

# Pinal County

## Drainage Ordinance Update

### Draft Drainage Ordinance

Public Review Draft  
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Prepared for:



PINAL COUNTY  
*wide open opportunity*

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## **CHAPTER 1: AUTHORITY, PURPOSE, APPLICABILITY AND TITLE**

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### **SECTION 1.1: STATUTORY AUTHORITY**

The Ordinance is adopted pursuant to Arizona Revised Statutes (A.R.S.) 11-251 Section's 30, 31 and 36, A.R.S. 11-251.05 and A.R.S. 11-251.08 authorizing the Pinal County Board of Supervisors do and perform all acts necessary to the full discharge of its duties-to create and enforce all local, police, sanitary and other regulations provided that such regulations are not in conflict with general law; to adopt and to enforce standards for excavation, fill and grading in order to prevent unnecessary loss of property or life 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, provided that those ordinances are not in conflict with the laws of the State of Arizona.

### **SECTION 1.2: ORDINANCE 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 grading and drainage of all land within the unincorporated area of Pinal County in order to protect life and property and prevent unnecessary loss from erosion, flooding and landslides through reasonable regulation of development by minimizing soil erosion, mitigating natural waterways and help ensure that all new development is free from adverse drainage conditions.

### **SECTION 1.3: ORDINANCE APPLICABILITY**

This Ordinance shall apply to all development or improvement of land and conditions which may affect drainage systems and patterns. These Ordinance provisions shall not prevent, restrict or otherwise regulate the use or occupation of land or improvements for railroad, mining, metallurgical, grazing or general agricultural purposes (does not include the cultivation of cannabis).

### **SECTION 1.4: TITLE**

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

## **CHAPTER 2: SEVERABILITY, LIABILITY DISCLAIMER, RULES OF CONSTRUCTION, ORDINANCE INTERPRETATION**

### **SECTION 2.1: SEVERABILITY**

This Ordinance and the various parts thereof are hereby declared to be severable. If any section, sub-section, sentence, clause, phrase, term, part or provision of this ordinance or application thereof to any person or circumstance is held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall be confined in its operation to the section, subsection, sentence, clause, phrase, term, part or provision, or application directly involved in the controversy, and such decision shall not effect or impair the constitutionality or validity of remaining portions of the Ordinance or the application thereof to the other persons or circumstances.

### **SECTION 2.2: DISCLAIMER OF LIABILITY**

The degree of drainage protection 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 Regulation does not ensure complete protection from flooding or local drainage problems and is not to be construed as a warranty. Larger storms than what are included in this Ordinance may occur or drainage or water damage problem areas may be increased or exacerbated by man-made or natural causes, such as bridge openings and channels restricted by debris or silting, natural erosion, streambed meander or man-made obstructions and diversions. This Ordinance shall not create liability on the part of Pinal County, the Pinal County Flood Control District, any officer or employee thereof, the State of Arizona or the Federal Emergency Management Agency, for any flood damages or drainage issues that may result from reliance on this Regulation or any administrative decision lawfully made there under.

### **SECTION 2.3: RULES OF CONSTRUCTION**

When not consistent 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 the Ordinance shall be given the meaning they have in common usage. In context of the regulatory requirements of the Ordinance, the word “shall” is deemed to mean mandatory and the word “may” is deemed to mean permissive.

## SECTION 2.4: ORDINANCE INTERPRETATION

- A. The County Engineer or his designee is responsible for the implementation and interpretation of this Ordinance. In interpreting and applying the regulations of this Ordinance, they shall be held to be the minimum requirements for the promotion of the public health, safety and general welfare. Appeals to the County Engineer's interpretation of this Ordinance may be filed in accordance with Chapter 8 of this Ordinance.
- B. Nothing contained in this Ordinance shall be construed to limit or repeal other powers granted to Pinal County. This Ordinance shall not be construed to legalize existing conditions or uses which are in violation of other statutes, ordinances or regulations. Should provisions of this Ordinance conflict or overlap with other regulations, ordinances and statutes, the regulation, ordinance or statute which imposes the more stringent requirement or restriction shall prevail.

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## CHAPTER 3: DEFINITIONS

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### Section 3.1: Definitions

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

**Abutting or Adjacent** - Two or more parcels sharing a common boundary of at least one point.

**Alluvial Fan** – Means a geomorphologic feature characterized by a cone or fan-shaped deposit of boulders, gravel and fine sediments that have been eroded from mountain slopes, transported by flood flows and then deposited in the valley floors and which is subject to flash flooding, high velocity flows, debris flows, erosion, sediment movement and deposition and channel migration.

**Appeal** - A request for review of the Drainage Administrator’s administration or interpretation of the provisions of this Ordinance.

**Area Drainage Master Study (ADMS)** – A study to develop stormwater hydrology for a watershed, to define drainage watercourses and systems, identify potential flood hazard areas, drainage problems and recommend solutions and standards for sound floodplain and stormwater management. The ADMS will identify alternative solutions to a given flooding or drainage problem.

**Area Drainage Master Plan (ADMP)** - A plan that is typically conducted subsequent, and in response to, the findings of an ADMS. The ADMP identifies the preferred alternatives of those identified in an ADMS. An ADMP provides minimum criteria and standards for flood control and drainage relating to land use and development.

**Base Flood** – A flood having a 1-percent probability of being equaled or exceeded in any given year.

**Base Flood Elevation** – The calculated water-surface elevation of the base flood.

**Berm** – A small embankment or mound of soil used to contain or divert the flow of runoff.

**Board** – Board of Supervisors for Pinal County serving as the governing body for enforcement of the Ordinance and for administrating and approving appeals and variances from the engineering standards specified in the this Ordinance.

**Building** – See Structure.

**Building, Accessory** - Means a subordinate building or portion of the main building on the same lot or building site, the use of which is incidental to that of the main building and which is used exclusively by the occupants of the main building(s) or their nonpaying guests or employees.

**Building Site** – The ground area of a building or buildings together with all adjacent open spaces.

**CC&R’s** – Codes, Covenants, & Restrictions which may be a part of the chain of title to a property that govern the use and purpose of said property. CC&R’s may be part of a plat or a separately record document.

**Clearing (Grubbing)** – The removal, relocating or transferring of vegetative material, soil or rock.

**Clerk of the Board** - An officer appointed by the Board of Supervisors charged with the duties customarily imposed on the clerk and in whose office shall be filed all papers directed or required to be filed with the clerk.

**County Engineer** – An official of Pinal County whose duties are set forth in A.R.S. Section 11-562 and 48-3603 and who is exercising active responsibility for the management or administration of the County Highway system or acting as the County Engineer, regardless of title, such as Director of Highways, Superintendent of Highways, Director of Public Works; Drainage Administrator, and any assistants or deputies, who are delegated engineering, management or supervisory responsibilities. For this document, the responsibilities of the County Engineer shall include administering the provisions of the Drainage Ordinance.

**Critical Structures** - Any structure for which even a slight chance of flooding would reduce or eliminate its designed function of supporting a community in an emergency. Such structures included but are not limited to fire stations, hospitals, municipal airports, police stations, communication antennas or towers, elderly care facilities, fuel storage facilities, schools designated as emergency shelters, fresh water and sewage treatment facilities.

**Design Flow** – The peak flow and peak volume of rainfall resulting from the design storm generated within the defined area.

**Design Storm** – The storm event corresponding to a specific recurrence interval for a given design element that produces the design flow.

**Design Storm (Retention Basins)** – The 100-year, 2-hour rainfall event as determined by the latest statistical precipitation information produced by the National Oceanic and Atmospheric Administration (NOAA) for the area where the project/site exists.

**Detention System** – A system that detains runoff in a controlled manner through the use of a storage facility and releases that runoff into a downstream drainage system at flow rates less than those entering the facility.

**Development** – Any manmade change to improved or unimproved real estate including but not limited to, buildings, walls, paved and unpaved roads, infrastructure, railroads or other structures, mining, dredging filling, grading, landscape, paving excavation or drilling operations.

**Drainage** – Runoff that flows over land as a result of precipitation. This shall include sheet flow and flows that may concentrate in local drainage systems with or without defined channels.

**Drainage Area** – The upstream contributing watershed area measured at a single point of drainage concentration which is expressed in units of area, also called a catchment area, watershed, subbasin, or river basin.

**Drainage Administrator** – The County Engineer or his/her designee authorized to administer the provisions of this Ordinance.

**Drainage Clearance (Final)** – A document issued by the Drainage Administrator following a final inspection that indicates that the site was developed in accordance with the approved plan.

**Drainage Clearance (Preliminary)** – The formal approval by the Drainage Administrator of a drainage report, and grading and drainage plans to develop a site. This plan may be associated with a site plan, subdivision plat or engineered grading and drainage plan.

**Drainage Design**– A means of conveying and/or storing on-site and off-site peak flow through a development, catchment or watershed.

**Drainage Design Manual** – The document used to define the accepted design criteria, methodologies and procedures for drainage design within Pinal County.

**Drainage Easement** - A legal right or privilege to use an area defined and established to receive or convey runoff, detention or retention.

**Drainage Fee Schedule** – fee schedule adopted by the Board of Supervisors to cover the costs associated with appeals, drainage clearances, drainage variances, reports and plan reviews and performance bonds.

**Drainage Report** - A Drainage Report consists of a more in-depth drainage analysis that is typically applicable to one or more of the following:

1. Residential and non-residential development sites greater than one acre;
2. Residential subdivisions;
3. Multi-family home sites;
4. Commercial retail and office sites;
5. Industrial parks;
6. Manufactured home parks;
7. Utility scale alternative energy developments;
8. Recreational vehicle parks;
9. Roadway or other utility improvements;
10. Residential sites that are less than one acre but located in a FEMA designated special flood hazard area or within an ADMP identified watercourse, erosion hazard setback or earth fissure setback; and,
11. Other development project types as determined by the Drainage Administrator.

