

PURPOSE: To provide submittal requirements for grading permit applications and a checklist for grading plans.

GRADING PERMIT APPLICATION: Grading permit applications shall contain the following items.

Minimum Submittal Requirements for Grading Permit Applications:

- ☐ A complete digital submittal via Permit Sonoma web site
- ☐ Grading plan as flattened PDF
- ☐ Drainage Report as flattened PDF (see Drainage Report Required Contents form for more information)
- ☐ Plan Check Fee
- ☐ A completed Grading Permit Supplemental Information Form

The following documents may be required due to nature of project:

- ☐ Letter of Authorization signed by the property owner
- ☐ Soils Report as PDF **NR**

Grading Plans: Grading plans shall be of sufficient clarity to indicate the nature and extent of the work proposed and show in detail they will comply with the provisions of the Sonoma County Code (SCC) and all relevant laws, ordinances, regulations, and conditions of approval. Grading work is designated as either "Regular Grading" or "Engineered Grading". Please refer to the [Frequently Asked Questions about Grading and Storm Water website](#) to determine grading designations. Grading plans for engineered grading may only be prepared by a civil engineer. Grading plans for regular grading may be prepared by the property owner or a licensed professional acting within the scope of their license. A licensed professional is an architect, civil engineer, landscape architect, professional geologist, or registered professional forester. A valid California seal of professional license and signature is required on all sheets for plans prepared by a licensed professional.

Grading plans shall include the applicable items listed below. Additional information may be required by plan review staff in order to ensure compliance with SCC or to clarify the nature and extent of the work proposed.

Cover Sheet

- ☐ Name of project & site address
- ☐ Vicinity map & location map of site
- ☐ Assessor's Parcel Number(s)
- ☐ Purpose statement for project (Regular or Engineered Grading)
- ☐ Property owner name & contact information
- ☐ Plan preparer name & contact information
- ☐ Sheet index
- ☐ Cut & fill table
- ☐ Amount of disturbed area
- ☐ Amount of new impervious surface
- ☐ Reference datum & benchmark(s)

Grading Plan / Site Plan

- ☐ Limits of grading work clearly delineated
- ☐ Dimensions to property lines & buildings **NR**
- ☐ Grades of proposed slopes
- ☐ Cross sections of proposed building pads **NR**
- ☐ Cross sections of cuts & fills
- ☐ Areas requiring keying & benching delineated **NR**
- ☐ Details & recommendations from soils report **NR**

Drainage Improvement Plan **NR**

- ☐ Drainage features identified as existing & proposed
- ☐ Subdrains identified as existing & proposed
- ☐ Elevations of inverts, flowlines, top of grates, high points, etc.
- ☐ Drainage specifications (e.g. size, material, length, slope)
- ☐ Structure list for large networks
- ☐ Cross sections of existing waterways
- ☐ Details & recommendations from drainage report

Erosion Prevention & Sediment Control Plan

- ☐ Best management practices (BMP's)
- ☐ BMP details & specifications
- ☐ Protective fencing for waterways & sensitive areas **NR**
- ☐ Limits of disturbed areas (total work) clearly delineated including temporary features such as BMP locations, staging areas, material stockpiles, construction accesses, etc.

General (shall be shown on all applicable sheets)

- ☐ Plan size no greater than 24 inches x 36 inches
- ☐ Seal & signature of licensed professional
- ☐ Date of plan preparation
- ☐ Identification of sheet page # of # in lower right corner
- ☐ Space for permit number & approval stamps in lower right corner
- ☐ Drawn to an engineering scale no less than 1 inch = 40 feet
- ☐ North arrow & scale (written & graphic)
- ☐ Legend & list of abbreviations
- ☐ Property lines identified on all pertinent views & details
- ☐ Right-of-ways identified on all pertinent views & details **NR**
- ☐ Easements identified on all pertinent views & details **NR**
- ☐ Contours & elevations identified as existing & proposed
- ☐ Buildings identified as existing & proposed
- ☐ Finished floor elevations of all relevant buildings **NR**
- ☐ Sonoma County standard notes for grading permits
- ☐ Required Standards on separate plan page
- ☐ Permit number on plans
- ☐ All other pertinent grading construction notes & details

