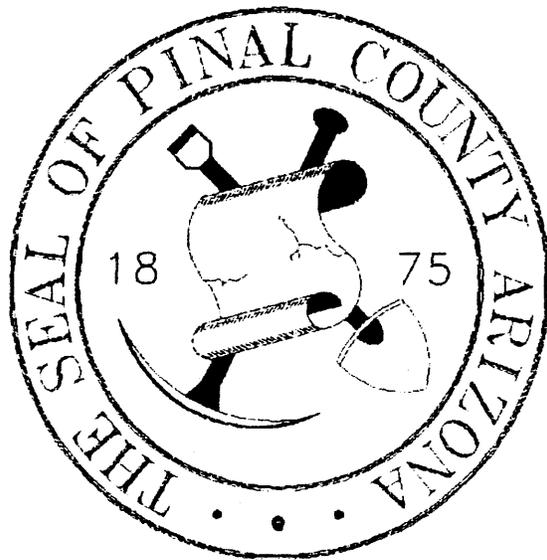


PINAL COUNTY DRAINAGE ORDINANCE

ORDINANCE NO. 100798-DO



AS APPROVED AND ADOPTED BY THE
PINAL COUNTY BOARD OF SUPERVISORS

ON OCTOBER 7, 1998

AND

EFFECTIVE ON NOVEMBER 7, 1998

TABLE OF CONTENTS

ARTICLE I	AUTHORITY, PURPOSE, SCOPE AND SHORT TITLE.	1
Sec. 100	Authority	1
Sec. 101	Purpose	1
Sec. 102	Scope	1
Sec. 103	Short Title	1
ARTICLE II	RULES OF CONSTRUCTION, INTERPRETATION and DEFINITIONS	1
Sec. 200	Rules of Construction	1
Sec. 201	Rules of Interpretation	2
Sec. 202	Definitions	2
ARTICLE III	ADMINISTRATION	4
Sec. 300	Mandatory Duties	4
Sec. 301	Discretionary Powers	5
Sec. 302	Restriction on Ordinance	5
ARTICLE IV	FEES	6
Sec. 400	Authority for Fee Schedule	6
Sec. 401	Name of Fee Schedule	6
Sec. 402	Waiver of Fee	6
Sec. 403	Revision of Fees	6
ARTICLE V	VARIANCES AND APPEALS	6
Sec. 500	Variances	6
Sec. 501	Appeals	8

ARTICLE VI	GENERAL PROVISIONS	9
Sec. 600	Drainage Clearance	9
Sec. 601	Drainage Report/Plan	10
Sec. 602	Design Parameters	10
Sec. 603	Development Report/Plan (Site)	13
ARTICLE VII	DRAINAGE REPORT/PLAN (MASTER)	13
Sec. 700	Drainage Report/Plan (Master)	14
ARTICLE VIII	DEVELOPMENT REPORT/PLAN (RESIDENTIAL)	14
Sec. 800	Development Drainage Report/Plan	14
ARTICLE IX	DEVELOPMENT REPORT/PLAN (COMMERCIAL AND INDUSTRIAL)	15
Sec. 900	Development Drainage Report/Plan	15
ARTICLE X	BUILDING SETBACK REQUIREMENTS	16
Sec. 1000	Minimum Building Setback	16
ARTICLE XI	COMPLIANCE, ENFORCEMENT AND PENALTIES	17
Sec. 1100	Ordinance Violation	17
Sec. 1101	Penalties	18
ARTICLE XII	WARNING AND DISCLAIMER OF LIABILITY	18
Sec. 1200	Warning and Disclaimer of Liability	18
ARTICLE XIII	SEVERABILITY AND EFFECTIVE DATE	18
Sec. 1300	Severability	18
Sec. 1301	Effective Date	19

AN ORDINANCE TO REGULATE DRAINAGE IN PINAL COUNTY

IT IS HEREBY ORDAINED by the Board of Supervisors of Pinal County, Arizona, as follows:

ARTICLE I

AUTHORITY, PURPOSE, SCOPE AND SHORT TITLE

Sec. 100 Authority

This Ordinance is adopted pursuant to ARS 11-251(30), (31), and (36) and A.R.S. § 11-251.05, which authorized the Board of Supervisors to do and perform all acts necessary to fully discharge its duties as the legislative authority of the county government; to make and enforce all local, police, sanitary and other regulations not in conflict with general law; to enforce standards for excavation, landfill and grading to prevent unnecessary loss from erosion, flooding and landslides; and to adopt, amend and repeal all ordinances necessary to carry out the duties, responsibilities and functions of the county.

