

CITY OF ANAHEIM
DEPARTMENT OF PUBLIC WORKS
SUBDIVISIONS SECTION

HILLSIDE GRADING PLAN PROCEDURES

TABLE OF CONTENTS PAGE

I. GENERAL

A. Hillside grading defined

B. Bonds

C. Agreements

II. INITIAL SUBMITTAL

III. GRADING PLAN SHALL INCLUDE

IV. DRAINAGE REPORTS

V. EROSION AND SEDIMENT CONTROL PLANS

VI. SPECIMEN TREE REMOVAL

VII. EQUESTRIAN AND HIKING TRAILS

VIII. PLAN CHECKING

A. First plan check

B. Public hearing and conditions of approval

C. Subsequent submittals

IX. GRADING PLAN APPROVAL

A. Signature

B. Grading permit

X. REVISIONS

XI. AS GRADED CERTIFICATION #9:

A. Prior to building permit

B. Prior to occupancy

C. Mass grade certification

XII. PLOT PLANS (EXHIBITS ARE PDF FILES)

XIII. EXHIBITS (EXHIBITS ARE PDF and/or .DWG FILES)



You will need the Acrobat Reader to view some of these documents. If you do not have Acrobat Reader, [click here](#) to download it.

[EXHIBIT A 1 IN .DWG](#) - STANDARD CITY TITLE BLOCKS - G1-HS (TITLE SHEET)

[EXHIBIT A 2 IN .DWG](#) - STANDARD CITY TITLE BLOCKS - G2 (OTHER SHEETS)

[EXHIBIT B](#) - GENERAL NOTES

[EXHIBIT C](#) - DRAINAGE DESIGN CRITERIA CHART



[EXHIBIT D](#) - PAD CERTIFICATION LETTER



[EXHIBIT E](#) - FINAL AS GRADE CERTIFICATION



[EXHIBIT F 1](#) - BUILDING DIVISION PLOT PLAN REQUIREMENTS



[EXHIBIT F 2](#)



[EXHIBIT F 3](#)



[APPENDIX 1](#) - TREES WITHIN SCENIC CORRIDOR OVERLAY ZONE



[APPENDIX 2](#) - ENVIRONMENTAL INFORMATION FORM



[APPENDIX 3](#) - INITIAL STUDY FORM



HILLSIDE GRADING PLAN PROCEDURES

I. GENERAL

A. HILLSIDE GRADING DEFINED

A hillside grading plan and grading permit will be required when the grading exceeds 100 cubic yards cut or fill and would involve either:

- 1) A cut or fill of more than 3' in vertical height below or above natural ground.
- 2) A summation of cut and fill which amounts to more than 5 feet.
- 3) An area where the natural gradient of the site is more than 5:1 (horizontal to vertical).
- 4) A location in the city designated as a "Hillside Area" by the City Engineer (E/O Newport Freeway and S/O Santa Ana Canyon Rd).

Grading plans not within the above guidelines will not require a grading permit, but shall be submitted for plan review (two prints) and must include earth work calculations based on the end areas method, with cross sections.

B. BONDS

Security will be required for all hillside grading plans in the form of a surety bond, letter of credit or cash deposit. The Grading Bond will be based on 30% of the cost of moving the largest amount of either cut or fill. The Landscape and Irrigation bond will be 100% of the cost of landscaping the slopes greater than 5 feet high. The minimum bond amount is \$10,000.

The Grading Bond will be released at the time of Final As Grade Certification. To obtain release of the Landscape and Irrigation Bond, the landscape architect must submit a letter of certification that the soils, additives and amendments, weed control, planting of the slopes and the installation of the irrigation system comply with the approved plans and to all provisions of Title 17. The bond will be released one year after receipt of this certification if an inspection of the site determines that the landscaping has become permanently established.

C. AGREEMENTS

Agreements with adjacent property owners will be required for grading, drainage, ingress and egress, community driveways, or encroachment outside the property boundaries. All agreements must be approved by the City and a conformed copy of the recorded document shall be submitted prior to approval of the plan.

