COMPLIANCE. FINAL DRAINAGE INSPECTION SHALL NOT BE SCHEDULED UNTIL 3RD PARTY INSPECTIONS HAVE BEEN COMPLETED AND CERTIFIED.

**4. RENO/GABION MATTRESS SLOPE STABILIZATION**

PROVIDE PROFESSIONAL 3RD PARTY INSPECTION SERVICES FOR THE PLACEMENT, ANCHORING, AND OVERALL CONSTRUCTION OF THE RENO/GABION MATTRESS SLOPE STABILIZATION. NOTE—ROCK FILL SHALL BE COMPLETELY RETAINED BY THE GABION/RENO MATTRESS WIRE MESH.

**5. UNDERGROUND RETENTION SYSTEM**

PROVIDE PROFESSIONAL 3RD PARTY INSPECTION SERVICES FOR THE EXCAVATION, BEDDING, PLACEMENT, COMPACTION, BACK FILL, AND OVERALL CONSTRUCTION OF THE UNDERGROUND RETENTION SYSTEM.

**6. PIER FOUNDATIONS**

PROVIDE PROFESSIONAL 3RD PARTY INSPECTION SERVICES FOR THE EXCAVATION, BEDDING, PLACEMENT, BACK FILL, AND OVERALL CONSTRUCTION OF THE PIER FOUNDATIONS.



# Planning & Development Department



## DRAINAGE REVIEW REQUIREMENTS FOR PRECISE PLANS INCLUDING SPECIAL USE PERMITS

A detailed drainage report with respect to hydrology and hydraulics in conjunction with grading, drainage and paving plans may need to be submitted. The final drainage plan needs to be signed and sealed by an Arizona Registered Professional Civil Engineer and should address the following:

1. **Offsite Hydrology** – Need to determine the quantity, the entrance and exit points, and how the flow is to be routed through the site.
2. **Onsite Hydrology** – Need to show how the flows are to be routed to retention basins.
3. **Onsite Retention** – Need to retain water for the 100-year, 2-hour storm for the site, including adjacent right of way. Determine volume needed and the size and location of basins.
4. **Retention Disposal** – Provide testing results in conformance with Standard 6.10 for disposal of total ponding volume within 36 hours.
5. **Onsite Hydraulic Calculations** – Need to show hydraulic analysis for any channels, culverts, storm drains, or street drainage.
6. **Cross Sections** – Need to show perpendicular cross-sections through the site indicating property lines, swales, retention areas, finished floors, and street details.
7. **Finished Floor Elevations** – Need to show finished floor elevation and certification note.
8. **Topography** – Need to show natural and proposed contour elevations or spot elevations.
9. **Dry Wells** – If applicable, need to submit a copy of the dry well registration before final drainage clearance of a permit.
10. **Floodplains** – Need to show the delineated floodplain boundaries if the site is within a Federal Emergency Management Agency’s (FEMA) special flood hazard area. Will also need to apply for Floodplain Use Permit.
11. **Erosion Setbacks** – For washes and other watercourse channels an erosion setback will need to be determined, which meets Arizona State Standard 5-96.

Since complex drainage systems may require more detailed information, a meeting should be arranged with personnel from Drainage Review.

### FEE INFORMATION\*:

#### Planning Cases:

Plan of Development including SUP (except SFR-SUP)	\$ 1,000 + \$ 500/Acre	\$11,000 Maximum
SUP or Plan of Development with disturbance of less than 1,500 sq. ft.	\$ 650	
Minor Amendment to a Plan of Development	\$ 650	
Zone Change (no site plan, without precise plan entitlements)	\$ 60	
Special Use plan for SFR uses	\$ 210	
Modification of Stipulation/s	\$ 60	

#### Construction Permits

\$ 2,000 + \$ 250/Acre      \$ 42,000 Maximum

Minor Accessory structure on previously developed site (see Regulation for restrictions) - \$ 650

Major Accessory structure on previously developed site (see Regulation for restrictions) - \$ 5,000

(Or as noted above if lower).