**Drainage Report: Commercial, Industrial and Multi-Family Development Site Plans** - A Drainage Report type for new construction of all commercial office, commercial retail, industrial and multi-family housing site plans in Pinal County for parcels not located wholly or partially within a FEMA Special Flood Hazard Area, ADMP identified watercourse, erosion hazard setback, earth-fissure setback. See Chapter 5 for respective Drainage Report contents/requirements for commercial, industrial and multi-family development types.

**Drainage Report: Final Plat Subdivisions** - A Drainage Report type in conjunction with the submittal of a final plat that may be required for single family residential subdivisions, including manufactured home parks and recreational vehicle parks, or commercial or industrial

developments not located wholly or partially within a FEMA Special Flood Hazard Area, ADMP identified watercourse, erosion hazard setback, earth-fissure setback. See Chapter 5 for respective Drainage Report contents/requirements for final plat subdivisions.

**Drainage Report: Master Planned Developments** – A Drainage Report type that may be required by the Drainage Administrator prior to submittal of any large or multi-phase commercial, industrial, mixed use, multi-family residential and single family residential subdivisions, including manufactured home parks and recreational vehicle parks, plans of development and special use residential developments not located wholly or partially within a FEMA Special Flood Hazard Area, ADMP identified watercourse, erosion hazard setback, earth-fissure setback. See Chapter 5 for respective Drainage Report contents/requirements for master planned developments.

**Drainage Report: Single Lot Residential & Minor Accessory Commercial Construction** - A Drainage Report type for single lot residential development upon a parcel of land that is wholly or partially located within a FEMA Special Flood Hazard Area, ADMP identified watercourse, erosion hazard setback, earth-fissure setback. Single lot residential development includes construction or improvement activities including grading/clearing, the construction of a detached single-family residence (including standard plans and lots within a platted subdivision or master planned community), mobile home, manufactured house, a building addition, swimming pool, utility/work shed, cabanas, ramada or structures of similar use and any other structure that may impede, retard or change the direction of the flow of water. Minor accessory construction on commercial projects shall be limited to uses of land or structures customarily incidental and subordinate to a permitted principal uses such as; sidewalks, ADA ramps, landscaping islands, parking lots, signage, outdoor storage/display areas, trash enclosures, outdoor seating areas, wireless communication facilities, and utility facilities serving the site. All such projects shall be located outside of a special flood hazard area, ADMP identified watercourse and shall have a maximum construction envelope/disturbance area or no greater than 2,500 square feet. See Chapter 5 for respective Drainage Report contents/requirements for single lot residential and minor accessory commercial development types.

**Drainage Report: Tentative Plat Subdivisions** – A Drainage Report type for single family residential subdivisions, including manufactured home parks and recreational vehicle parks, or commercial or industrial developments not located wholly or partially within a FEMA Special Flood Hazard Area, ADMP identified watercourse, erosion hazard setback, earth-fissure setback. See Chapter 5 for respective Drainage Report contents/requirements for tentative plat subdivisions.

**Drainage Statement** - A Drainage Statement is a less rigorous reporting requirement than a Drainage Report and is typically applicable to one or more of the following:

1. Construction of a primary residence or ancillary structure upon a single lot residential development located outside of a platted subdivision;
2. Residential development sites that are less than one acre in size and are not located in a FEMA designated special flood hazard area or within an ADMP identified watercourse, erosion hazard setback or earth fissure setback;

3. Development sites that are less than one acre in size and are not impacted by 100-year event off-site flows of 200 cfs or greater.

**Drainage Statement, Single Lot Residential** – A Drainage Statement associated with single lot residential development within or associated with an individual residential parcel(s), not part of a Master Planned Community or platted subdivision containing more than five (5) individual parcels acres, and contains or will contain one detached, single-family residence. See Chapter 5 for respective Drainage Statement reporting contents/requirements for Single Lot Residential development types.

**Drainage System** – A system of lakes, rivers, creeks, streams, washes, arroyos channels, closed conduits, or other topographic features on, through, or over which storm water is conveyed periodically. A drainage system includes such manmade features as gutters, swales, channels, detention/retention facilities and other drainage infrastructure designed to capture, store, and/or convey runoff.

**Dry well** – Means a well which is a bored, drilled or driven shaft or hole whose depth is greater than its width and is designed and constructed specifically for the disposal of storm water. Drywells do not include class 1, class 2, class 3 or class 4 injection wells as defined by the Federal Underground Injection Control Program (P.L. 93-523, part C), as amended. A.R.S. § 49-331(3).

**Dwelling unit** - Means a room or suite of two or more rooms that is designed for or is occupied by a person or persons for living purposes and having its own cooking and sanitary facilities.

**Earth Fissure** – Tension cracks formed in alluvial basins, usually caused by land subsidence as a result of groundwater withdrawal.

**Earth Fissure (Confirmed)** – An earth fissure that has been studied in sufficient detail such that its exact physical location has been determined.

**Earth Fissure (Unconfirmed)** – An earth fissure that has not been studied in sufficient detail to determine its exact physical location but that has been reported by Professional Geologists in previously published documents or maps.

**Earth Fissure Investigation Report** – A study containing findings and recommendations regarding the investigation of an earth fissure which has been prepared by a registered geotechnical engineer or registered geologist that conforms to the minimum industry standards and guidelines as published by the Arizona Geological Survey.

**Earth Fissure Setback** – The minimum horizontal distance between a structure and an earth fissure measured to the nearest visible tension crack.

**Encroachment** – The advancement or infringement of uses, fill or structures into the regulatory floodplain in a manner that impedes the flow conveyance capacity of the channel and/or regulatory floodplain of the watercourse.

**Erosion** – the physical process of wearing away or removing sediment or earthen materials by wind, water, ice or other geological agents.

**Erosion Control Zone**— a land area adjoining a body of water or watercourse or adjacent to or located partially or wholly within a delineated floodplain which due to the soil instability, is likely to suffer flood-related erosion damage.

**Erosion Hazard Setback** – the minimum horizontal distance between a structure and the watercourse as measured from the top edge of the highest channel bank or edge of the regulatory floodplain, based upon the water-surface elevation of the base flood, whichever is closer to the channel centerline.

**Excavation** – Any act which earth, sand and gravel, rock or other earthen material is cut into, dug uncovered, displaced or relocated and shall include the conditions resulting there from.

**Exemption** – A land use, construction activity and/or other action that is allowed or immune to local regulations by a federal, state and/or local law.

**Existing Grade** – The grade or elevation on the ground surface prior to excavating, grubbing or filling.

**Fill** – The placement of fill material at a specified location to bring the ground surface up to a desired elevation.

**Fill Material** – Natural sands, dirt, soil or rock but can also include concrete, cement, soil cement, brick or similar material as approved by the Drainage Administrator.

**First Flush** – Initial stormwater runoff which may contain a higher pollutant load.

**Flood or Flooding** - Means a general and temporary condition of partial or complete inundation of normally dry land areas from: (1) the overflow of flood waters; (2) the unusual and rapid accumulation or runoff of surface waters from any source; and/or (3) the collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm or by an unanticipated force of nature, such as flash flood or by some similarly unusual and unforeseeable event which results in flooding as defined in this definition.

**Floodplain** – Means any land area susceptible to being inundated by water from any source. (*See Flood or Flooding*)

**Floodplain Administrator** – The community official designated by title to administer and enforce the floodplain management regulations.

**Floodplain Encroachment Analysis** – A pre-versus-post hydraulic analysis of a watercourse, delineated floodplain, and/or drainage corridor that demonstrates that a proposed Development will not violate the policies regulating floodplains from an event that has a 1-percent probability of occurring in any given year (100 year).

**Grubbing (Clearing)** – The removal, relocating or transferring of vegetative material, soil or rock.

**Hardship** - Related to Chapter 8: “Appeals and Variances”, of this ordinance means the exceptional hardship which would result from a failure to grant the requested variance. The governing body requires that the variance be exceptional, unusual and peculiar to the property

involved. Mere economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, self-imposed conditions or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting a variance, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.

**Land Subsidence** – A lowering in the elevation of the ground surface, a process that occurs as the underlying aquifer is drained, resulting in decreased volume because of pore collapse and compression of the sediment materials.

**Levee** – A manmade structure, usually consisting of an earth embankment, designed and constructed for the purpose of controlling, or diverting of water to provide protection from temporary flooding.

**Obstruction** – Anything, including but is not limited to, any dam, wall, wharf, embankment, levee, dike, pile, abutment, protection, excavation, channelization, bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, structure, vegetation or other material in, along, across or projecting into any watercourse which may alter, impede, retard or change the direction and/or velocity of the flow of water, or due to its location, its propensity to snare or collect debris carried by the flow of water or its likelihood of being carried downstream.

**Off-Site Runoff** – Runoff produced from precipitation that falls outside the limits of a development and that drains through a development or site of a proposed development, including easements and dedicated rights-of-way.

**On-site Runoff** – Runoff produced from precipitation that falls within the limits of a development, including easements and dedicated rights-of-way.

**One Hundred Year Flood** – Means the flood event having a one percent chance of being equaled or exceeded in any given year.

**National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permits** - General, group, and individual stormwater discharge permits which regulate facilities defined in Federal NPDES regulations pursuant to the Clean Water Act. The State of Arizona administers this under the AZPDES program.

**Person** – An individual, or the individual's agent, a firm, partnership, association, corporation, municipality or an agent of the aforementioned groups, or this state or its agencies or political subdivisions.

**Pinal County** – The political subdivision established by A.R.S. Chapter 11 and defined by A.R.S. 11-113 and from this point forward is referred to as the County.

**Rainfall Event** – The amount of rain falling in a specific period of time.

**Reach** – a hydraulic engineering term used to describe a longitudinal section of a stream or watercourse.

**Regional Drain** – A watercourse in which the 100-year, 24-hour event produces a peak flow rate of at least 10,000 cubic feet per second.