II. INITIAL SUBMITTAL

The initial submittal of hillside grading plans shall consist of the following:

1. Eleven (11) copies of the grading plan including Erosion Control Plan on a sheet size 24" X 36" drafted at a legible scale and signed by a Registered Civil Engineer (Engineer's name, RCE number and expiration date are required for plan submittal). The plans shall be folded to 9" X 12" with the title and plan number visible. Shading will not be accepted, cross-hatching will be allowed if it does not obscure information on the plans. The title sheet shall include the standard information blocks shown on Exhibit A.
2. A filing fee and checking and inspection deposit in the amount approved by City Council.
3. Concurrent submittal of street, traffic signal, public sewer and storm drain improvement plans when required for the subsequent development of the property. Private street and private storm drain improvements may be shown on the grading plan.
4. Two (2) copies of a soils and geological report signed by a Registered Geotechnical Engineer or a Registered Soils Engineer and Registered Geological Engineer.
5. An "Environmental Information" form filled out and signed by the developer or his representative
6. Each property owner's name and address within 300 feet of the exterior boundaries of the site on typed self-adhesive address labels, two (2) copies of this list, and a letter verifying that the names listed are the current property owners.
7. Drainage study, with hydrology calculations, map, and hydraulic calculations.
8. Crib wall calculations and specifications, if applicable.

Incomplete plans will not be reviewed or processed, the engineer will be notified and the plans will be returned.

III. THE GRADING PLAN SHALL INCLUDE THE FOLLOWING:

1. The site address (obtain from the building department).
2. Name, address and telephone number of the engineer and developer.
3. [City bench mark](#) on each sheet. Elevations shall be based on field survey or aerial topo, and North American Vertical Datum (NAVD 1988). No assumed elevations, partial elevations or equations will be accepted. The county bench mark is only accepted when City bench mark has not been established.
- 4) Quantity of cut and fill, maximum depth of cut and fill and area of disturbed soil.
- 5) Civil Engineer's certification on title sheet (see Exhibit A). Engineer shall stamp and sign each sheet.

- 6) City signature block (see Exhibit A).
 - 7) Vicinity map and/or location map adequately indicating the site location.
 - 8) General Notes (see Exhibit B).
 - 9) Appropriate Environmental Assessment:
 - (Mitigated) Negative Declaration by City Engineer (date)
 - EIR No. Certified by City Council (date).
 - Supplement/Addendum No. to EIR No., by City Engineer (date)
 - 10) Property lines and dimensions of the property.
 - 11) Location of any buildings or structures on the property or within 15 feet of the property.
 - 12) Existing topographical features including elevations and contours on the property and 50 feet beyond the property lines to establish drainage patterns.
 - 13) Proposed elevations and contours.
 - 14) Details of any drainage devices and protective devices to be constructed in connection with or as part of this plan, unless a City of Anaheim Standard Detail applies.
 - 15) Typical sections through property lines and slopes.
 - 16) All specimen trees on the site.
- All plans shall conform to Title 17.06 of the Municipal Code and the City's grading policies.

GRADING PLANS FOR LESS THAN FIVE (5) LOTS

When possible, grading plans for less than five lots should include the following items. This will eliminate the need for a plot plan.

- 1) Building footprint and roof overhangs.
- 2) Finish surface elevations.
- 3) Location and elevation of drainage swales.
- 4) Set backs from building to property lines.
- 5) Set backs from building to top or toe of slopes.
- 6) Add to engineer's certification (III.5) "the plan conforms to the City of Anaheim ordinances and/or policies regarding building set backs and lot drainage." (see Exhibit A)

IV. DRAINAGE REPORTS

Drainage reports are required for all projects involving proposed drainage structures, accepting water from off-site properties, draining to adjacent properties, or when required by the plan checker for other reasons.

The drainage report shall include:

- 1) A hydrology map showing the drainage basin(s), the site of proposed grading, and any proposed drainage structures.
- 2) A summary of the hydrology and any proposed drainage structures.
- 3) Hydrology calculations based on the latest edition of the Orange County Hydrology Manual. See the Drainage Design Criteria Chart (Exhibit C) for storm intensity requirements.
- 4) Hydraulic calculations for all drainage facilities.

V. EROSION AND SEDIMENT CONTROL PLANS

An Erosion and Sediment Control Plan is a part of Grading Plan and is required for any grading. The

plan shall be updated each year, prior to October 15, to reflect the conditions of the site during that rainy season.

A duplicate of the grading plan may be used if adequately screened. Minimum requirements of the plan are outlined in the Grading Design Manual.

Erosion and Sediment Control Plan is a part of Grading Plan and will be reviewed and approved with grading plan.

VI. SPECIMEN TREE REMOVAL

All specimen trees as defined in Section 18.18.040 (Tree Preservation) of the Municipal Code shall be shown on the grading plan with a note to either remove or protect such trees. Before any specimen tree is removed, an Application to Destroy Specimen Trees must be approved. The application is filed with the Planning Department and, depending on the reason for removing such trees, may require a determination by the Planning Commission or City Council. An Application to Destroy Specimen Trees must be approved prior to approval of the grading plan. The number of the approved Application to Destroy Specimen Trees shall be noted on the grading plan in the lower left hand corner of the first sheet. The grading plan shall be reviewed by the Planning Department to verify that the specimen trees marked for removal are in conformance with the approved application.

