

Drainage Report Required Contents

DRN-006

Purpose: To identify requirements and a submittal checklist for drainage reports.

DRAINAGE REPORTS: Drainage reports shall be prepared with sufficient clarity to indicate the nature and extent of proposed drainage improvements. Drainage improvements must be designed according to the Sonoma County Water Agency's Flood Control Design Criteria and to Sonoma County Code §11.16.040 and §11.16.050. Drainage improvements must also demonstrate no adverse impacts to existing and proposed structures and to adjacent properties.

Drainage reports for engineered grading may only be prepared by a civil engineer. Drainage reports for regular grading and all other permit applications may be prepared by the property owner, a civil engineer or an architect (if that architect also designed and prepared the grading or site plans for the same development). The cover sheet of drainage reports prepared by property owners shall include the property owner's signature and a note stating acceptance and responsibility of the drainage report by the property owner.

Drainage reports shall include the following items, where applicable:

<p>Cover Sheet</p> <ul style="list-style-type: none"><input type="checkbox"/> Name of project & site address<input type="checkbox"/> Assessor's Parcel Number(s)<input type="checkbox"/> Property owner name & contact information<input type="checkbox"/> Report preparer name & contact information<input type="checkbox"/> Seal & signature of civil engineer or architect<input type="checkbox"/> Date prepared <p>Project Narrative</p> <ul style="list-style-type: none"><input type="checkbox"/> Description/scope of project<input type="checkbox"/> Methodologies used to prepare drainage report & analysis<input type="checkbox"/> Assumptions pertinent to drainage design<input type="checkbox"/> Disclosure of existing on-site & off-site drainage conditions<input type="checkbox"/> Impacts of proposed drainage design<input type="checkbox"/> Conclusion statement addressing adequacy of design <p>Hydrology & Hydraulic Calculations</p> <ul style="list-style-type: none"><input type="checkbox"/> Pre- & post-development analysis<input type="checkbox"/> Hydrology calculations for all pertinent drainage areas<input type="checkbox"/> Hydraulic calculations for proposed drainage improvements such as swales, culverts, inlets, curbs, gutters, & pipes<input type="checkbox"/> Hydraulic calculations for existing drainage improvements affect by drainage design<input type="checkbox"/> Hydraulic Grade Line (HGL) calculations for storm drain pipe network systems<input type="checkbox"/> Explanation of established or determined starting HGL<input type="checkbox"/> Post-development storm water levels & pollutant discharges shall be limited in compliance with PRMD's best management practices guide	<p>Hydrology Maps</p> <ul style="list-style-type: none"><input type="checkbox"/> All items listed under cover sheet requirements<input type="checkbox"/> Full size sheet no greater than 24" x 36"<input type="checkbox"/> Drawn to an engineering scale no less than 1" = 100'<input type="checkbox"/> North arrow & scale (written & graphic)<input type="checkbox"/> Property lines, right-of-ways, & easements<input type="checkbox"/> Contours & elevations labeled as existing & proposed<input type="checkbox"/> Structures labeled as existing & proposed<input type="checkbox"/> Finished floor elevations of all relevant structures<input type="checkbox"/> Pre- & post-development drainage areas for on-site & off-site hydrology analysis clearly delineated & labeled<input type="checkbox"/> Points of concentration clearly shown & labeled<input type="checkbox"/> Drainage improvements clearly labeled as existing & proposed<input type="checkbox"/> Elevations for inverts, flowlines, top of grates, high points<input type="checkbox"/> Drainage specifications (e.g. size, material, length, slope)<input type="checkbox"/> Structure list for large networks <p>Other Required Documentation</p> <ul style="list-style-type: none"><input type="checkbox"/> The 100-year overland release route/map including areas of existing & anticipated inundation<input type="checkbox"/> Projects within the Flood Prone Urban Area shall include documentation demonstrating the proposed project will not adversely affect drainage<input type="checkbox"/> Projects within Special Flood Hazard Areas shall include documentation demonstrating the proposed project will not cause a reduction in flood carrying capacities (no net fill)<input type="checkbox"/> Any other supporting or supplemental data, documentation or calculations relevant to the proposed project
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For questions regarding drainage report required contents, please visit or call PRMD's Grading & Storm Water customer service cubicle at (707) 565-2098.

Sonoma County Permit and Resource Management Department

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