Sec. 101 Purpose

The purpose of this Ordinance is to promote and protect the health, peace, safety, comfort, convenience and general welfare of the citizens of Pinal County by regulating drainage of all land within the unincorporated area of Pinal County, Arizona.

Sec. 102 Scope

This Ordinance shall apply to all development of land and conditions which may affect drainage systems and patterns except single family residences, multi-family and commercial development unless otherwise required by the building official or by regulations based on a county-implemented community drainage study.

Sec. 103 Short Title

This Ordinance may be cited as the Pinal County Drainage Ordinance and shall be referred to herein as the Ordinance.

ARTICLE II

RULES OF CONSTRUCTION, INTERPRETATION AND DEFINITIONS

Sec. 200 Rules of Construction

When not inconsistent with the context, words used in the present tense include the future; words in the singular include the plural; words in the plural include the singular. Words or phrases not specifically defined in this Ordinance shall be given the meaning they have in common usage. The

word "shall" is mandatory and the word "may" is permissive.

Sec. 201 Rules of Interpretation

201.1 This Ordinance is remedial in nature and, therefore, shall be liberally construed to effectuate its purpose. The requirements set out herein shall be construed as minimum requirements.

201.2 Nothing contained in this Ordinance shall be construed to limit or repeal other ordinances adopted and/or powers granted to Pinal County Flood Control District or Pinal County. Further, this Ordinance shall not be construed to legalize existing conditions or uses which are in violation of other statutes, ordinances or regulations.

Sec. 202 Definitions

In this Ordinance, unless the context requires otherwise, the following definitions of words shall be used:

- 202.1 Appeal - A request for review of a decision by the County Engineer under this Ordinance.
- 202.2 Building Official - The functional title of the Director of the Department of Building Safety, or his duly authorized representative, charged with the administration and enforcement of the Pinal County Building Code Ordinance.
- 202.3 Building Site - The area extending laterally a minimum distance of ten feet beyond the foundation or support of a building.
- 202.4 County Engineer - County Engineer for Pinal County, Arizona.
- 202.5 Design Flow - The peak flow and peak volume of rainfall resulting from the design storm generated within a defined area.
- 202.6 Design Storm/Off-site - The 100 year rainfall event that produces the peak design flow.
- 202.7 Design Storm/On-site - The 100 year, one hour rainfall event.
- 202.8 Development - Any man-made change to property, including but not limited to, buildings or other structures, mining, dredging, filling, grading, landscaping, paving, excavation or drilling operations.
- 202.9 Drainage - Runoff which flows over land as a result of precipitation. This shall include sheet flow and flows which may concentrate in local drainage systems with or without defined channels.
- 202.10 Drainage Clearance - The formal approval by the County Engineer of a

- grading and drainage plan to develop a site.
- 202.11 Drainage Easement - A legal right or privilege to use an area defined and established to receive or convey runoff.
- 202.12 Drainage Report/Plan (Conceptual) - A drainage study encompassing a planned development providing a minimum of drainage information with order of magnitude value for peak flows and retention requirements.
- 202.13 Drainage Report/Plan (Area) - A drainage plan based on a defined watershed which may include more than one political jurisdiction.
- 202.14 Drainage Report/Plan (Master) - A preliminary drainage plan encompassing all future phases or units within a development. A report/plan generally of greater detail and encompassing a smaller geographic area than a Drainage Report/Plan (Area).
- 202.15 Drainage Report/Plan (Development) - A drainage plan covering a phase or portion of a development. A report/plan generally of greater detail and encompassing a smaller area than a Drainage Report/Plan (Master).
- 202.16 Drainage Report/Plan (Site) - A drainage plan for a single lot or the smallest increment of development. A report/plan generally of greater detail than a Drainage Report/Plan (Development).
- 202.17 Drainage System - See watercourse.
- 202.18 Erosion - The wearing away of the ground surface as a result of the movement of wind, water, ice and other geologic agents.
- 202.19 Floodplain Administrator - The individual who is designated by the Pinal County Flood Control District Board of Directors to act as Floodplain Administrator and administer the provisions of District's Floodplain Management Ordinance.
- 202.20 Off-site Runoff - Runoff produced from precipitation which falls outside the limits of a development and which drains through a development or the site of a proposed development, including easements and dedicated rights-of-way.
- 202.21 On-site Runoff - Runoff produced from precipitation which falls within the limits of a development including easements and dedicated rights-of-way.
- 202.22 Person - An individual or his agent, firm, partnership, association, corporation, municipality, or agent of the aforementioned groups, or this State or its agencies or political subdivisions.
- 202.23 Rainfall Event - The amount of rain falling in a specified period of time.