**Regulatory Flood Elevation** – An elevation one foot above the base flood elevation for a watercourse for which the base flood elevation has been determined and shall be determined by the criteria developed by the federal emergency management agency (FEMA) drainage administrator, floodplain administrator, or the Arizona Director of Water Resources for all other watercourses.

**Regulatory Watercourse** – Any watercourse conveying on-site or off-site runoff in excess of 200 cubic feet per second (cfs) during the design storm, or any watercourse that has been designated by FEMA as being a Special Flood Hazard Area, or any watercourse which has been designated as regulatory by the drainage administrator.

**Retention System** – A system that stops (or retains) the progression of runoff in a controlled manner through the use of storage facilities, allowing for the release of the runoff through natural percolation or through a man-made infiltration system such as a dry well.

**Right-of-way** - Means an area of land which by deed, conveyance, agreement, dedication, or process of law is dedicated to Pinal County for public purposes including, but not limited to, streets, highway, public utility, pedestrian facility, bikeway or drainage.

**Roadway or Road** – That area, whether public or private, between right-of-way lines, dedicated, reserved or provided for the purpose of providing vehicular, pedestrian, bicycle, utility and/or drainage facilities, access or thoroughfare.

**Setback** – The minimum horizontal distance between a structure and a watercourse or earth fissure.

**Sheet Flooding** – Flow that occurs overland in places where there are no defined channels, the flood water spreads out over a large area at a uniform depth typically less than three (3) feet. This also referred to as overland flow.

**Special Flood Hazard Area (SFHA)** – The land area covered by the floodwaters of the base flood (one percent annual chance flood) is the Special Flood Hazard Area (SFHA) on the Federal Emergency Management Agency's (FEMA's) Flood Insurance Rate Maps (FIRMs). The SFHA is the area where the National Flood Insurance Program's (NFIP's) floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies. The SFHA includes Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, V1-30, VE, and V.

**Start of Construction** - Includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns or any work beyond the stage of excavation, or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling, nor does it include the installation of streets and/or walkways, nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms, nor does it include the installation on the property of

accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

**Structure** – Means anything constructed or erected the use of which requires location on the ground or attachment to something having a location on the ground. This definition shall include, for the purpose of this title, a manufactured home, mobile home and accessories thereto. For the purpose of this title, the terms “building” and “structure” shall be treated as though they are synonymous, unless stated otherwise.

**Substantial Improvement** – Means any repair, reconstruction, rehabilitation, addition or other improvement of a structure, the estimated cost of each repair which as determined by a licensed contractor equals or exceeds 50 percent of the fair market value or the appraised value as determined by a competent appraiser whichever may be higher of the building or structure either: 1) before the improvement or rehabilitation is started, or 2) if the building or structure has been damaged by any origin and is being restored, before the damage occurred. In the case of structures which have been damaged, the value of the rehabilitation or restoration must include the fair market cost of all material and labor required to return the structure to its pre-damaged condition, regardless of the actual work performed. "Substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building or structure commences, whether or not that alteration affects the external dimensions of the building or structure. The term does not include any project for improvement of a building or structure which has been identified by the local building official to correct violations of existing state and local health, sanitary or safety code requirements; nor does it include any alteration of a building or structure listed on the National Register of Historic Places or State Inventory of Historical Places.

**Thalweg** – A small channel which forms within the bed of the channel, and in which flows from the average rainfall are conveyed.

**Utility Grade** – A power generating facility capable of supplying electricity for distribution to the grid to for the purpose of serving multiple customers.

**Variance** – A recorded authorization from the Board to grant relief from the requirements of this Ordinance that would allow construction in a manner that would otherwise be prohibited by the Ordinance.

**Watercourse** – A lake, river, creek, stream, wash, arroyo, channels, or other topographic feature on or over which waters flow periodically.

**Watershed** – See Drainage Area.

## CHAPTER 4: ADMINISTRATION

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This chapter sets forth the duties and powers of the Drainage Administrator as well as the limitations of this Ordinance.

### SECTION 4.1: DUTIES AND RESPONSIBILITIES OF THE DRAINAGE ADMINISTRATOR

The County Engineer or his/her designee (“County Engineer”) is hereby designated as the Drainage Administrator responsible for enforcing the provisions of this Ordinance.

### SECTION 4.2: MANDATORY DUTIES OF THE DRAINAGE ADMINISTRATOR

The Drainage Administrator or his/her designee shall:

- A. Administer the review of applications for drainage reports, clearances and plans for development of all land(s), and building construction regulated by this Ordinance.
- B. Issue preliminary and final Drainage Clearances provided that the drainage reports and plans meet the requirements of this Ordinance as well as other Pinal County ordinances, statutes and regulations.
- C. Administer the review and approval of Grading Plans for development(s) of all land(s) regulated by the Ordinance and issue Grading Permits, and Clearing and Grubbing Permits provided that the Grading Plans meet the requirements of the Ordinance as well as other Pinal County, State and Federal ordinances, statutes and regulations.
- D. Inspect land and development improvements to ensure compliance with the Ordinance and conditions placed on the Drainage Report/Grading Permit and issue a Final Drainage Clearance.
- E. Investigate potential public health and safety violations of this Ordinance. Nuisance-type concerns or complaints may not constitute public health concerns and may not be investigated by the Drainage Administrator.
- F. Issue notices or orders necessary to enforce the provisions of this Ordinance.
- G. Upon determination that development of land subject to this Ordinance has proceeded without a Drainage Clearance, take appropriate action to obtain compliance with the Ordinance.
- H. Establish and collect fees which have been approved by the Board of Supervisors for the review, processing and inspection of all drainage and/or grading reports, plans, notices, and clearances described herein.

### SECTION 4.3: DISCRETIONARY DUTIES OF THE DRAINAGE ADMINISTRATOR

The Drainage Administrator may:

- A. Adopt drainage design guidelines, policies and procedures, to implement and effectuate the purposes of this Ordinance.
- B. Inspect properties for which a Final Drainage Clearance and/or Final Grading Approval has been requested.
- C. Inspect properties in response to complaints and, if violations are found, require compliance with the provisions of this Ordinance.
- D. Issue notices of violation pursuant to this Ordinance.
- E. Require additional information necessary to make the determination concerning the violations and compliance with the provisions of this Ordinance.
- F. Upon determination that all reasonable means to gain voluntary compliance have been exhausted, record a Notice of Non-Compliance or disclaimer with the Pinal County Recorder to appear upon a chain of title for said property in accordance with the provisions of Chapter 7 of this Ordinance.
- G. Require appropriate financial assurance for any of the following drainage infrastructure projects:
  1. Drainage control features which provide protection for the development such as channels, basins and culverts.
  2. Common area retention systems or drainage way easements affecting two or more tracts or phases of development.
  3. When the Drainage Administrator determines that a development that has been interrupted leaving a partially completed drainage systems which presents a flood hazard to adjacent property;
  4. When a project that has more than one phase and the schedule of construction of all phases is longer than one year.

### SECTION 4.4: AREA DRAINAGE MASTER STUDY/AREA DRAINAGE MASTER PLAN

#### A. Area Drainage Master Study & Master Plan

Whenever an Area Drainage Master Study (ADMS) authorized by the Board of Supervisors has been completed in order to develop new stormwater hydrology for a particular watershed of interest, a follow up Area Drainage Master Plan (ADMP) may also be utilized to further identify preferred drainage/flood control alternatives, design solutions, and rules of development in response to the hydrology developed in the ADMS. If adopted by the Board of Supervisors, the Area Drainage Master Plan

amends and becomes part of this Ordinance and shall be enforced by the Drainage Administrator.

**B. Public Notification**

During the preparation of any Area Drainage Master Plan, the owners of record of real property within the designated study area shall be publicly notified by Pinal County through the County website and/or by first class mail so that owners may have the opportunity to provide input to the planning process.

**C. Standards**

Requirements for development within an adopted Area Drainage Master Plan shall be in accordance with the uniform rules of development established by the Area Drainage Master Plan. In the event the ADMP does not contain specific rules of development, development standards and requirements shall meet or exceed the drainage standards and requirements presented in the Pinal County Floodplain Ordinance, this Ordinance or any other ordinance or publication adopted by the Board of Supervisors and/or enforced by the Drainage Administrator. In the case of a conflict, the more stringent requirement(s) shall prevail.

**SECTION 4.5: ORDINANCE LIMITATIONS**

This Ordinance shall not:

- A. Require a property owner to submit plans for or install or change a drainage system on property that was developed prior to the effective date of this Ordinance, provided that the drainage system associated with the developed project has not/will not cause an adverse impact to adjacent property owners. Modification, alteration or enhancement to the existing use which constitutes a “substantial improvement” (please refer to Chapter 3: Definitions) will require that development be brought into the compliance with the requirements of the Ordinance.
- B. Pertain to or otherwise regulate cities, towns or other incorporated municipalities, the State or its agencies or political subdivisions. School districts, private utilities, private emergency or fire services are not exempt from compliance with the provisions of this Ordinance.
- C. 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 is five or more contiguous commercial acres. This restriction on regulation shall be construed to conform with the requirements of A.R.S. § 11-812.
- D. Compliance with or exemption from this Ordinance does not relieve any person from liability, if that person’s actions cause flood damage to any other person or property.

