

PIMA COUNTY REGIONAL FLOOD CONTROL DISTRICT
OVERALL PROJECT CONDITIONS AND DRAINAGE REPORT REVIEW CHECKLIST

This checklist is to assist Pima County Regional Flood Control District staff in completing a review of project drainage information and to help assure consistent reviews. The checklist is provided as a courtesy to the public. It is not a substitute for professional judgment or complete text of codes, policies and design standards. Submitting the items summarized by the checklist does not insure project approval. Additional site-specific information may be required.

Project Name _____ Project Number _____

REFERENCE DRAINAGE AND REGULATORY FLOODPLAIN INFORMATION CHECK, complete as applicable

FEMA Panel Number _____ Effective Date _____ Zone _____
 LOMR Case No. _____ Effective Date _____
 CLOMR Case No. _____ Effective Date _____
 RFCD Special Study Complete _____
 RFCD Special Study In Progress _____
 District Basin Management Study Complete _____
 Developer Mapped Floodplain Project Information _____
 Local Sheet Flood Area Depth _____
 Transportation Project Number _____
 District Improvement Plans _____
 Adjacent Developments _____
 Previously Approved Permits for the site _____
 Aerial Photo Check for Overall Characteristics _____

REZONING/SPECIFIC AREA PLANS/COMPREHENSIVE PLAN AMENDMENTS/CONDITIONAL USE PERMIT?

Yes _____ No _____
 Case No. _____ Flood Control Conditions Checked _____

DRAINAGE COMPLAINTS? Yes _____ No _____
 If yes, recent complaints checked _____

PRE-SUBMITTAL AGREEMENTS? _____ **SDRC?** _____
 If yes, documented in file _____ If yes, minutes in file _____

DRAINAGE REPORT REQUIREMENTS

General

_____ Engineer's Seal on Drainage Report
 _____ Cover Sheet follows TECH-114
 _____ General Location Description
 _____ Location Map
 _____ Description of Proposed Development
 _____ Description of Existing Conditions
 _____ Description of Upstream and Downstream Watershed Conditions
 _____ Relevant Drainage Features 16.36.020
 _____ Aerial Photo
 _____ Description of FEMA Zones
 _____ Proposed alterations to FEMA Mapping. CLOMR Requested.
 _____ (16.16.070, 16.36.040)
 _____ FEMA Firmette with project location show
 _____ Description of Special Studies
 _____ Description of Regulatory Floodplains/Sheet Flood Areas
 _____ Other Previous Studies Information
 _____ Critical or Balanced Basin
 _____ Site-specific Detention/Retention Requirements?
 _____ 404 Compliance Statement

_____ Summary and Conclusions
 _____ Engineer's Statement
 _____ References

Procedures

_____ Description of methodology and assumptions
 _____ Previous Studies to be used? Engineer verifies discharges used.

Hydrology & Hydraulics

Offsite

_____ Description of watersheds
 _____ Soils Map
 _____ Watershed Map
 _____ Rainfall Data
 _____ Peak Discharges with calculations
 _____ Table of CP's, Drainage Areas, Peak Discharges
 _____ Exhibit with entering and exiting CP's (16.36.030)
 _____ Adjacent Plans/Plats Provided
 _____ Topography consistent with other available sources

Onsite/Existing

_____ Description of Site-Specific Conditions
 _____ Peak Discharges with calculations
 _____ Table of CP's, Drainage Areas, Peak Discharges
 _____ Drainage Exhibit
 _____ On-site Drainage Watershed Boundaries
 _____ Drainage Infrastructure
 _____ Entering/Exiting CP's
 _____ Regulatory Floodplains
 _____ Erosion Hazard Setbacks
 _____ Cross-sections with WSEs for Regulatory Floodplains
 _____ Regulatory Sheet Flood Areas; limits and depths
 _____ Modeling Files

Onsite/Proposed

_____ Description of Site-Specific Conditions
 _____ Peak Discharges with calculations
 _____ Table of CP's, Drainage Areas, Peak Discharges
 _____ Drainage Exhibit
 _____ Drainage Area Boundaries
 _____ Drainage Infrastructure
 _____ Entering/Exiting CP's
 _____ CPs for onsite drainage infrastructure
 _____ Regulatory Floodplains (16.36.020)
 _____ Erosion Hazard Setbacks (16.28, TECH-002)
 _____ Cross-sections with WSEs for Regulatory Floodplains
 _____ Average Depth of Flow for Sheet Flood Areas
 _____ Modeling Files
 _____ Encroachment (16.26.020 C)
 _____ Developed Conditions approximate Existing
 _____ Conditions at Property Boundaries, comparison table relating all proposed CP's to existing CP's
 _____ Clear Drainage Pattern to Basins and Structures; topo and spot elevations; high and low points
 _____ Street Flows and Street Capacity Cross-sections (SDSS)
 _____ All-weather access, dv^2
 _____ P.A.A.L. depth does not exceed 1 foot
 _____ First Flush Calculations
 _____ Retention/Detention (DSSDR, 16.36.100, 16.48)
 _____ Detention and Retention Volumes
 _____ Routing for Detention and Detention with Retention Basins
 _____ Runoff Volumes to Retention Only Basins; if volume exceeds Basin volume; outflow shown
 _____ 100-year water surface elevation; Q100 in and out
 _____ Top and bottom elevation
 _____ Adjacent structure FFE, if applicable
 _____ Near structures require engineer recommendation
 _____ Minimum .5% bottom slope for detention only; flat bottom for retention
 _____ Cross-sections of basin as appropriate
 _____ Details/profiles of structures
 _____ Security Barriers (TECH-008)
 _____ Embankment details (DSSDR)
 _____ Underground emergency overflow, maintenance covenant
 _____ Waiver Request follows DSSDR
 _____ In-lieu Fee Calculation
 _____ Scuppers
 _____ Curb Openings
 _____ Catch Basins
 _____ Storm Drain
 _____ Culverts
 _____ Headwater
 _____ Inlet/Outlet Protection

_____ Sediment Transport Ratios
 _____ Channels, Swales (16.36.120, DCDC V-11 to V-24, SMDDFM, Chapters 8 and 9)
 _____ Rip-Rap (DCDC V-6, COT 9.3.3)
 _____ Q_{100} shown at all drainage structures
 _____ Details and profiles shown
 _____ Walls and Fences (TECH-005)
 _____ Elevation
 _____ Wall Openings

Maintenance and Inspection Protocols

_____ Format usable by owner