- 202.24 Regional Drain - A watercourse in which the 100-year event produces a peak flow rate of at least 10,000 cubic feet per second and that has been so designated by the County Engineer.
- 202.25 Retention/Detention System - A system which retains runoff in a controlled manner through the use of storage facilities. Stored runoff is either evacuated by percolation or released to the downstream drainage system after the storm event.
- 202.26 Road or Roadway - That area, whether public or private, between right-of-way lines, dedicated, reserved or provided for roadway purposes and other uses not inconsistent therewith.
- 202.27 Variance - A grant of relief from the requirements of this Ordinance which permits construction or other uses of property in a manner that would otherwise be prohibited or restricted by this Ordinance.
- 202.28 Watercourse - A lake, river, creek, stream, wash, arroyo, channel, or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

ARTICLE III

ADMINISTRATION

This article sets forth the duties and powers of the County Engineer and the limitations on regulation.

Sec. 300 Mandatory Duties

The County Engineer shall:

- 300.1 Review drainage reports and plans for all developments of land covered by this Ordinance and issue Drainage Clearances approving such plans to ensure that the requirements of this Ordinance are met.
- 300.2 Investigate violations and complaints of non-compliance with this Ordinance.
- 300.3 Keep copies of all documents or other submissions made pursuant to the requirements of this Ordinance.
- 300.4 Issue notices or orders necessary to enforce the provisions of this Ordinance.
- 300.5 Upon determination that development of land subject to this Ordinance has proceeded without a Drainage Clearance, take action necessary to obtain compliance with this Ordinance.

Sec. 301 Discretionary Powers

The County Engineer may:

- 301.1 Inspect properties for which approval of drainage and grading reports and plans have been requested.
- 301.2 Inspect properties in response to complaints; and if violations are found, require compliance with the provisions of this Ordinance.
- 301.3 Upon determination that a drainage system has not been built in accordance with approved plans, the County Engineer may after due notice to the developer, revoke the approved Drainage Clearance until the drainage system is completed in substantial conformance to the approved plans.
- 301.4 Require additional information necessary to make a determination concerning violations and compliance with the provisions of this Ordinance.
- 301.5 Issue notices of violation.
- 301.6 Adopt drainage design standards, guidelines, administrative rules, procedures and policies to implement and effectuate the purposes of this Ordinance.
- 301.7 Require appropriate financial assurances for one or more of the following drainage infrastructure projects:
 - 301.7.1 Drainage control features which provide protection for development, such as dams, levees, dikes, interceptor channels and canals.
 - 301.7.2 Common area detention basins or drainage easements affecting two or more tracts or phases of development.
 - 301.7.3 Whenever the County Engineer determines that construction of a development has been interrupted and a partially completed drainage system presents a flood hazard to adjacent property.

Sec. 302 Restriction on Ordinance

This Ordinance shall not:

- 302.1 Prevent, restrict or otherwise regulate the use or occupation of land or improvements for railroad, mining, metallurgical, grazing or general agricultural purposes, if the tract concerned is five or more contiguous commercial acres. This restriction on regulation shall be construed to conform with the requirements of A.R.S. § 11-830 as written or as subsequently amended.
- 302.2 Require a property owner to submit plans for or install or change a drainage system

on property for which the development plans have already been approved by the County at the time this Ordinance became effective.

- 302.3 Require submission of a drainage report and plan in connection with the repair or alteration of property as it was developed at the time this Ordinance became effective so long as the effect of such repair or alteration upon drainage would not be substantial or constitute an increased hazard to that or other properties.
- 302.4 Diminish or otherwise alter the enforcement of Floodplain Management Ordinance No. 81582 for the unincorporated area of Pinal County.
- 302.5 Apply to property owned by Federal, State, County or Municipal governments and used by them in carrying out their governmental operations.

ARTICLE IV

FEES

ec. 400 Authority for Fee Schedule

A fee schedule may be adopted by the Board of Supervisors to cover expenses for drainage matters.

ec. 401 Name of Fee Schedule

Each fee schedule will be identified as the Drainage Fee Schedule.

ec. 402 Waiver of Fee

Fees will be waived on property owned by Federal, State, County or Municipal governments when said property is used by them in carrying out their governmental operations.

ec. 403 Revision of Fees

The Board may revise the fee schedule as needed to keep current with rising expenses to perform view and inspection services. The adoption or revision of a fee schedule shall not effect any change to the Ordinance itself.

ARTICLE V

VARIANCES AND APPEALS

c. 500 Variances

500.1 The Board of Supervisors shall hear all written requests for variances from the provisions of this Ordinance.

500.2 The request for variance from a provision of this Ordinance shall be made in writing

and filed with the County Engineer.