## CHAPTER 5: DRAINAGE CLEARANCE & DRAINAGE REPORTING REQUIREMENTS

### Section 5.1 Drainage Clearance Required (Preliminary and Final)

- A. A Preliminary and Final Drainage Clearance shall be required for any development, building construction or substantial improvement that may have an adverse impact on existing drainage and/or public health and safety.
  1. A Preliminary Drainage Clearance is the formal approval by the Drainage Administrator of a Drainage Report, and/or grading and drainage plans to construct improvements upon a site, property or parcel of land. The Drainage Report may be associated with a site plan, subdivision plat, single lot residential parcel, or engineered grading and drainage plan.
  2. A Final Drainage Clearance is a document issued by the Drainage Administrator following a final inspection that indicates that the site was developed in accordance with the approved Drainage Report and/or grading plans and construction permit. Prior to requesting the drainage inspection for the Final Drainage Clearance, the approval of the floor/stemwall/foundation inspection shall be obtained. The Final Drainage Clearance will be necessary before a Certificate of Occupancy can be issued by Pinal County.
- B. A written application for a Preliminary Drainage Clearance shall be submitted to the Drainage Administrator.
- C. The Drainage Administrator may require the completion and an approval of a Drainage Statement or a Drainage Report to determine the need for area drainage facilities resulting from the proposed development. The Drainage Report shall quantify the land area necessary for the construction of area drainage system and may provide alternatives as to the location of the facilities. The necessary amounts of land shall be proportionate to the amount of runoff contributed by the post-construction parcel with respect to the total runoff generated by the entire watershed. The Drainage Administrator shall evaluate the Drainage Report application and determine if the applicant has proposed sufficient infrastructure to mitigate the increased drainage resulting from the proposed development.
- D. If the Drainage Administrator determines that a Drainage Report application cannot be approved as submitted, the Drainage Administrator (or designee) will provide written comments indicating areas of insufficient or non-compliant design that will encourage modification to the Drainage Report for re-submittal and Preliminary Drainage Clearance approval. If no such modification to the Drainage Report are offered, the Drainage Report shall be denied with a written explanation of the reasons for the denial of the Preliminary Drainage Clearance be provided to the applicant.
- E. If substantial construction as approved by the Drainage Administrator has not occurred within 180 days of Preliminary Drainage Clearance approval, the Drainage Report may be

declared null and void by the Drainage Administrator. Removal of any partially completed or minor improvements that may adversely affect drainage as determined may be ordered by the Drainage Administrator. Upon application that shall be made prior to the expiration date of the current application, the Drainage Administrator may approve a renewal of an expired Preliminary Drainage Clearance for an additional 180 days.

- F. The Preliminary Drainage Clearance will expire two (2) years from the initial approval date regardless of whether or not substantial construction has occurred. The Preliminary Drainage Clearance maybe extended by providing an updated Master Plan and accompanying Drainage Report that represents current site conditions as of two months prior to the expiration date.
- G. An exemption from the requirements for Zoning Clearance, Building Permit, Health Department Clearance, Floodplain Ordinance or other permits and ordinances does not constitute an exception from the Ordinance, except as set forth in ARS 11-830.
- H. Any financial assurances required by the Drainage Administrator as part of the approval of the Preliminary Drainage Clearance shall be released upon verification of compliance with the approved plans and all the provisions of the Ordinance or upon the receipt of the Final Drainage Clearance.
- I. The applicant and/or owner (builder/developer) is in violation of this Ordinance, for failure to correct any deficiencies noted at the time of the final drainage inspection. Final drainage inspection approval shall be obtained within ninety (90) days of the date of notice of such deficiencies or final Building Inspection, whichever is the longer period.

## **Section 5.2 Drainage Report Types**

All proposed plans for development or substantial improvement to any parcel of land in Pinal County are subject to one of two drainage reporting types; 1) Drainage Statement or, 2) Drainage Report.

- A. A Drainage Statement is a less rigorous reporting requirement that is typically applicable to one or more of the following:
  - 1. Construction of a primary residence or ancillary structure upon a single lot residential development located outside of a platted subdivision or master planned community;
  - 2. Residential development sites that are less than one acre in size and are not located in a designated special flood hazard area as identified by the Federal Emergency Management Agency (FEMA) or within a regulatory watercourse, erosion hazard setback or earth fissure setback;
  - 3. Residential development sites that are less than one and a half acres in size and that are not impacted by the one percent annual chance (100-year) flood event having flows of 200 cubic feet per second (cfs) or greater.

- B. A Drainage Report consists of a more in-depth drainage analysis that is typically applicable to one or more of the following:
1. Residential and non-residential development sites greater than one and a half acres;
  2. Residential subdivisions;
  3. Multi-family home sites;
  4. Commercial retail and office sites;
  5. Industrial parks;
  6. Manufactured home parks;
  7. Utility scale alternative energy developments;
  8. Recreational vehicle parks;
  9. Roadway or other utility improvements;
  10. Residential sites that are less than one and a half acres but are located in a designated special flood hazard area as identified by the Federal Emergency Management Agency (FEMA) or within regulatory watercourse, erosion hazard setback or earth fissure setback; and,
  11. Other development project types as determined by the Drainage Administrator.
- C. The drainage report type(s) and their respective drainage reporting contents/requirements prescribed in this section provide general guidance that is applicable under most development situations. However, drainage reporting requirements can vary depending on the size and complexity of a given development project and/or that project's proximity to existing off-site and on-site drainage ways and watercourse. As such, applicants are highly encouraged to request a Pre-Application Meeting with Pinal County representatives to discuss the proposed development type and advise the applicant of appropriate drainage reporting requirements.

### Section 5.3 Drainage Statement: Single Lot Residential

A Drainage Statement is required for single lot residential development within or associated with an individual residential parcel(s), not part of a Master Planned Community or platted subdivision containing more than five (5) individual parcels acres, and contains or will contain one detached, single family residence. A Drainage Statement shall conform to the drainage design standards contained in Chapter 6 of this Ordinance and contain the following information:

- A. For purposes of this section, single lot residential development is defined as development, construction or improvement activities upon individual residential parcels that may include; grading/clearing the construction of a detached single-family residence, mobile home, manufactured house, building addition, swimming pool, utility/work, shed, cabanas, ramada or structures of similar use and any other structure that may impede, retard or change the direction of the flow.

- B. If the single lot residential development is located upon a parcel of land that contains a Federal Emergency Management Agency (FEMA) Special Flood Hazard Area, regulatory watercourse, erosion hazard setback or earth-fissure setback, a Drainage Report per Section 5.4 shall be required instead of a drainage statement.
- C. The Drainage Administrator may require the Drainage Statement to be certified by an Arizona Registered Professional Engineer explicitly stating that the site does not contain drainage features that may impact adjacent properties.
- D. A Site Plan shall be incorporated into the Drainage Statement and shall contain, at a minimum, the following information:
  - 1. North Arrow.
  - 2. Scale of drawing with scale bar.
  - 3. Property lines with dimensions, including any public and/or private easements.
  - 4. Legal description, property address or tax identification number and closest intersection.
  - 5. Location and size of any existing or proposed drainage easements.
  - 6. Drainage flow arrows and topography displayed as either five (5) foot maximum contour intervals and/or spot elevations.
  - 7. Finished Floor Elevation of the primary and/or any ancillary structures including air conditioner units and pool equipment.
  - 8. Location and dimensions of on-site retention basins if required by this Ordinance.
  - 9. Existing or proposed drainage structures, including but not limited to natural washes and swales, drywells, underground retentions systems, drainage ways, culverts, storm drains, pavement catchments, erosion mitigation measures, channel stabilization measures, drainage and utility easements, common areas and public and private rights-of-way and roads.
  - 10. Location and dimensions of any walls/fences, including drainage openings.
  - 11. Current aerial photograph of the property.
  - 12. Information necessary to show compliance with the Arizona Pollution Discharge Elimination System (AZPDES) program.

## **Section 5.4 Drainage Report: Single Lot Residential & Minor Accessory Commercial Construction**

A Drainage Report is required for single lot residential development upon a parcel of land that is wholly or partially located within a FEMA Special Flood Hazard Area, regulatory watercourse, erosion hazard setback, earth-fissure setback. A single lot residential and minor accessory commercial drainage report shall conform to the drainage design standards contained in Chapter 6 of this ordinance and contain the following information:

- A. For purposes of this section, single lot residential development is defined as construction or improvement activities include grading/clearing, the construction of a detached single-family residence (including standard plans and lots within a platted subdivision or master planned community), mobile home, manufactured house, a building addition, swimming pool, utility/work shed, cabanas, ramada or structures of similar use and any other structure, including drainage infrastructure, that may impede, retard or change the direction of the flow of water.
- B. For purposes of this section, minor accessory construction on commercial projects shall be limited to uses of land or structures customarily incidental and subordinate to a permitted principal uses such as; sidewalks, ADA ramps, landscaping islands, parking lots, signage, outdoor storage/display areas, trash enclosures, outdoor seating areas, wireless communication facilities, and utility facilities serving the site. All such projects shall be located outside of a special flood hazard area, regulatory watercourse and shall have a maximum construction envelope/disturbance area or no greater than 2,500 square feet.
- C. The Drainage Report for the site shall be prepared and sealed by an Arizona Registered Professional Civil Engineer.
- D. The Drainage Administrator may specify in writing what information needs to be presented on the Drainage Report for the site. In the absence of the Drainage Administrator's written provisions, the Drainage Report shall be prepared in accordance with this Ordinance and/or other Pinal County Public Works Department standards as needed.
- E. A Site Plan shall be incorporated into the Drainage Report and shall contain, at a minimum, the following information:
  1. North Arrow
  2. Scale of drawing with scale bar.
  3. Property lines with dimensions, including any public and/or private easements.
  4. Legal description, property address or tax identification number and closest intersection.
  5. Bench Mark and Datum.
  6. Location and size of any existing or proposed drainage easements.
  7. Drainage flow arrows and topography displayed as either two (2) foot maximum contour intervals and/or spot elevations.