\* See the Drainage Regulation for current fee schedule



## Planning & Development Department

# DRAINAGE REVIEW REQUIREMENTS FOR PRELIMINARY PLAT



A drainage plan and report needs to accompany a preliminary plat submittal. The drainage plan/report shall be developed in accordance with Chapter 6 of the Maricopa County Drainage Policies and Standards Manual and signed and sealed by an Arizona Registered Professional Civil Engineer and should address the following at a minimum:

1. **Offsite Hydrology** – Need to determine the quantity, the entrance and exit points, and how the flow is to be routed through the site.
2. **Onsite Hydrology** – Need to show how the flows are to be routed to retention basins.
3. **Onsite Retention** – Need to retain water for the 100-year, 2-hour storm for the site, including adjacent right of way. Determine volume needed and the size and location of basins.
4. **Retention Disposal** – Provide testing results in conformance with Standard 6.10 for disposal of total ponding volume within 36 hours.
5. **Onsite Hydraulic Calculations** – Need to show hydraulic analysis for any channels, culverts, storm drains, or street drainage.
6. **Cross Sections** – Need to show perpendicular cross-sections through the site indicating property lines, swales, retention areas, finished floors, and street details.
7. **Finished Floor Elevations** – Need to show finished floor elevation and certification note.
8. **Topography** – Need to show natural and proposed contour elevations or spot elevations.
9. **Preliminary Construction Details** – Sufficient detail shall be provided to verify that any proposed drainage control structure can be constructed within identified easements or tracts.
10. **Floodplains** – Need to show the delineated floodplain boundaries if the site is within a Federal Emergency Management Agency's (FEMA) special flood hazard area. Will also need to apply for Floodplain Use Permit. Delineate all floodplains (non-FEMA) of 50 cfs or greater. All Floodplain delineations must be shown on the preliminary plat.
11. **Erosion Setbacks** – For washes and other watercourse channels an erosion setback will need to be determined, which meets Arizona State Standard 5-96.
12. **Drainage Easements** – All drainage control structures, including retention, shall be in platted tracts or easements.

Since complex drainage systems may require more detailed information, a meeting should be arranged with personnel from Drainage Review.

### FEE INFORMATION\*:

FEE: \$ 2,000 + \$200/acre maximum \$34,000

\* See the Drainage Regulation for current fee schedule



## Planning & Development Department

### DRAINAGE REVIEW REQUIREMENTS FOR FINAL PLAT



A final drainage report in conjunction with grading, drainage and paving plans will need to be submitted with the final plat. The final drainage report needs to be developed in accordance with the County's Drainage Policies and Standards Manual and signed and sealed by an Arizona Registered Professional Civil Engineer and to include the following:

1. **Offsite Hydrology** – Need to determine the quantity, the entrance and exit points, and how the flow is to be routed through the site.
2. **Onsite Hydrology** – Need to show how the flows are to be routed to retention basins.
3. **Onsite Retention** – Need to retain water for the 100-year, 2-hour storm for the site, including adjacent right of way. Determine volume needed and the size and location of basins.
4. **Retention Disposal** – Provide testing results in conformance with Standard 6.10 for disposal of total ponding volume within 36 hours.
5. **Onsite Hydraulic Calculations** – Need to show hydraulic analysis for any channels, culverts, storm drains, or street drainage.
6. **Cross Sections** – Need to show perpendicular cross-sections through the site indicating property lines, swales, retention areas, finished floors, and street details.
7. **Finished Floor Elevations** – Need to show finished floor elevation and certification note.
8. **Lot Plans** – Need to show drainage tracts, easements, building envelopes, and typical lot drainage.
9. **Topography** – Need to show natural and proposed contour elevations or spot elevations.
10. **Dry Wells** – If applicable, need to submit a copy of the dry well registration before final drainage clearance of a permit.
11. **Floodplains** – Need to show the delineated floodplain boundaries if the site is within a Federal Emergency Management Agency's (FEMA) special flood hazard area. Will also need to apply for Floodplain Use Permit. Delineate all floodplains (non-FEMA) of 50 cfs or greater.
12. **Erosion Setbacks** – For washes and other watercourse channels an erosion setback will need to be determined, which meets Arizona State Standard 5-96.
13. **Access** – Need to show a 100-year all weather access route throughout the subdivision.

Since complex drainage systems may require more detailed information, a meeting should be arranged with personnel from Drainage Review.

#### FEE INFORMATION\* :

FEE: \$ 1,000 + \$ 25/acre maximum \$10,000

\* See the Drainage Regulation for current fee schedule  
(Final Plat fee is separate and additional to a Preliminary Plat fee and infrastructure improvement fees.)