- 500.3 The written request shall set forth the following:
- 500.3.1 The specific variance being requested;
 - 500.3.2 the section number for which the variance is being requested;
 - 500.3.3 why the granting of the variance would not result in an increase in the 100 year peak flow or discharge;
 - 500.3.4 the special physical circumstances, location or surroundings of the property which would deprive the property of privileges enjoyed by similar property if the Ordinance is strictly applied by Pinal County;
 - 500.3.5 why the variance would not constitute a grant of special privilege inconsistent with the limitations on similar property;
 - 500.3.6 why the variance would not result in additional threats to the public health, safety, welfare or to adjacent public and private property; and
 - 500.3.7 how the variance would meet the general intent and purposes of the Ordinance.
- 500.4 Upon receipt of the written request for variance, the County Engineer shall transmit said request to the Board together with a written report by the County Engineer responding to the requirements set forth in Sec. 500.8 below within fifteen (15) calendar days from the filing of said request with the County Engineer.
- 500.5 The Board shall hold a hearing on the request for variance within at least fifteen (15) calendar days but not more than thirty (30) calendar days from receipt of said request from the County Engineer.
- 500.6 Notice of the date and time of the hearing shall be given to the party requesting the variance and the appropriate county officials at least seven (7) calendar days prior to the hearing date.
- 500.7 The Board of Supervisors may adopt rules for hearing such requests.
- 500.8 No Variances shall be granted by the Board of Supervisors unless all of the following requirements are met:
- 500.8.1 The grant will not result in an increase in the 100 year peak flow or discharge;
 - 500.8.2 by the reason of special physical circumstances, location or surroundings of the property, strict application of the Ordinance

- would deprive the property of privileges enjoyed by similar property;
- 500.8.3 the variance would not constitute a grant of special privilege inconsistent with the limitations on similar property;
- 500.8.4 the Board of Supervisors determines that the minimum requirements necessary to afford relief from flood hazards are met;
- 500.8.5 the variance will not result in additional threats to the public health, safety, welfare or to adjacent public and private property; and
- 500.8.6 the granting of the variance will preserve the general intent and purposes of the Ordinance.
- 500.9 The Board of Supervisors may impose conditions on the variance, including, but not limited to, the posting of bonds, security, assurances or other security deemed necessary to guarantee compliance with the conditions.
- 500.10 If the Board of Supervisors has cause to believe, after approval of a variance, that any stipulations or conditions may have been violated, it may set a hearing for the purpose of determining whether to revoke the variance for such violation. The Board of Supervisors may revoke the variance upon finding a violation of the stipulations or conditions, or it may grant a limited time to allow the violator to correct the violation in order to avoid revocation of the variance.

Sec. 501 Appeals

- 501.1 A person whose property rights have been adversely affected by a decision of the County Engineer under this Ordinance may file an appeal with the Board of Supervisors within thirty (30) calendar days after the decision is issued by the County Engineer.
- 501.2 Appeals shall be in writing, specifically stating the grounds for the appeal and be filed with the Clerk of the Board.
- 501.3 Upon receipt of the appeal, the Clerk of the Board shall obtain a complete copy of the entire file from the County Engineer within fifteen (15) calendar days from the filing of said appeal.
- 501.4 The Board shall hold a hearing on the appeal within at least fifteen (15) calendar days but not more than thirty (30) calendar days from the receipt of the entire file from the County Engineer.
- 501.5 Notice of the date and time of the hearing shall be given to the party filing the appeal and the appropriate county officials at least seven (7) calendar days prior to the hearing date.

501.6 The Board of Supervisors may adopt rules for hearing such appeals.

501.7 The decision of the Board of Supervisors shall be a final decision.

ARTICLE VI

GENERAL PROVISIONS

This article sets forth the general requirements for Drainage Clearance, Drainage Report/Plan (Site).

Sec. 600 Drainage Clearance

- 600.1 A Drainage Clearance shall be required for any development or substantial improvement which may have an adverse effect on existing drainage. Unless substantial construction as approved by the County Engineer has occurred within one year of such approval, the Drainage Clearance may be declared null and void and removal may be ordered of any partially completed or minor improvements which may adversely affect drainage as determined by the County Engineer.
- 600.2 Written application for a Drainage Clearance shall be submitted to the County Engineer on forms provided by Pinal County.
- 600.3 An exemption from requirements for zoning clearance, building permit, Health Department clearance or other permits does not constitute an exemption from this Ordinance, except as set forth in A.R.S. § 11-830.
- 600.4 A drainage inspection is required prior to the issuance of a Drainage Clearance.
- 600.5 Notice of any deficiency noted in the drainage inspection shall be made to applicant in writing by the County Engineer. Failure to cure deficiencies within ninety (90) calendar days of the date of notice of such deficiencies or final Building Inspection, whichever is the longer period, may result in the delay or non-issuance of the Drainage Clearance and Certificate of Occupancy.
- 600.6 A final Certificate of Occupancy for permits issued to construct commercial, industrial, educational, institutional, and residential units regulated by this Ordinance shall not be issued prior to securing the required Drainage Clearance.
- 600.7 Before issuance of the Drainage Clearance, financial assurances may be required by the County Engineer to ensure construction, completion or maintenance of approved drainage facilities. Assurances shall be released upon verification of compliance with approved plans and all provisions of this Ordinance.
- 600.8 The County Engineer may require completion of a master drainage plan or development to determine the need for area drainage facilities resulting from proposed development. The plan shall set forth the amounts of land required for construction of area drainage facilities. These required amounts of land shall be proportionate to