VII. EQUESTRIAN AND HIKING TRAILS

Equestrian and hiking trails shall be graded and constructed on the grading plan in conformance with the Anaheim General Plan and the approved tentative map. The final alignment and design of the trail shall be approved by the Park Planner, Parks Department, when the grading plan is distributed for review. All trail improvements shall be in conformance with Standard Detail No. 603 and a sufficient easement (minimum 10 feet) shall be dedicated to the City of Anaheim on the final map. The trail shall be maintained by the Homeowner's Association as required by the conditions of approval for the map.

VIII. PLAN CHECKING

A. FIRST PLAN CHECK

Plans will be scheduled for plan checking in the order they are received. The first plan check will be thorough and every attempt will be made to mark all plan deficiencies (except in those cases where the plan is incomplete or unclear). The design engineer will be notified as soon as the plan check is complete and ready for pick-up, approximately 3-4 weeks from the time of submittal.

When the plan checking backlog exceeds an estimated 3 weeks, the grading plan may be sent to a consulting engineer that has contracted with the City. All checking done by a consulting engineer will be returned to the City for review before being returned to the design engineer. The design engineer will be notified as soon as the plan check is complete and ready for pickup.

All plan checks will be returned with a letter listing items to be submitted with the next plan check. Items marked "required for further processing" must be submitted with the next plan check.

B. PUBLIC HEARING AND CONDITIONS OF APPROVAL

A public hearing is required for all grading plans in accordance with Anaheim Municipal Code 17.06.047. The hearing will be held approximately six weeks after the plan is accepted for plan checking. The City Engineer holds hearings every Monday, except holidays.

C. SUBSEQUENT SUBMITTALS

Corrected grading plans will not be accepted for rechecking when items "required for further processing" are missing. It shall be the responsibility of the engineer and/or developer to submit all items together with the corrected plans and previous check print.

Subsequent plan checks will be completed in approximately three weeks. The previous check print will be used as a guide for rechecks, the entire plan will be rechecked only in instances where the first check was incomplete or unclear. The engineer will be notified as soon as the plan check is complete and ready for pick up.

In an effort to expedite the project, the Associate Engineer assigned to the project will contact the developer and request a meeting with the design engineer and the developer if the plans are not ready for approval after the third plan check.

IX. GRADING PLAN APPROVAL

A. SIGNATURE

The plan checker will request the grading plan originals in the plan check letter when the corrections requested are minor and will be sufficient to complete the plans. All conditions must be met, all bonds must be posted, and all agreements received prior to plan approval. Originals are to be in ink on 4 mil double-matt mylar or photographic mylar process if submitting duplicate mylars. No paste-ons or shading will be accepted.

After a final check has been made to verify that all corrections have been incorporated into the plan, the plan will be reviewed and approved by the Building Division Manager, Zoning Division Manager, Development Services Manager and the City Engineer.

The design engineer will be notified as soon as the plans are approved and will be instructed to contact a bonded blue printer to have the originals picked up from the Engineering Records counter. The originals and five prints must be returned to Engineering Records before a grading permit can be issued.

B. GRADING PERMIT

The Subdivision Section will issue a grading permit when the following items are received.

- 1) Five prints of the approved grading plan.
- 2) Proof of liability insurance of \$1,000,000 minimum, from the owner or his contractor to insure against claims for damages which may arise from or out of the performance of the work. The amount may be increased as deemed necessary by the City Engineer.
- 3) Grading permit fee as approved by City Council.
- 4) Completed permit application.

X. REVISIONS

All changes to an approved grading plan must be submitted and approved by the City Engineer as a revision. Submit the following items to process a revision.

- 1) Two (2) prints of the revised grading plan, folded to 9"X12".
- 2) A checking deposit in an amount determined by the City based on the estimated time for review.

All revisions must be clearly marked and described in the revision block. Obsolete information shall be crossed out and not erased unless necessary for clarity. The engineer shall certify on the title sheet (sign and stamp) "Revision # was made under my supervision."

If the engineer of record is changed during the course of the work, the replacement engineer shall add the following certification:

"I hereby agree to accept the responsibility for As Graded certification upon completion of the work as required per Section 17.06.080 of the Hillside Grading Ordinance"

XI. AS GRADED CERTIFICATION

A. PRIOR TO BUILDING PERMIT

Prior to obtaining Engineering clearance for building permits, the following items must be submitted and approved.

- 1) Any revisions to the original grading plan related to the building pad.
- 2) Two (2) copies of the interim soils report indicating pad compaction

and site stability.