# Planning & Development Department

## DRAINAGE REQUIREMENTS FOR MASTER PLAN



The master plan needs to be signed and sealed by an Arizona Registered Civil Engineer. The following information will need to be provided for the Master Drainage Plan:

1. **Offsite Hydrology-** Need to determine the quantity, the entrance and exit points, and how the flow is to be routed through the site.
2. **Onsite Hydrology-** Need to show how the flows are to be routed to retention basins. Need to determine quantity for pre and post development conditions.
3. **Onsite Retention-** Need to retain water for the 100-year, 2-hour storm for the site, including adjacent right of way. Determine volume needed and the size and location of basins
4. **Retention Disposal** – Provide preliminary design in accordance with Standard 6.10 for disposal of total ponding volume within 36 hours.
5. **Onsite Hydraulic Calculations** – Need to show preliminary hydraulic analysis for any proposed channels or watercourse encroachments.
6. **Contours-** Need to show natural and proposed contours or spot elevations on the plans.
7. **Streets-** Need to show the layout of major streets.
8. **Floodplains-** Need to show the delineated floodplain boundaries if the site is within a Federal Emergency Management Agency's (FEMA) special flood hazard area. Will also need to apply for a floodplain use permit. Delineation of floodplains (non-FEMA) for major washes is required.
9. **Erosion Setbacks-** For washes and other water course channels an erosion setback will need to be determined, which meets Arizona State Standard 5-96.
10. **Floodplains** – Need to show the delineated floodplain boundaries if the site is within a Federal Emergency Management Agency's (FEMA) special flood hazard area. Will also need to apply for Floodplain Use Permit.
11. **Erosion Setbacks** – For washes and other watercourse channels an erosion setback will need to be determined, which meets Arizona State Standard 5-96.

Since complex drainage systems may require more detailed information, a meeting should be arranged with personnel from Drainage Review.

FEE\*:

Master Plans (including Development Master Plans)  
\$ 6,000 + \$ 10/acre (for each acre over 640 acres) maximum \$ 80,000

Master Plans Amendments  
\$ 3,000 + \$ 5/acre (for each acre over 640 acres) maximum \$ 40,000

\* See the Drainage Regulation for current fee schedule

**SUBMIT 2 COPIES**



# Planning & Development Department



## PLAN SUBMITTAL REQUIREMENTS FOR MINOR ACCESSORY CONSTRUCTION

THE CHECKLIST BELOW IS FOR MINOR ACCESSORY CONSTRUCTION PROJECTS AS IDENTIFIED IN SECTION 1205.7.7 OF THE GRADING AND DRAINAGE PROVISIONS OF THE MARICOPA COUNTY ZONING ORDINANCE.

**ALL SUCH PROJECTS SHALL MEET THE MINIMUM CRITERIA:**

- 1. TOTAL PROJECT CONSTRUCTION ENVELOPE AND DISTURBANCE LIMIT OF LESS THAN OR EQUAL TO 1500 FT<sup>2</sup>
- 2. THE ACCESSORY STRUCTURE IS OUTSIDE THE ESTIMATED INUNDATION LIMIT OF ANY WATERCOURSE, AS DETERMINED BY THE DRAINAGE ADMINISTRATOR, OR RETENTION FACILITY.
- 3. CONCURRENT PROJECTS THAT CUMULATIVELY EXCEED A TOTAL PROJECT CONSTRUCTION ENVELOPE AND DISTURBANCE LIMIT OF 1500 FT<sup>2</sup>. SHALL NOT BE CONSIDERED AS MEETING SECTION 902.B.

PLEASE CHECK YOUR PLAN AGAINST THE LISTED ITEMS FOR COMPLIANCE. THE FOLLOWING CHECKLIST SHOULD BE USED AS A GUIDELINE. ADDITIONAL DATA MAY BE REQUIRED BASED UPON COMPLEXITY OF THE DESIGN AND LOCATION. SUBMIT THE CHECKLIST WITH YOUR REVISED PLAN OF DEVELOPMENT.

- 1. VICINITY MAP
- 2. NORTH ARROW
- 3. USE EITHER A STANDARD ENGINEERS' OR ARCHITECT SCALE
- 4. LEGAL DESCRIPTION
- 5. SITE ADDRESS
- 6. OWNER NAME AND PHONE NUMBER
- 7. PARCEL NUMBER
- 8. SITE LOCATION MAP
- 9. GENERAL NOTES/LEGEND
- 10. USE OF ADJACENT PROPERTIES (VACANT, RESIDENTIAL, COMMERCIAL etc.)
- 11. PROPERTY LINES/DIMENSIONS
- 12. BUILDING DIMENSIONS (ALL SIDES)
- 13. SETBACKS TO ALL STRUCTURES, TO PROPERTY LINES AND BETWEEN BUILDINGS
- 14. LABEL AND NUMBER ALL BUILDINGS INTENDED USE (i.e. CLASSROOM, CONSTRUCTION TRAILER etc.)
- 15. DEDICATED STREET ACCESS, INCLUDING STREET NAMES
- 16. LABEL ALL EASEMENTS ON PROPERTY
- 17. SHOW ENTRANCE AND EXITS TO PROPERTY WITH APPROPRIATE SIGHT TRIANGLES
- 18. PROVIDE TYPICAL DETAIL TO SCALE ¼"=1' OF STANDARD AND ACCESSIBLE PARKING SPACE INCLUDE TOTAL OF STANDARD AND ACCESSIBLE SPACES
- 19. STORAGE TANKS (i.e. WATER, FUEL, PROPANE) MUST SHOW SETBACKS AND SIZE. LABEL ABOVE GROUND OR BELOW GROUND
- 20. LIMITS OF CONSTRUCTION DISTURBANCE LIMITS
- 21. DRAINAGE PATTERNS/ARROWS/GRADE BREAKS
- 22. WASHES & SWALES
- 23. FENCES/BLOCK WALLS WITH TYPE & LOCATION OF DRAINAGE OPENINGS
- 24. SEPTIC TANK LOCATION