the amount of runoff contributed by a parcel to the total runoff calculated for the master drainage plan or development drainage plan. The County Engineer shall evaluate each request for a Drainage Clearance or variance and determine if the applicant has proposed sufficient facilities to mitigate the increased drainage resulting from the proposed development.

Sec. 601 Drainage Report/Plan

A drainage report/plan shall be required for all manufactured home parks, recreational vehicle parks, industrial parks, and residential subdivisions. Biennial reports shall be submitted for any undeveloped or partially developed portions of an approved plan if in the opinion of the County Engineer the unfinished work creates drainage problems for downstream properties. The report shall address existing drainage conditions as compared to drainage conditions at the time of plan approval. Based upon conclusions of the report, reasonable modifications to the approved plan may be required by the County Engineer. Single family residential development shall be governed by the provisions of Section 603 of this Ordinance which applies to individual lot ownership.

Sec. 602 Design Parameters

The entire drainage detention and runoff conveyance system shall be designed to eliminate or minimize storm water runoff effects and convey the runoff through the development with minimum detrimental effects to the development or to any other property. No system shall be approved if the effect may cause an increase in the peak discharge or velocity of runoff or change the point of entry of drainage onto other property during the 2, 10 and 100 year runoff event. No system shall be approved that impedes runoff from adjoining upstream properties.

602.1 Storm Frequency Criteria

The rainfall event, based upon the 100 year storm return frequency generating the peak discharge for the area contributing runoff to the development shall be used in designing the overall development drainage system.

602.2 Retention/Detention of Storm Drainage

- 602.2.1 On-site retention/detention facilities may include natural depressions or man-made basins.
- 602.2.2 Individual lot retention may be permitted in residential subdivisions with a minimum lot size of one acre with the approval of the County Engineer.
- 602.2.3 Retention/detention basins shall not be located within 25 feet of septic system facilities.
- 602.2.4 Utility lines and structures shall not be located within drainage facilities unless approved by the utility company and the County Engineer.

- 602.2.5 If reasonable alternatives are not available, detention in the County right-of-way may be acceptable provided the County Engineer approves the design.
- 602.2.6 A right-of-way or public utility easement shall not be designated for drainage or retention without prior written approval of the appropriate agency or affected utility.
- 602.2.7 In any landscaping and maintenance agreement, provisions shall be made for an annual maintenance certification.
- 602.2.8 On-site drainage shall be either to the street or to a designated drainage easement with adequate outfall.
- 602.2.9 The County Engineer may reduce the requirements for on-site retention/detention where the storm water runoff discharges directly to a regional drain, provided that any reduction in on-site retention/detention does not increase peak flow within the watercourse for the 100-year event.

602.3 Storm Water Disposal

Unless otherwise approved by the County Engineer, on-site runoff that has been retained shall be disposed of within 36 hours either by percolation, dry wells or draining into an approved drainage way. Flows from basins shall not exceed pre-development flows for the 2, 10 and 100 year runoff event and shall be in the location and direction of the historic flows. If runoff is to be conveyed by an underground system, complete detailed plans shall be submitted to the County Engineer.

602.4 Dry Well Design

- 602.4.1 If dry wells are to be utilized for storm water disposal, certification shall be required indicating that the dry wells meet the requirements of Pinal County.
- 602.4.2 Dry wells shall be used only for storm water disposal and not for disposal or deposit of wastes or other contaminants.
- 602.4.3 Proof of dry well registration with the Arizona State Department of Environmental Quality shall be required.

602.5 Road Design

- 602.5.1 To facilitate drainage, the design of roadways which may be in or are proposed for future inclusion into the Pinal County Highway Maintenance System shall conform to Pinal County standards for roadways.