Driveways & Roads

- ☐ Centerline stationing (construction alignment)
- ☐ Profiles with existing & proposed grades
- ☐ Cross sections (minimum of every 50 feet)
- ☐ Typical structural section detail(s)
- ☐ Driving surface cross slopes
- ☐ Traffic control plan if any work takes place impacting any private road **NR**

Other Relevant Information

- ☐ Assessor's Parcel Numbers for adjacent lands
- ☐ Any applicable setback requirements
- ☐ Special flood hazard areas or geologic hazard areas delineated **NR**
- ☐ Wetlands or sensitive areas delineated **NR**
- ☐ NPDES MS4 permit provisions met **NR**
- ☐ Reservoir standards met **NR**
- ☐ Terrace standards met **NR**
- ☐ Non-storm drain utilities information (for reference only) **NR**
- ☐ Wells & septic systems identified as existing & proposed (for reference only).

DRAINAGE REPORT REQUIRED CONTENTS

GRD21-0205 PC #1

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:

Cover Sheet

- ☐ Name of project & site address
- ☐ Assessor's Parcel Number(s)
- ☐ Property owner name & contact information
- ☐ Report preparer name & contact information
- ☐ Seal & signature of civil engineer or architect
- ☐ Date prepared

Project Narrative

- ☐ Description/scope of project
- ☐ Methodologies used to prepare drainage report & analysis
- ☐ Assumptions pertinent to drainage design
- ☐ Disclosure of existing on-site & off-site drainage conditions
- ☐ Impacts of proposed drainage design
- ☐ Conclusion statement addressing adequacy of design

Hydrology & Hydraulic Calculations

- ☐ Pre & post development analysis
- ☐ Hydrology calculations for all pertinent drainage areas
- ☐ Hydraulic calculations for proposed drainage improvements such as swales, culverts, inlets, curbs, gutters, & pipes
- ☐ Hydraulic calculations for existing drainage improvements affect by drainage design
- ☐ Hydraulic Grade Line (HGL) calculations for storm drain pipe network systems
- ☐ Explanation of established or determined starting HGL
- ☐ Post-development storm water levels & pollutant discharges shall be limited in compliance with Permit Sonoma's best management practices guide

Hydrology Maps NR

- ☐ All items listed under cover sheet requirements
- ☐ Full size sheet no greater than 24-inches x 36-inches
- ☐ Drawn to an engineering scale no less than 1-inch = 100-feet
- ☐ North arrow & scale (written & graphic)
- ☐ Property lines, right-of-ways, & easements
- ☐ Contours & elevations labeled as existing & proposed
- ☐ Structures labeled as existing & proposed
- ☐ Finished floor elevations of all relevant structures
- ☐ Pre- & post-development drainage areas for on-site & off-site hydrology analysis clearly delineated & labeled
- ☐ Points of concentration clearly shown & labeled
- ☐ Drainage improvements clearly labeled as existing & proposed
- ☐ Elevations for inverts, flowlines, top of grates, high points
- ☐ Drainage specifications (e.g. size, material, length, slope)
- ☐ Structure list for large networks

Other Required Documentation NR

- ☐ The 100-year overland release route/map including areas of existing & anticipated inundation
- ☐ Projects within the Flood Prone Urban Area shall include documentation demonstrating the proposed project will not adversely affect drainage
- ☐ 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)
- ☐ Any other supporting or supplemental data, documentation or calculations relevant to the proposed project

For questions regarding drainage report required contents, please visit or call Permit Sonoma's Grading & Storm Water customer service cubicle at (707) 565-2268.