8. Finished Floor Elevation (FFE) of the primary and/or any ancillary structures including air conditioner units and pool equipment. The FFE shall be at least one (1) foot above the 100-year water surface elevation.
  9. Location, dimensions, and volume of on-site retention basins if required by this Ordinance, an overlying Plat, or CC&R.
  10. Existing or proposed drainage structures, including but not limited to natural washes and swales, drywells, underground retentions systems, drainage ways, culverts, storm drains, pavement catchments, erosion mitigation measures, channel stabilization measures, drainage and utility easements, common areas and public and private rights-of-way and roads.
  11. Peak flow rates for off-site watersheds at the property boundaries and as needed within the site for both existing and proposed conditions.
  12. Peak flow rates for on-site drainage areas.
  13. Floodplains with Water Surface Elevations for the regulatory watercourses (referenced to the property boundary or known provided bench mark).
  14. Erosion hazard setbacks for the regulatory watercourses (referenced to the property boundary or known provided bench mark).
  15. Earth fissure setbacks (referenced to the property boundary or known provided bench mark.)
  16. Location and dimensions of any walls/fences, including drainage openings.
  17. Location and size of any existing or proposed drainage easements.
  18. Current aerial photograph of the property.
  19. Information necessary to show compliance with the Arizona Pollution Discharge Elimination System (AZPDES) program.
- F. The Drainage Administrator may require the submittal of certified as-built plans for the construction of the improvements approved under this section.
- G. If applicable, a Professional Engineer's statement certifying as to the development and location of the Floodplain and Erosion Hazard Setbacks shall be provided on the Site Plan.
- H. If part of a larger Master Planned Community, the Drainage Report for the single lot residential site shall be consistent with the previously approved Master Drainage Report in which property resides.

### **Section 5.5 Drainage Report: Commercial, Industrial and Multi-Family Development Site Plans**

A Drainage Report is required for new construction of all commercial office, commercial retail, industrial and multi-family housing site plans in Pinal County. For parcels located wholly or partially within a Federal Emergency Management Agency (FEMA) Special Flood Hazard Area, regulatory watercourse, erosion hazard setback, earth-fissure setback, please refer to the Floodplain Management Ordinance for additional reference and reporting requirements. A commercial, industrial or multi-family drainage report shall conform to the drainage design standards contained in Chapter 6 of this ordinance and contain the following information:



- A. For individual commercial, industrial and multi-family development sites that are contained within a large, multiple phased development project in which a Master Drainage Report was previously prepared and approved, the Drainage Administrator shall apply the minimum reporting requirements of this section, however may modify the Drainage Report submittal requirements of this section depending upon the construction phasing and functionality of adjacent drainage facilities serving the site.
- B. For purposes of this section, construction of tenant improvements are exempt from the provisions of this section.
- C. The Drainage Report for the site shall be prepared and sealed by an Arizona Registered Professional Civil Engineer.
- D. The Drainage Administrator may specify in writing what information needs to be presented on the Drainage Report for the site. In the absence of the Drainage Administrator's written provisions, the Drainage Report shall be prepared in accordance with Pinal County Public Works Department standards and shall be in compliance with the Floodplain Management Ordinance and this Ordinance.
- E. A Site Plan shall be incorporated into the Drainage Report and shall contain, at a minimum, the following information:
  1. North Arrow
  2. Scale of drawing with scale bar. Plan must be drawn to a minimum 1" equals 40-foot scale unless otherwise approved by the Drainage Administrator.
  3. Property lines with dimensions, including any public and/or private easements.
  4. Legal description, property address or tax identification number and closest intersection.
  5. Related Pinal County case file number (zoning, use permit, plat, etc.)
  6. Bench Mark and Datum.
  7. Proposed building location(s), walkways, driveways, parking areas, etc. layout with complete dimensions and ties.
  8. Existing and proposed streets, including right-of-way width on and adjacent to the site.
  9. Existing and proposed easements on and adjacent to the site with their dimensions and purpose, including recordation information.
  10. Location and size of any existing or proposed drainage easements.
  11. Location, size and capacity of all existing or proposed drainage structures, including but not limited to natural washes and swales, drywells, underground retentions systems, drainage ways, culverts, storm drains, pavement catchments, erosion mitigation measures, channel stabilization measures, drainage and utility easements, common areas and public and private rights-of-way and roads.

12. On site drainage conveyance system for runoff through the site that provides a mechanism for runoff discharge at or near the same location to the site conditions prior to development including flow rates, water surface elevations and velocities.
  13. 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 twenty-five percent (25%) of public parking for retention and the maximum water depth of water shall not exceed six inches.
  14. Drainage flow arrows and topography with maximum one (1) foot contour interval or sufficient spot elevations to determine pad elevation, and surrounding grades.
  15. Finished Floor Elevation (FFE) of the primary and/or any ancillary structures. The FFE shall be at least one (1) foot above the 100-year water surface elevation.
  16. A description of methods to be used to flood proof buildings and utilities up to or above the calculated water surface elevation of the design storm.
  17. Peak flow rates for off-site watersheds at the property boundaries and as needed within the site for both existing and proposed conditions. Peak flow rates for on-site drainage areas.
  18. Floodplains with Water Surface Elevations for the regulatory watercourses (referenced to the property boundary or known provided bench mark).
  19. Erosion hazard setbacks for the regulatory watercourses (referenced to the property boundary or known provided bench mark).
  20. Earth fissure setbacks (referenced to the property boundary or known provided bench mark.)
  21. Location and dimensions of any walls/fences, including drainage openings.
  22. Current aerial photograph of the property.
  23. Information necessary to show compliance with the Arizona Pollution Discharge Elimination System (AZPDES) program.
- F. The Drainage Administrator may require the submittal of certified as-built plans for the construction of the improvements approved under this section.
- G. If applicable, a Professional Engineer's statement certifying as to the development and location of the Floodplain and Erosion Hazard Setbacks shall be provided on the Site Plan.
- H. If part of a larger Master Planned Community, the Drainage Report for the multi-family residential site shall be consistent with the previously approved Master Drainage Report in which property resides.

## Section 5.6 Drainage Report: Master Planned Developments

A Master Drainage Report may be required by the Drainage Administrator prior to submittal of any large or multi-phase commercial, industrial, mixed use, multi-family residential and single family residential subdivisions, including manufactured home parks and recreational vehicle parks, plans of development and special use residential developments. A master drainage report shall conform to the drainage design standards contained in Chapter 6 of this ordinance and contain the following information:

- A. For parcels located wholly or partially within a FEMA Special Flood Hazard Area, ADMP identified watercourse, erosion hazard setback, earth-fissure setback, please refer to the Floodplain Management Ordinance for additional reference and reporting requirements.
- B. The Drainage Report for the site shall be prepared and sealed by an Arizona Registered Professional Civil Engineer.
- C. The Drainage Administrator may specify in writing what information needs to be presented in the Master Drainage Report. In the absence of the Drainage Administrator's written provisions, the Master Drainage Report shall be prepared in accordance with Pinal County Public Works Department standards and shall be in compliance with the Floodplain Management Ordinance and this Ordinance.
- D. The landowner or developer shall submit for review and approval the following:
  1. All existing off-site and on-site drainage facilities and/or patterns affecting the land included in the proposed development shall be shown.
  2. Off-site watersheds shall be delineated from the upstream origin to a local and downstream release point.
  3. Existing and proposed on-site watersheds shall be from the upstream origin to a local and downstream release point.
  4. Information associated with natural watercourses shall include the following:
    - a. Size of the contributing watershed area, in acres.
    - b. Approximate length and width of contributing drainage area.
    - c. Type and amount of peak flow rate for the design storm entering and exiting the development under both existing and proposed conditions.
    - d. For watercourses exceeding a 100-year peak discharge of 200 cfs, the existing and post-construction floodplain limits, including backwater and ponding limits.
    - e. For watercourses exceeding a 100-year peak discharge of 200 cfs, the existing and post-construction erosion hazard setback limits.
    - f. The Army Corps of Engineers' Waters of United States as defined by Section 404 of the Clean Water Act.

- g. Vertical datum and horizontal datum/projection of surveyed topographic information
- E. The owner or developer is responsible for providing adequate drainage through the proposed development for off-site and on-site runoff within the proposed development.
- F. Unless otherwise authorized by the Drainage Administrator, the owner shall properly dispose of runoff in the same manner as before the development or by other approved means.
- G. Peak discharges and velocity at the outlet or downstream lower boundary of the proposed development shall not be increased as a result of the development. The water surface elevation and flow characteristics (including sediment load) shall not be modified.
- H. Unless otherwise authorized by the Drainage Administrator, the off-site floodplain limits shall not be altered as a result of the proposed development.
- I. The location and method of retention and runoff conveyance shall be included on the plan. If the proposed retention facility is located within a designated Pinal County MS4 area, additional stormwater quality provisions may be required.
- J. The amount and degree of hydraulic and hydrologic detail required shall be determined by the Drainage Administrator based on the complexity of the Master Plan.
- K. All information and calculations, excluding earth fissures, as required in this chapter shall be prepared by an Arizona Registered Professional Civil Engineer. Earth fissure setbacks or recommended mitigation measures may be certified by a Registered Geotechnical Engineer or Registered Geologist.
- L. The Master Plan shall demonstrate compliance with Section 404 of the Clean Water Act and the Arizona Pollutant Discharge Elimination System (AZPDES) Program.
- M. Unless a Drainage Report is prepared for an individual development site in accordance with Section 5.5, an updated Master Plan and Drainage Report demonstrating the most current site conditions will be submitted biannually (every two (2) years) for the entire construction phase of the project as part of the renewal of the preliminary Drainage Clearance.