# DRAINAGE REGULATIONS FOR MARICOPA COUNTY

## Chapter 16 – Fee Schedule

<b>SECTION 1605. RESIDENTIAL SITE/DRAINAGE PLANS</b>	
Subdivision lots, Custom lots, Rural Single Family	
Approved by Administrative Review	\$60
Approved by Site Inspection	+\$150
With an In-Progress Inspection Required	+\$150
With Final Inspection Required	+\$150
Maximum Total	\$510
Approved by Engineering Review	\$360
With Pre-Issuance Site Inspection (Required)	\$150
Minimum Total	\$510
With Drainage Report Required for Engineering Review	+\$240
With an In-Progress Inspection Required	+\$150
With Final Inspection Required	+\$150
Maximum Total	\$1050
Failed Inspection for Residential Permits	\$150
Additional and Concurrent Permits for Engineering Review	+ \$30 ea
In-Progress Inspection Required for Additional and Concurrent Permits	+\$150
Multi-Parcel Projects	+ \$150/ parcel
Modification to Issued Permits	\$250
Modification to Issued Permits on Multi-Parcel Projects	+ \$75/ parcel
<b>1606. NEW SFR IN APPROVED SUBDIVISION – EXPEDITED PROCESS</b>	
Lots Approved for Expedited Permit Process with Certified Pad Elevation	\$60
Final Inspection Required	+\$150
<b>1607. Other Fees</b>	
Drainage Review Board Cases (Variances and Appeals)	
Commercial and Subdivision	\$1,000
All Other Sites	\$250
Board of Adjustment	\$100

# DRAINAGE REGULATIONS FOR MARICOPA COUNTY

## Chapter 16 – Fee Schedule

Special Inspections - Consultations with County Staff (On-site or at County Offices)	
SFR	\$150
Commercial	\$300
Complex Projects	\$350
Work begun or completed without a permit	
Residential (violation case opened before permit initialization)	\$500
Residential (voluntary compliance without a violation case opened)	\$250
Commercial including subdivisions (with or without open violation case opened)	Fees Doubled
Pre-Application review and meetings	
	\$150

**<sup>1</sup> COMMERCIAL & INDUSTRIAL SITES AND USES, MULTI-FAMILY RESIDENTIAL, SUBDIVISION INFRASTRUCTURE, SCHOOLS, GOLF COURSES AND OTHER RECREATIONAL FACILITIES, NON-EXEMPTED MUNICIPAL, SPECIAL DISTRICTS, CHURCHES, AND ALL OTHER PRECISE PLANS**

**<sup>2</sup> SITES MUST HAVE AN ESTABLISHED PRIMARY USE, BE DEVELOPED IN SUBSTANTIAL CONFORMANCE WITH THE DRAINAGE REGULATIONS, AND THE CONSTRUCTION ACTIVITY MUST DISTURB LESS THAN ONE ACRE. MINOR ACCESSORY CONSTRUCTION INCLUDES, BUT IS NOT LIMITED TO, SIGNS, ADA ACCESSIBILITY RAMPS, PROPANE TANKS, TRASH ENCLOSURES, NON-LIVABLE AND ACCESSORY BUILDINGS, AS DEFINED IN SECTION 301.**

**<sup>3</sup> SITES MUST HAVE AN ESTABLISHED PRIMARY USE, BE DEVELOPED IN SUBSTANTIAL CONFORMANCE WITH THE DRAINAGE REGULATIONS, AND THE CONSTRUCTION ACTIVITY MUST DISTURB LESS THAN 5 ACRES.**

Date of Revisions		
Δ 1	January 28, 2009	TA2008010
Δ 2	August 19, 2009	TA2008011