- 602.5.2 Adequate drainage ways shall be constructed to convey the street design flow if that flow is designed to leave the public right-of-way. Such drainage ways shall be platted as drainage easements or as separate tracts with maintenance provisions designated.
- 602.5.3 The County Engineer may require construction of a culvert or bridge where a road crosses a natural drainage way. The size of a culvert or bridge shall conform to the requirements set by the Pinal County Department of Public Works.
- 602.5.4 If roads are designed to convey runoff, the amount conveyed shall not exceed design standards. Additional flow shall be conveyed in drainage ways if the design standards are exceeded or the depth within roadways is greater than eight inches.
- 602.5.5 To prevent back and head cutting, dip sections and culvert crossings of rights-of-way shall have adequate cutoff walls or aprons constructed of non-erodible material.
- 602.5.6 Each site shall have one all-weather road access with a maximum flow of eight inches in depth over the culvert or overflow section during the 25 year peak flow event with no adverse backwater effect during a 100 year peak flow event.
- 602.5.7 The County Engineer in evaluating various backwater conditions, may allow some roads to be constructed which result in substantial overtopping of the roadway surface provided that the velocity of flow or hydraulic features prevent roadway erosion.

602.6 Finished Floor Elevation

Finished floors shall be elevated a minimum of one foot above the high point of the building site. A finished floor elevation may be other than the minimum permitted, provided it is determined by technical data certified by an Arizona Registered Civil Engineer to be a minimum of twelve (12) inches above the 100-year water surface elevation in adjacent streets and drainage ways, the minimum necessary to be safe from inundation by the 100 year peak runoff event. Finished floor elevations shall be referenced to a known benchmark. Aerial photographs of the 1983 and 1993 floods may be used, with the approval of the County Engineer, to supplement FEMA flood zone water surface elevations.

602.7 Floodplain Development

That portion of a development that is within a designated special flood hazard area shall comply with Pinal County Floodplain Management Ordinance No. 81582. If a developer desires to re-delineate a floodplain, he shall submit the necessary data to the Floodplain Administrator. Development within a delineated floodplain is not exempt

from drainage and grading requirements of this Ordinance.

602.8 Landscape/Grading

Walls, fences, decorative borders, berms and other similar structures or features less than one foot in height above finished grade are permitted without first obtaining a Drainage Clearance provided they do not have an adverse effect on adjacent land or obstruct, retard or divert any drainage way or other drainage design feature. This does not relieve any person from liability if that person's actions cause flood damage to any other person or property.

Sec. 603 Development Report/Plan (Site)

For developments including, but not limited to, single family residence, building additions, utility sheds, and similar uses within low flow areas or adequately protected by upslope drainage control structures, a drainage report/plan is not required. However, in such cases, the following minimum information shall be submitted to obtain a Drainage Clearance:

603.1 A plot plan of the property indicating:

- 603.1.1 north arrow and a bar scale for the drawing;
- 603.1.2 property lines with dimensions, including easements;
- 603.1.3 legal description, property address and nearest street intersection;
- 603.1.4 location of existing and proposed structures;
- 603.1.5 location and size of any existing or proposed drainage easements;
- 603.1.6 an on-site temporary elevation bench mark for verification purposes;
and
- 603.1.7 drainage arrows and topography with maximum five foot contour interval or sufficient spot elevations to determine building pad elevation.

603.2 Any support information which the County Engineer deems necessary to evaluate the Drainage Clearance.

ARTICLE VII

DRAINAGE REPORT/PLAN (MASTER)

This article sets forth requirements which are in addition to the requirements set forth in Article VI and apply to all phases or units within a master drainage planned area.

Sec. 700 Drainage Report/Plan (Master)

The landowner or developer shall submit for review and approval the following:

- 700.1 All existing drainage patterns affecting the land included in the proposed development shall be shown. Washes shall indicate the following:
 - 700.1.1 Size of contributing drainage area, in acres.
 - 700.1.2 Approximate length and width of contributing drainage area.
- 700.2 Type and amount of peak flow at lower boundary of the proposed development indicating the effect on neighboring property: It is the owner's or developer's responsibility to provide for drainage across the proposed development. The owner or developer shall also properly dispose of this runoff in as nearly as possible the same manner as before development or by other approved means. Peak discharge and velocity at the lower boundary of the proposed development shall not be increased as a result of development.
- 700.3 The location and method of retention/detention and runoff conveyance shall be included on the plan.
- 700.4 All information and calculations as required in this article shall be prepared by an Arizona Registered Civil Engineer.
- 700.5 The amount and degree of hydraulic and hydrologic detail required shall be determined by the County Engineer based upon the complexity of the master plan.

ARTICLE VIII

DEVELOPMENT REPORT/PLAN (RESIDENTIAL)

This article sets forth requirements in addition to the requirements set forth in Article VI and VII and may apply to residential subdivisions, manufactured home parks, recreational vehicle parks, and special use residential developments.