### **Section 5.7 Drainage Report: Tentative Plat Subdivisions**

A Tentative Plat Drainage Report shall be required by the Drainage Administrator in conjunction with the submittal of the Tentative Plat. A tentative plat drainage report shall conform to the drainage design standards contained in Chapter 6 of this ordinance and contain the following information:

- A. A Tentative Plat Drainage Report is required for single family residential subdivisions, including manufactured home parks and recreational vehicle parks, or commercial or industrial developments as desired/necessary.
- B. For subdivision parcels located wholly or partially within a FEMA Special Flood Hazard Area, regulatory watercourse, erosion hazard setback, earth-fissure setback, please refer to the Floodplain Management Ordinance for additional reference and reporting requirements.
- C. For Tentative Plat subdivision sites that are contained within a large, multiple phased development project in which a Master Drainage Report was previously prepared and approved, the Drainage Administrator shall apply the minimum reporting requirements of this section, however he/she may modify the Drainage Report submittal requirements of this section depending upon the construction phasing and functionality of adjacent drainage facilities serving the site.
- D. The Drainage Report for the site shall be prepared and sealed by an Arizona Registered Professional Civil Engineer.
- E. The Drainage Administrator may specify in writing what information needs to be presented on the Tentative Plat Drainage Report. In the absence of the Drainage Administrator's written provisions, the Drainage Report shall be prepared in accordance with Pinal County Public Works Department standards and shall be in compliance with the Floodplain Management Ordinance and this Ordinance.
- F. The Tentative Plat Drainage Report shall include the following minimum information:
  1. All existing off-site and on-site drainage facilities and/or patterns affecting the land included in the proposed development shall be shown.
  2. Off-site watersheds shall be delineated from the upstream origin to a local and downstream release point. Indicate the drainage pattern, grade breaks and slopes of all streets, parking lots, and other relevant features. If the site is subject to off-site drainage, the watershed boundaries shall be delineated and any off-site drainage shall be accounted for in the report.
  3. Existing and proposed on-site watersheds shall be from the upstream origin to a local and downstream release point.
  4. Information associated with natural watercourses shall include the following:
    - a. Size of the contributing watershed area, in acres.
    - b. Approximate length and width of contributing drainage area.
    - c. Type and amount of peak flow rate for the design storm entering and exiting the development under both existing and proposed conditions.
    - d. For watercourses exceeding a 100-year peak discharge of 200 cfs, the existing and post-construction floodplain limits, including backwater and ponding limits.

- e. For watercourses exceeding a 100-year peak discharge of 200 cfs, the existing and post-construction erosion hazard setback limits.
  - f. The Army Corps of Engineers' Waters of United States as defined by Section 404 of the Clean Water Act.
  - g. Vertical datum and horizontal datum/projection of surveyed topographic information.
- G. Indicate the retention volume required for retention basins proposed. Present a preliminary retention basin plan including size, depth and proposed method(s) of draining the basin(s) within 36 hours.
- H. Indicate conveyance channel(s) required. Present a preliminary channel (s) design plan including, flow volume, flow rate, channel size, channel depth, side slopes and erosion protection methods.
- I. Indicate street drainage patterns of all streets within the subdivision.
- J. Indicate if the subdivision will be phased and if there is a temporary solution for storm water run-off during phased construction.
- K. Indicate preliminary pad and/or finished floor elevations.
- L. Indicate the grade difference between adjacent development(s) and demonstrate how there will be no greater than 1.5 feet grade difference between adjacent developments.
- M. Information necessary to show compliance with the Arizona Pollution Discharge Elimination System (AZPDES) program.

### **Section 5.8 Drainage Report: Final Plat Subdivisions**

A Final Plat Drainage Report shall be required by the Drainage Administrator in conjunction with the submittal of the Final Plat. A Final Plat may be required for single family residential subdivisions, including manufactured home parks and recreational vehicle parks, or commercial or industrial developments as desired/necessary. A final plat drainage report shall conform to the drainage design standards contained in Chapter 6 of this ordinance and contain the following information:

- A. For subdivision parcels located wholly or partially within a FEMA Special Flood Hazard Area, regulatory watercourse, erosion hazard setback, earth-fissure setback, please refer to the Floodplain Management Ordinance for additional reference and reporting requirements.
- B. For Final Plat Drainage Reports shall be prepared in substantial conformance with the approved Tentative Plat Drainage Report. The Drainage Administrator shall apply the minimum reporting requirements of this section, however he/she may modify the Final Plat Drainage Report submittal requirements of this section depending upon the construction phasing and functionality of adjacent drainage facilities serving the site.

- C. The Drainage Report for the site shall be prepared and sealed by an Arizona Registered Professional Civil Engineer.
- D. The Drainage Administrator may specify in writing what information needs to be presented on the Final Plat Drainage Report. In the absence of the Drainage Administrator's written provisions, the Final Plat Drainage Report shall be prepared in accordance with Pinal County Public Works Department standards and shall be in compliance with the Floodplain Ordinance and this Ordinance.
- E. The Final Plat Drainage Report shall include the following minimum information:
  - 1. A reference to the approved tentative Plat Drainage Report.
  - 2. All on-site drainage facilities and/or patterns affecting the land included in the proposed development shall be shown. For all catch basins and /or retention basins, demonstrate the required volume and calculated volume, water surface elevation, cross section design, detailed grading plans and inlet and outlet structure designs.
  - 3. Type and amount of peak flow rate for the design storm entering and exiting the development under both existing and proposed conditions.
  - 4. For watercourses exceeding a 100-year peak discharge of 200 cfs, the existing and post-construction floodplain limits, including backwater and ponding limits.
  - 5. For watercourses exceeding a 100-year peak discharge of 200 cfs, the existing and post-construction erosion hazard setback limits.
  - 6. The Army Corps of Engineers' Waters of United States as defined by Section 404 of the Clean Water Act.
  - 7. Vertical datum and horizontal datum/projection of surveyed topographic information
  - 8. Final conveyance channel(s) design plan including, detailed grading plan, flow volume, flow rate, channel size, channel depth, side slopes, cross section design, water surface elevation, scour protection methods and erosion hazard setbacks if applicable.
  - 9. Indicate street drainage patterns, flow calculations and peak street flows of all streets within the subdivision.
  - 10. Indicate all finished floor elevations.
  - 11. If applicable, illustrate the FEMA 100-year flood plain, or calculated 100-year floodplain, whichever is applicable, on the Final Plat.
  - 12. A statement referencing the fact that the civil plans and landscaping plans for all retention basin designs coincide.
  - 13. Information necessary to show compliance with the Arizona Pollution Discharge Elimination System (AZPDES) program.

## CHAPTER 6: DRAINAGE DESIGN STANDARDS

### Section 6.1 Drainage Design Standards

The entire runoff conveyance and drainage retention system shall be designed to eliminate or minimize the stormwater runoff effects and convey the runoff through the development without adversely impacting the surrounding properties and with minimal detrimental effects to the development. No system shall be approved if the effect may cause an increase in the peak discharge, volume, or change the point of entry of the drainage onto other property during the rainfall event. No system shall be approved that does not conform to Pinal County's drainage standards and/or design criteria.

All development shall conform to the applicable the provisions of this Ordinance, Pinal County Public Works Department standards the Pinal County Floodplain Management Ordinance, the Arizona Pollution Discharge Elimination System (AZPDES) program, as well as all other applicable county, state and federal codes and regulations.

#### A. Precipitation Frequency Criteria

Unless otherwise specified by the Drainage Administrator, the NOAA Atlas 14 (or most current update) shall be used for hydrologic analyses.

#### B. Storm Frequency Criteria

1. The rainfall event, with a 1-percent probability of occurring in any given year (100-year event), that produces the peak discharge for an area contributing runoff to and within the development, shall be used in designing the overall drainage system. The Drainage Administrator may specify which storm duration is most applicable.

#### C. Retention Basin Criteria

1. The retention system shall be designed to receive and retain the volume of runoff generated by the 100-year storm having a duration of 2 hours (100-year, 2-hour storm) falling over the entire development site including all rights-of-way, excluding off-site flow conveyance areas.
2. Individual lot retention may be permitted in residential subdivisions with a minimum lot size of two and a half acres (2.5 acres) with written approval from the Drainage Administrator. In the event on-lot retention is used, separate retention facilities to capture roadway runoff may be required. Drainage easements may also be required to protect the retention areas serving the roadway.
3. The Drainage Administrator may reduce the retention requirements for utility scale solar or wind power generating facilities which utilize raised reflecting or photo-voltaic panels or vertically oriented windmills as the primary means of generating energy provided that the applicant can demonstrate that the inverters,

panels or towers will not have an adverse impact on drainage patterns and that the overall post-construction impervious ground cover (including access roads, pedestals, & ground mounted electrical equipment) is less than 10% of the entire site. The reduction in retention from the standard 100-year, 2-hour criterion for utility scale solar and wind power generating facilities may be to a minimum of retaining the difference in runoff generated from a pre versus post condition providing that the applicant can demonstrate that post construction flow rate leaving the site is less than or equal to the existing flow rate for the 2-year, 10-year, and 100-year storms and that the requirements of the Pinal County Stormwater Ordinance are still being met.

4. Drywell volumes shall not be included as part of the retention volume.
5. Unless otherwise approved in writing by the Drainage Administrator, retained on-site runoff shall be disposed of within a period of time not exceeding thirty-six (36) hours by percolation or dry wells or other approved sub-surface disposal systems. Evaporation shall not be considered when computing the disposal rate.
6. On-site retention facilities may include natural depressions, man-made basins, depressed parking areas, or other catchments that do not result in water being ponded for a period exceeding thirty-six (36) hours.
7. No more than 25% of a single commercial parking lot shown on a site plan shall be used for retention.
8. The maximum depth of ponding in the commercial parking area retention facilities shall not exceed 6 inches.
9. Complete detailed plans including the proposed engineered backfill for sub-surface retention facilities shall be submitted for review and approval of a Drainage Clearance.
10. Sub-surface retention shall not be permitted for single family detached residential development unless otherwise authorized by the Drainage Administrator.
11. Retention basins shall not be located within 25-feet of an existing or proposed septic system.
12. Utility lines and structures shall not be located within a retention facility without prior written approval from the utility company and/or the Pinal County Planning and Zoning Department and the Drainage Administrator.
13. Retention and/or conveyance facilities are prohibited in County rights-of-way. Only under unusual physical site characteristics that limit reasonable alternatives, the Drainage Administrator may approve a Drainage Waiver to allow retention in the County right-of-way.

14. A right-of-way or public utility easement shall not be designated over or in conjunction with a drainage or retention without prior written approval from the appropriate agency or affected utility.
15. In any landscape and maintenance agreement, provisions shall be made for an annual maintenance certification of all retention basins.
16. Off-site and on-site runoff shall not be combined within a retention facility without prior written approval from the Drainage Administrator. The Drainage Administrator may require the capture and/or treatment of the 2-year, 1-hour storm or the accepted first-flush volume equivalent to meet stormwater quality standards.
17. Percolation tests will be required for all retention basins. The results of the tests must be sealed by Arizona Registered Professional Engineer and provided to Pinal County prior to the issuance of the Final Drainage Clearance.