- 3) The original and two (2) copies of a letter of certification for the building pads from the civil engineer (Exhibit D).
- 4) Approved plot plans, when required.

The two copies of the civil engineer's certification and one copy of the soils report will be sent to the field engineer for verification. The field engineer will return one copy of the civil engineer's certification either accepted or rejected. When the certification is accepted and any revisions approved, the plan checker will sign off the Building Permit Case.

Note: Other conditions or fees may apply and must be complied with.

B. PRIOR TO OCCUPANCY

Prior to obtaining Engineering clearance for occupancy, the following items must be submitted and approved.

- 1) The original grading plan and two (2) prints with an As Graded certification (Exhibit E) and all revisions to the original grading plan.
- 2) Two (2) copies of the final soils and geological report, including certification of the site and final recommendations.
- 3) Two (2) copies of the soils fertility report, including recommendations for soil additives and amendments.

All revisions must be approved and the As Graded certification verified by the field engineer. The Field Engineer will then sign for Engineering clearance on Building's Inspection Log. The plan checker will stamp the plan "As Graded" and notify the engineer. The engineer shall instruct a bonded blueprinter to pick up the plan and return to Engineering Records with four (4) prints (five prints for revised plans).

Allow approximately two weeks to receive Engineering Clearance for occupancy.

Notification will be sent to the Bonding Company (or bank) that the grading has been completed and the grading bond may be released.

C. MASS GRADE CERTIFICATION

Prior to approval of any rough grade certification within an area that has been mass graded, the following items must be submitted and approved.

- 1) The original mass grading plan and two (2) prints with an As Graded certification (Exhibit E) and any revisions. As Graded certification of the mass grading plan may be phased by certifying each tract separately.
- 2) Two copies of the interim soils report certifying the mass grading, including an assessment of the stability of all slopes, within the area to be approved.

One print of the mass grading plan and one copy of the soils report will be sent to the Field Engineer for verification. The plan checker will then stamp the plan, noting the area of certification, and notify the engineer. The engineer shall instruct a bonded blueprinter to pick up the plan and return to Engineering Records with four (4) prints.

XII. PLOT PLANS

Approved plot plans will be required prior to obtaining building permits for tracts or if the original grading plan was not in sufficient detail to be approved as a grading plan/plot plan.

The initial submittal of plot plans shall consist of three (3) copies of the plot plan on a sheet 24" X 36" drafted at a legible scale and signed by a Registered Civil Engineer. Originals are to be in ink on 4 mil double-matt mylar or photographic mylar process if submitting duplicate mylar. No paste-ons will be accepted.

Plot plans shall include the following information:

- 1) Reference to tract number or grading plan number.
- 2) Signature block for Building Division Manager, Zoning Division Manager, Development Services Manager, and Director of Public Works/City Engineer.
- 3) City benchmark datum.
- 4) North arrow and scale.
- 5) Street names and addresses.
- 6) Lot numbers.
- 7) Location map.
- 8) Finish surface grades at each lot corner. Proposed finish surface grades at front lot corners if lot is undercut for street construction.
- 9) Existing/proposed top of curb grades.
- 10) Location and elevations for drainage swales, common swales are not allowed.
- 11) Proposed on-site drainage system.
- 12) All slopes and elevations per approved grading plan. Grading per the plot plan shall be limited to cutting in the drainage swales.
- 13) Building footprint and roof overhangs.
- 14) Set backs from building to property lines and top and toe of slopes.
- 15) Any additional information required by the Building Department.
- 16) A certification signed and stamped by the Civil Engineer stating "I hereby certify this plot plan was prepared under my supervision and accurately represents the As Graded condition and proposed improvements. I further certify the plan conforms to the City of Anaheim ordinances and/or policies regarding building set backs and lot drainage."

Plot plans will be checked in the same manner as grading plans and shall conform to the same standards, including:

- 1) No use of common swales.
- 2) Dirt swales shall have a minimum grade of 1%.
- 3) Swale elevation at the high point shall be 0.1' minimum below the pad elevation.
- 4) No drainage to be over the sidewalk. Swale shall be taken to the driveway, or under the sidewalk through the curb in 3"-4" CIP or PVC schedule 80 pipe or a sidewalk culvert.

Minimum requirements of the Building Division are shown in Exhibit F.

The originals may be submitted to Subdivisions for approval after all corrections have been made and the Building Division Manager and Zoning Division Manager has signed the original. The plot plan will then be reviewed and approved by the Development Services Manager and the City Engineer. The engineer will then be notified and instructed to contact a bonded blueprinter to provide prints.