Sec. 800 Development Drainage Report/Plan (Residential)

A development drainage report/plan shall be required and shall be in accordance with any drainage report/plan (area or master). Where sufficient information has been shown on a drainage report/plan (area or master), it may also be submitted as the required development drainage report/plan under this article. Biennial reports shall be submitted for any undeveloped or partially developed portions of an approved plan if in the opinion of the County Engineer the unfinished work creates drainage problems for downstream purposes. The report shall address existing drainage conditions as compared to drainage conditions at the time of plan approval. Based upon conclusions of the report, reasonable modifications to the approved plan may be required by the County Engineer. The development drainage report/plan shall be prepared by an Arizona Registered Professional Engineer

and shall include, but not be limited to, the following information:

- 800.1 Compliance and continuity with the applicable master plan.
- 800.2 Location, size and capacity of all existing and proposed drainage system elements including natural washes and swales, FEMA flood zones, dry wells, underground systems, retention systems, drainage ways, culverts, pipes, easements and roads.
- 800.3 Provisions for conveyance of runoff through the site and the discharge of runoff at the lower boundary that minimizes the effects of the development upon drainage in the area.
- 800.4 Lot and roadway layout including designation and use of all land to be used for public or semi-public purposes.
- 800.5 Designation of existing and proposed land uses.
- 800.6 Site drainage reports and plans shall be consistent with such development drainage report/plan.
- 800.7 Finished floors shall be elevated a minimum of one foot above the high point of the building site. A finished floor elevation may be other than the minimum permitted, provided it is determined by technical data certified by an Arizona Registered Professional Engineer to be the minimum necessary to be safe from inundation by the 100 year peak runoff event. Finished floor elevations shall be referenced to a known benchmark.

ARTICLE IX

DEVELOPMENT REPORT/PLAN (COMMERCIAL AND INDUSTRIAL)

This article sets forth requirements which are in addition to the requirements set forth in Article VI and VII and may apply to commercial and industrial developments as set forth in this Ordinance.

Sec. 900 Development Drainage Report/Plan (Commercial and Industrial)

A development drainage report/plan shall be required and shall be in accordance with any drainage report/plan (area or master). Where sufficient information has been shown on a drainage report/plan (area or master), it may also be submitted as the required development drainage report/plan under this article. Biennial reports shall be submitted for any undeveloped or partially developed portions of an approved plan. The report shall address existing drainage conditions as compared to drainage conditions at the time of plan approval. Based upon conclusions of the report, reasonable modifications to the approved plan may be required by the County Engineer. The development drainage report/plan shall be prepared by an Arizona Registered Professional Engineer and shall include but not be limited to the following information:

- 900.1 Location, size and capacity of all existing and proposed drainage system elements

including natural washes and swales, FEMA flood zones, dry wells, underground systems, retention/detention systems, drainage ways, culverts, pipes, easements and roads.

- 900.2 Provisions shall be made for conveyance of runoff through the site and the discharge of runoff at the lower boundary and at the same location and as near as possible to the same conditions as before development, except as approved by the County Engineer.
- 900.3 Lot and street layout including designation and use of all land to be used for public and semi-public purposes.
- 900.4 A description of methods to be used to flood proof buildings, including utilities up to or above the calculated water surface elevation of the design storm.
- 900.5 Finished floors shall be elevated a minimum of one foot above the high point of the building site. A finished floor elevation may be other than the minimum permitted provided it is determined by technical data certified by an Arizona Registered Professional Engineer to be the minimum necessary to be safe from inundation by the 100 year peak runoff event. Finished floor elevations shall be referenced to a known benchmark.
- 900.6 Site drainage reports and plans shall be consistent with such development drainage report and plan.
- 900.7 Retention facilities which may include natural depressions or man-made basins, depressed parking areas or other methods which do not result in water being ponded longer than thirty-six (36) hours. No more than fifty percent (50%) of public parking for retention and the maximum depth of water shall not exceed six inches.

ARTICLE X

BUILDING SETBACK REQUIREMENTS

Sec. 1000 Minimum Building Setback

- 1000.1 For major watercourses, with a base flood peak discharge of 5,000 CFS or greater, the following building setbacks shall be required where bank protection satisfactory to the Floodplain Administrator is not provided.
 - 1000.1.1 Where no unusual conditions exist, a minimum setback of three hundred (300) feet measured from the primary channel bank shall be provided at the time of development.
 - 1000.1.2 Along major watercourses where unusual conditions do exist, building setbacks shall be established on a case-by-case basis by the Floodplain Administrator, unless an engineering study which established safe limits is performed by a registered civil engineer and is approved by

the Floodplain Administrator. When determining building setback requirements, the Floodplain Administrator shall consider danger to life and property due to existing flood elevations (including superelevation and waves) and/or velocities and historical channel meandering.