**D. Stormwater Disposal Criteria**

1. Unless otherwise approved in writing by the Drainage Administrator, off-site runoff from the rainfall event with a 1-percent probability of occurring in any given year (100-year event) peak discharge, conveyed through the development shall exit the development at the same historic location, direction and type (i.e. concentrated or sheet flow) or into an approved drainage way at lesser or equal rates, volumes and velocities. The water surface elevation and flow characteristics (including sediment load) shall not be modified.
2. On-site drainage shall be conveyed to the street or to a designated drainage easement with adequate outfall.
3. If runoff is to be conveyed by an underground drainage system, complete detailed plans shall be submitted to the Drainage Administrator.
4. Erosion mitigation shall be designed with all drainage structures.
5. Erosion protection shall not be constructed within the right-of-way without prior written approval from the Drainage Administrator and Pinal County Department of Public Works.

**E. Drywell Design Criteria**

1. If drywells are to be utilized for stormwater disposal, certification by an Arizona Registered Professional Engineer shall be required indicating that the drywells meet the provisions of the Arizona Department of Environmental Quality.
2. Drywells shall be used only for stormwater disposal and not for disposal or deposit of wastes or other contaminants.

3. Proof of drywell registration with the Arizona State Department of Environmental Quality shall be required prior to the approval of any plans or issuance of the Final Drainage Clearance.
4. Certification that the drywell meets the requirements of this Ordinance shall be submitted at the time of installation.

**F. Roadway Design Criteria**

1. To facilitate drainage, the design of roadways that may be in or are proposed for future inclusion into the Pinal County Highway Maintenance system, roadway design shall conform to the standards for roadways specified by Pinal County Public Works Department Standards.
2. Adequate drainage ways shall be constructed to convey the street design flow if the flow is designed to leave the public right-of-way. Such drainage ways shall be platted and/or dedicated through separate instrument as drainage easements or as separate tracts with maintenance provisions designated.
3. The Drainage Administrator may require construction of a culvert or bridge crossing over a natural drainage way. The facility type and sizing of the culvert or the bridge shall conform to the requirements set by the Pinal County Department of Public Works.
4. If roads are designed to convey runoff, the depth of flow shall be in accordance with Pinal County Public Works Department standards. . Any additional flow that results in a depth exceeding the Pinal County Public Works Department standards shall be removed from the roadway and conveyed in a separate drainage way or in an underground conveyance system. All inlets shall be designed with a clogging factor as specified by the Pinal County Public Works Department standards.
5. Each development site shall have a minimum of one all-weather access as defined by the following criteria.
  - a. Arterial Streets – Discharge from the 50-year design storm conveyed beneath the roadway, with the 100-year conveyed in combination of culvert and overland flow at depths less than 6-inches.
  - b. Collector Streets – Discharge from the 25 - year design storm conveyed beneath the roadway, with the 100-year conveyed in combination of culvert and overland flow at depths less than 6-inches.
  - c. Local Streets – Discharge from the 10 - year design storm conveyed beneath the roadway, with the 100-year conveyed in combination of culvert and overland flow at depths less than 8-inches.
6. The maximum outlet velocity for the flow exiting a culvert onto County rights-of-way shall not exceed 15 fps.
7. The Drainage Administrator may require erosion protection and cutoff walls at both the inlet and outlet ends of the culvert as well as any approved dip sections.

### G. Finished Floor Elevation Criteria

1. For any structure, the minimum finished floor elevation, shall be the higher of the following:
  - a. One (1) foot above the 100-year water-surface elevation located in any adjacent drainage facilities including, but not necessarily limited to: retention basins, constructed channels, drainage swales, valley gutters, or an adjacent regulatory floodplain. Should a building be located within or adjacent to more than one of these drainage features, the highest water surface elevation shall govern the finished floor elevation criteria
  - b. One (1) foot above the 100-year water surface elevation within any the adjacent streets.
  - c. One (1) foot above the highest finished grade point within ten feet of the foundation of the building.
  - d. One (1) foot above the 100-year hydraulic grade line of any adjacent storm drain component including, catch basin inlets, manholes and grates.
  - e. Fourteen (14) inches above the low outfall of the site.
  - f. The Drainage Administrator may require the minimum lowest floor elevation to be set higher than the criteria set forth in this section.
2. Finished floor elevations shall be referenced to a known benchmark.

### H. Erosion Hazard Setback Criteria

All watercourses, constructed or natural, shall have an erosion hazard setback defined for the purposes of providing access and stability of building foundations and footings. The erosion hazard setback also allows for natural sediment transport processes and meandering of the watercourse to occur without adversely affecting property or buildings. In development application types where an Arizona Registered Professional Engineer has not calculated the erosion hazard setback or provided a bank/erosion protection design, the minimum development setback from a structure is:

1. All watercourses, constructed or natural, conveying 100 year peak flows less than 200 cubic feet per second (cfs) shall have a minimum development setback of 20 feet from the top of the bank.
2. All watercourses, constructed or natural, conveying 100 year peak flows greater than 200 cubic feet per second (cfs) but less than 5,000 cubic feet per second (cfs) shall have a minimum development setback of 50 feet from the top of the bank.
3. All watercourses, constructed or natural, conveying 100 year peak flows greater 5,000 cubic feet per second (cfs) shall have a minimum development setback of 300 feet from the top of the bank.

4. Where the setback limit would fall within a designated floodway, the outer boundary of the floodway shall serve as the building setback. Under these criteria, any structure that would be considered as an encroachment into the floodway shall be constructed outside the limit of the floodway.

**I. Earth Fissure Criteria**

1. Prior to the issuance of the Preliminary Drainage Clearance, a copy of the current Arizona Earth Fissure Map from the Arizona Geological Survey, containing an overlay of the property boundaries shall be provided.
2. Site grading shall be such that runoff is not directed toward an earth fissure as part of the drainage design.
3. Confirmed Earth Fissures
  - a. Any confirmed earth fissure(s) found on or within 50 feet of the property boundaries or project area shall have an earth fissure investigation prepared and minimum development setback or structural mitigation established by a registered geotechnical engineer or registered geologist and approved by the Drainage Administrator.
4. Unconfirmed Earth Fissures
  - a. Any unconfirmed earth fissure(s) found on or within 100 feet of the property boundaries or project area shall have an earth fissure investigation prepared by a registered geotechnical engineer or registered geologist to confirm its exact location. If the fissure is confirmed to be on or within 50 feet of the property boundaries or project area, a minimum development setback or structural mitigation must be established by a registered geotechnical engineer or registered geologist and approved by the Drainage Administrator.
5. Written certification by the registered geotechnical engineer, civil engineer or registered geologist as to the compliance of the development with these criteria shall be required prior to the issuance of the Final Drainage Clearance.

**J. Erosion Mitigation**

1. Erosion of the ground in the area of discharge shall be prevented by the implementation of rip-rap, concrete aprons, non-erosive cutoff walls, erosion control mattresses, or other devices as approved by the Drainage Administrator.
2. The erosion mitigation measures shall be prepared as part of the engineering study sealed by an Arizona Registered Civil Engineer. The design of erosion mitigation measures shall be designed in accordance with Pinal County Public Works Department standards and is subject to approval by the Drainage Administrator.

**K. Landscaping Criteria**

1. If landscaping is proposed within a drainage system the engineer shall incorporate such landscaping into the hydraulic design of such a system. Landscaping plans shall be coordinated with the overall drainage design so as not to create a hazard to life and property.

**L. Clean Water Act Section 404 Compliance**

1. The design of any drainage facility shall meet the requirements set forth by Section 404 of the Clean Water Act in regards to the Waters of the United States as defined by the Army Corps of Engineers.
2. A statement sealed by an Arizona Registered Civil Engineer certifying compliance of Section 404 of the Clean Water Act shall be provided.

**M. Clean Water Act Section 402 Compliance**

1. The design and development of a parcel shall be in compliance with the current National Pollutant Discharge Elimination System (NPDES) Permit Program (Section 402 of the Clean Water Act).
2. Compliance with this section shall be in accordance with the current requirements set forth by the Arizona pollution discharge elimination system (AZPDES) program, under the authority of the Environmental Protection Agency
3. Compliance with this section shall be in accordance with Pinal County Public Works Department standards.

## CHAPTER 7: COMPLIANCE, VIOLATIONS, ENFORCEMENT

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### Section 7.1: Compliance

- A. Chapter Four (4) of this Ordinance sets forth the mandatory and discretionary duties and powers of the Drainage Administrator to enforce the provisions of this Ordinance to help ensure that the public health and safety is maintained. It is therefore the responsibility of any resident, property owner or applicant for a construction permit in Pinal County to submit necessary plans for construction of land development improvements. Each applicant shall also obtain a Final Drainage Clearance (if applicable as determined by the Drainage Administrator) to ensure that the construction of said land development improvements are built in accordance with the approved plans/drawings.
- B. The Drainage Administrator (or designee), at his/her discretion, may require the following compliance measures be established as a condition of approval of a Final Drainage Clearance.
1. Deed Restriction - The Drainage Administrator may require the recording of deed restrictions, including drainage easements, tracts, channels or common areas to be used for drainage purposes to be maintained by the property owner as necessary for compliance with this Ordinance. The recording of such deed restriction(s) shall appear on the final plat, site plan, lot split and/or upon chain of title for said property.
  2. Performance Assurance – For land development projects that require or utilize a subdivision plat, the Drainage Administrator may require financial assurances (performance bond) to ensure construction, completion or maintenance of approved drainage facilities. Assurance shall be released upon verification of compliance with approved plans and all provisions of this Ordinance.
  3. Dedication - The Drainage Administrator, Hearing Officer or Board of Supervisors may require, as a condition of issuance of a Final Drainage Clearance, Waiver or Variance, the dedication of land to the County necessary for construction of area drainage facilities constructed in accordance with a master drainage plan and/or development drainage plan/drawings if said drainage facilities emanate at least in part from the proposed property or is connected to a broader system of drainage facilities upon the proposed property to be developed. The amount of land requested for dedication shall be proportionate to the amount of runoff contributed by the proposed development parcel to the total runoff calculated for the master drainage plan or development drainage plan.