- 1000.1.3 Where a building setback limit would fall within a designated floodway, the outer boundary of the floodway shall be the minimum building setback.
- 1000.2 For minor watercourses with a base flood peak discharge of less than 5,000 CFS, the following building setbacks shall be required where bank protection satisfactory to the Floodplain Administrator is not provided.
 - 1000.2.1 Along minor watercourses where no unusual conditions exist, a minimum building setback of fifty (50) feet measured from the nearest primary channel bank shall be provided at the time of development.
 - 1000.2.2 Along minor watercourses where unusual conditions do exist, building setbacks shall be established on a case-by-case basis by the Floodplain Administrator. When determining building setback requirements, the Floodplain Administrator shall consider danger to life and property due to existing flood heights and/or velocities and historical channel meandering.
 - 1000.2.3 Building setbacks along very minor watercourses (200 CFS or less) will be determined on a case-by-case basis.
- 1000.3 Unusual conditions include, but are not limited to, historical meandering of the watercourse, excavation pits, poorly defined or poorly consolidated banks and changes in the direction, amount and velocity of the flow of waters within the watercourse.

ARTICLE XI

COMPLIANCE, ENFORCEMENT AND PENALTIES

Sec. 1100 Ordinance Violation

- 1100.1 It is a violation of this Ordinance to develop, construct, alter, use, repair, improve, fill, divert, obstruct, remove or commence the creation, construction, alteration, repair, improvement, filling, diversion, obstruction or removal of any wash, culvert, easement, channel, ditch, berm, detention basin, wall fence, other structure or use which may affect any natural drainage or improved drainage design or drainage system without obtaining a Drainage Clearance as set forth in this Ordinance from the County Engineer.

1100.2 Each and every day during which the violation of this Ordinance occurs shall constitute a separate offense.

Sec. 1101 Penalties

1101.1 For the purpose of this section, person means a human being.

1101.2 For the purpose this section, enterprise includes any corporation, association, labor union, unincorporated association, partnership, firm, society, or other legal entity.

1101.3 If a person is convicted of a violation under this Ordinance, the Court may impose a fine or imprisonment or both. The fine shall not exceed Two Thousand Five Hundred Dollars (\$2,500.00), and the imprisonment shall not exceed six months.

1101.4 If an enterprise is convicted of a violation under this Ordinance, the Court may impose a fine not to exceed Twenty Thousand Dollars (\$20,000.00).

1101.5 If there is no alternative of imprisonment in the judgment, then the judgment shall constitute a lien in the same manner as a money judgment rendered in a civil action.

ARTICLE XII

WARNING AND DISCLAIMER OF LIABILITY

Sec. 1200 Warning and Disclaimer of Liability

The degree of protection from flooding due to storm water runoff required by this Ordinance is considered reasonable for regulatory purposes and is based on engineering and scientific methods of study. Compliance with this Ordinance does not insure complete protection from flooding and is not to be taken as a warranty. Greater storms may occur or the water damage hazard may be increased by man-made obstructions or diversions. This Ordinance does not imply that land used will be free from flooding or flood damage. This Ordinance shall not create liability on the part of Pinal County or any officer or employee thereof for any flood damages that may result from reliance on this Ordinance or any administrative decision lawfully made thereunder.

ARTICLE XIII

SEVERABILITY AND EFFECTIVE DATE

Sec. 1300 Severability

This Ordinance and the various parts thereof are hereby declared to be severable. Should any section

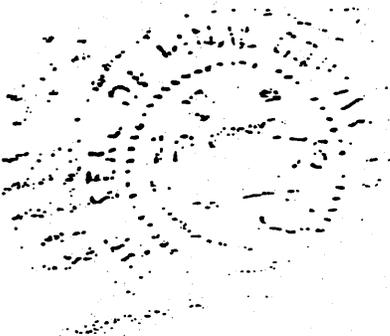
of this Ordinance be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of this Ordinance as a whole, or any portion thereof other than the section so declared to be unconstitutional or invalid.

Sec. 1301 Effective Date

This Ordinance shall take effect thirty (30) calendar days from the date passed and adopted by the Pinal County Board of Supervisors.

PASSED AND ADOPTED THIS 7th DAY OF October, 1998.

PINAL COUNTY BOARD OF SUPERVISORS


Lionel D. Ruiz
Lionel D. Ruiz, Supervisor - District 1

Sandie Smith
Sandie Smith, Supervisor - District 2

Jimmie B. Kerr
Jimmie B. Kerr, Supervisor - District 3

ATTEST:

Sheri Cluff, Deputy Clerk
Clerk of the Board