## Section 7.2 Violations of this Ordinance

### A. It is a violation of this Ordinance:

1. 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, retention basin, wall, fence or other structure or use that may affect any natural drainage or improved drainage design or drainage system without obtaining a Drainage Clearance from the Drainage Administrator;
2. For any person to place or allow the placement of fill material, rubbish, trash, litter, filth or debris or the growth of weeds or other vegetation that obstructs, retards, diverts the conveyance of flow of any natural or improved drainage system upon any private or public property located in the unincorporated areas of Pinal County;
3. For failure to maintain any natural drainage system or any drainage easement, tract, channel, basin or common area created or pursuant to this Ordinance;
4. For failure to obtain the required Drainage Clearance and/or final drainage inspection prior to obtaining a final Certificate of Occupancy for permits issued for the purpose of constructing commercial, educational, industrial, institutional developments, or multi-family dwelling units such as apartments and condominiums;
5. For failure to obtain the required floor/stem wall/foundation elevation inspection approval prior to securing a final building inspection for a single-family dwelling including mobile and manufactured homes, additions thereto and/or accessory buildings;
6. For any owner, builder or developer to fail to correct any deficiencies noted at the time of the final drainage inspection. A final drainage inspection approval shall be obtained within ninety (90) days of the date of the deficiency notice, final Building Inspection and/or occupancy of the dwelling unit, whichever is the longer period;

### B. Declaration of Public Nuisance

Violation of the requirements of this Ordinance shall constitute a public nuisance and will be subject to all remedies provided by law.

1. If a property owner fails to remove fill material, rubbish, trash, weeds, filth, debris or any other obstruction within thirty (30) days of the issuance of a Compliance Order or hearing officer ruling, that has determined obstructs, retards or diverts a natural or improved drainage system, the Drainage Administrator may remove or cause for the removal of the fill material, rubbish, trash, weeds, filth, debris to abate the condition upon a determination that the condition presents a threat to public health, safety or welfare.

2. The charge for the removal and/or abatement of the public health violation shall be billed to the property owner and collected by the County Attorney by use of all appropriate legal remedies, including but not limited to a lien against the property for the costs of removal plus attorney's fees and costs of collection.

C. Civil Remedies

Pursuant to A.R.S. 11-251.05 (A), violations of this Ordinance are punishable by fine, which shall not exceed the amount authorized for Class 1 misdemeanors. Each and every day during which the violation of this Ordinance occurs shall constitute a separate offense. The County Attorney or any person who may be or has been damaged by the violation of any provision of this Ordinance may institute legal action to enforce the provisions of this Ordinance and/or seek damages and attorney's fees for violation of this Ordinance.

### **Section 7.3 Abatement & Enforcement of Violations**

#### **A. Inspection**

1. The Drainage Administrator is authorized to investigate all complaints of suspected violations of this Ordinance.
2. The Drainage Administrator or his or her designee may enter onto private property, not including the interior of any buildings, during normal business hours, as necessary to conduct inspections to determine if violations exist. In the event access to a property is denied the Drainage Administrator or his/her designee may present an affidavit setting forth the basis for suspecting a violation of this Ordinance and seek an administrative search warrant to enter the property. Property inspections will be conducted in compliance with A.R.S. § 11-1603.
3. If the County and its agents are denied access for inspection, the Drainage Administrator may apply for an administrative search warrant from a local court of general jurisdiction and shall be served by a certified peace officer.

#### **B. Notice of Violation**

1. When the Drainage Administrator or his designee has reason to believe a violation of this Ordinance has occurred or is occurring he/she shall issue a Notice of Violation to the owner, occupant, manager or responsible party.
2. The written Notice of Violation shall describe the following:
  - a. State the section of this Ordinance, other regulations or laws or permit terms that have been violated.
  - b. Identify the nature of the violation and any actions required to achieve compliance required by this Ordinance, including any additional information or engineering analyses required to show compliance.

- c. Establishing that the notice is an order to cease and desist, effective on the date served.
  - d. Providing a time schedule for corrective actions for compliance, or to request a hearing.
  - e. Identifying the consequences for failure to take corrective action, including the imposition of monetary penalties.
3. Notices of Violation may be served by hand, by posting a notice at the site, and/or through certified mail with return receipt requested.

### **C. Response to Notice of Violation**

The responsible party has ten (10) business days to respond to the Notice of Violation. The respondent may do one of the following:

1. Admit the allegations by:
  - a. Appearing in person, by attorney, or by designated representative at a time and location given in the Notice of Violation and admitting the allegations, agreeing to acquire any required permit and to remedy the violation, damage, or interference in accordance with the terms determined by the Drainage Administrator, or
  - b. Mailing or delivering to the Drainage Administrator a form provided with the Notice of Violation or a written statement signed by the respondent in which the respondent admits the allegations, agrees to acquire any required permit and to remedy the violation, damage, or interference in accordance with the terms determined by Drainage Administrator.
2. Deny allegations by:
  - a. Appearing in person, by attorney, or by designated representative at a time and location given in the Notice of Violation and denying the allegations and requesting a hearing, or
  - b. Mailing or delivering to the Drainage Administrator a form provided with the Notice of Violation or a written statement signed by the respondent denying the allegations and requesting a hearing to appeal the Notice of Violation in Superior Court.

### **D. Compliance Orders**

1. If the responsible party fails to correct a violation and either fails to request a hearing within ten (10) business days or is found responsible for the violation after a hearing, the Drainage Administrator may issue a Compliance Order stating the actions necessary to correct the violation and imposing a civil penalty. Compliance Orders may be served by hand, by posting a notice at the site, and/or through certified mail with return receipt requested. Penalties imposed may not exceed the maximum limitation for a fine for a Class I misdemeanor.



2. The Drainage Administrator may record the Compliance Order with the Pinal County Recorder's Office to appear in the chain of title of the affected property.
3. For any violation which presents an ongoing threat to life or property the Drainage Administrator may, in addition to other remedies, authorize the County Attorney to seek an order is Superior Court requiring the responsible party to correct the violation.

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## CHAPTER 8: WAIVERS & VARIANCES

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### Section 8.1 Drainage Waivers

The Drainage Administrator shall hear and decide requests for Drainage Waiver from the requirements of this section.

- A. Any request for a Drainage Waiver must be submitted in writing to the Drainage Administrator. The written request must cite the specific standard requesting to be waived or reduced and must also include a justification for the need for such a waiver. Justification may be in the form of an engineering analysis, geotechnical testing or as otherwise determined by the Drainage Administrator. Before granting a Drainage Waiver the Drainage Administrator shall find that each of the following criteria is met:
1. The grant will not result in an increase in the 100-year peak flow, water surface elevation or discharge; and
  2. By 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; and
  3. The waiver request is the minimum necessary, considering the flood hazard, to afford relief; and
  4. There is a showing of good and sufficient cause; and
  5. Granting the waiver will not result in additional threats to public safety, health, welfare, or extraordinary public expense, create a nuisance, the victimization of or fraud on the public and that the waiver does not conflict with existing local laws or ordinances.
- B. The Drainage Administrator may attach such conditions or restrictions to the granting of a waiver as the Drainage Administrator determines necessary to reduce or eliminate potential threats to public safety, health, welfare or to public or private property resulting from the granting of the waiver. The applicant may be required to post bonds, assurances or other security to guarantee compliance with the conditions and restrictions imposed.
- C. The property shall be posted a minimum of fifteen (15) business days prior to the Drainage Administrator's decision.

### Section 8.2 Variances

- A. An owner of real property located within the unincorporated area of the county may request a Variance approval form the Drainage Administrator.
- B. The Drainage Administrator or Board of Adjustment allow a variance from the terms of this Ordinance if, owing to peculiar conditions, a strict interpretation would work an

unnecessary hardship and if in granting the variance the general intent and purposes of the zoning ordinance will be preserved.

- C. A request for variance shall be filed with the Board and will specifically state the variance being requested including the section number within the Ordinance.
- D. The meeting will be noticed and scheduled in accordance with Section 501 above.
- E. The Board shall not recommend approval of a variance unless all of the following are met:
  - 1. Granting of the variance will not result in an increase in the 100-year peak flow or discharge or water surface elevation.
  - 2. By 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 properties.
  - 3. The variance request is the minimum necessary, considering the flood hazard, to afford relief.
  - 4. There is a showing of good and sufficient cause.
  - 5. Failure to grant the variance would result in exceptional hardship to the applicant.
  - 6. Granting the variance will not result in additional threats to public safety, health, welfare or extraordinary public expense, create a nuisance, the victimization of or fraud on the public and that the variance does not conflict with local laws and ordinances.
  - 7. Granting the variance will still meet the general intent and purpose of the Ordinance.
- F. The Board shall hear and decide all variance requests. Prior to granting a variance the Board must find that the variance request meets all the criteria in Subsection 8.2 (E) 2 above.
- G. The Board may attach restrictions or impose conditions to the granting of the variance to reduce or eliminate potential threats to public safety, health, welfare or to public or private property, resulting from the granting of the variance. The Board may require the posting of bonds, assurances or other securities deemed necessary to guarantee compliance with conditions and restrictions attached to the variance.
- H. If the Board has cause to believe that after the approval of the variance, any of the stipulations or conditions may have been violated, it may set a hearing for the purpose of determining whether to revoke the variance for such a violation. The Board may revoke the variance upon finding a violation of the stipulations or conditions, or it may grant a limited time to allow for the correction of the violation in order to avoid revocation of the variance.