# CITY OF ANAHEIM PUBLIC WORKS ENGINEERING DEPARTMENT SUBDIVISION SECTION

# FLATLAND GRADING PLAN PROCEDURES

# TABLE OF CONTENTS PAGE

<u>L</u>	<u>GENERAL</u>
	A. FLATLAND GRADING DEFINED
	B. WHEN PERMIT REQUIRED
	C. AGREEMENTS
<u>II.</u>	INITIAL SUBMITTAL
<u>III.</u>	THE GRADING PLAN SHALL INCLUDE THE FOLLOWING:
<u>IV.</u>	<u>DRAINAGE REPORT S</u>
<u>v.</u>	EROSION CONTROL PLAN
<u>VI.</u>	PLAN CHECKING
	A. FIRST PLAN CHECK
	B.SUBSEQ UENT SUBMITTALS
VII.	GRADING PLAN APPRO VAL
	A. SIGNATURE
	B. GRADING PERMIT
VIII.	REVISIONS
<u>IX</u>	AS GRADED CERTIFICATION
	PRIOR TO BUIDING PERMIT
	PRIOR TO FINAL OCCUPANCY
<u>x</u>	EXHIBITS (EXHIBITS ARE PDF and DWG FILES)
	EXHIBIT A-1 - STANDARD CITY TITLE BLOCKS - G1-FL (TITLE SHEET)
	EXHIBIT A-2 - STANDA RD CITY TITLE BLOCKS - G2 (OTHER SHEETS)

**EXHIBIT B-1** - GENERAL NOTES

#### **EXHIBITB-2** - EROSION AND SEDIMENT CONTROL GENERAL NOTES

EXHIBIT C - DRA INAGE DESIGN CRITERIA CHART

EXHIBIT D - PAD CERTIFICATION LETTER
EXHIBIT E - FINAL AS GRADE CERTIFICATION-LOT CERTIFICATION

July 2005

#### I. GENERAL

#### A. FLATLAND GRADING DEFINED

Flatland Grading Plan is required when the grading is performed in an area which is not designated as a "hillside area" by the City Engineer and will be processed in accordance with Title 17.04 of the Municipal Code.

Grading plans within a "hillside area" will be processed in accordance with the Hillside Grading

Plan Procedures and Title 17.06 of the Municipal Code.

#### B. WHEN PERMIT REQUIRED

A flatland grading plan and grading permit will be required in accordance with Section 17.04.050 of the Municipal Code. No grading permit shall be required for an excavation below finished grade for basements, footings, swimming pools or underground structures authorized by a valid building permit; however this exception shall not affect the requirement of a grading permit for any fill made with the material from such excavation.

#### C. AGREEMENTS

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

#### II. INITIAL SUBMITTAL

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

1) 12 copies of the grading plan on a size 24" X 36" drafted at a legible scale and signed by a Licensed Soils Engineer and a Registered Civil Engineer. Shading will not be accepted, cross-hatching will be allowed if it does not obscure information on the plans. Plans shall include the standard information blocks shown on ExhibitA.

The plans shall be folded to 9" X 12" with the title and plan number visible.

- 2) A service fee deposit in the amount approved by the City Council. (See current fee schedule).
- 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) Drainage study, with hydrology calculations, map, and hydraulic calculations.
- 5) One (1) hard copy and one (1) electronic copy on CD of Soils Report prepared and signed by a licensed Geologist or Soil Engineer providing a thorough engineering investigation based on the existing conditions and work proposed to be done.

Incomplete plans will not be reviewed or processed, the designer 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, email, and telephone number of the developer, the civil engineer and soil engineer.
- 3. <u>Citybenchmark</u> on each sheet. Elevations shall be based on field survey or aerial topos, 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; net disturbed area in acres and the total development area in acres.
- 5. Engineer's certification (see ExhibitA).
- 6. City signature block (see ExhibitA).
- 7. Vicinity map and/or location map adequately indicating the site location.
- 8. General Notes applicable to the plan (see ExhibitB).
- 9. Property lines and dimensions of the property.
- 10. Location of any buildings or structures on the property or within 15 feet of the property.
- 11. Existing topographical features including elevations and contours on the property and 50 feet beyond the property lines to establish drainage patterns.
- 12. Proposed elevations and contours.
- 13. Details of crib walls, any drainage devices and protective devices to be constructed in connection with or as a part of this plan, unless a City of Anaheim Standard detail applies.
- 14. Typical sections through property lines and slopes.
- 15. Location, length and height of all retaining walls proposed to be constructed in connection with the proposed work as required by the Building Division. Indicate maximum height along each wall segment. All walls visible from public view shall be in conformance with Section 18.46.110.130 of the Anaheim Municipal Code.
- 16. The legal description of the property on which the work is to be performed.
- 17. The purpose of the work and a statement as to whether the purpose of the excavation is to prepare the site for subdivision under the State Map Act.
- 18. Location of all private and public easements on the property.
- 19. Location of existing and ultimate public right-of-ways. All setbacks shall be measured from the ultimate right-of-way.

All plans shall conform to Title 17.04 of the Municipal Code and the City's grading policies.

#### 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 Drainage Design Criteria Chart (ExhibitC) for storm intensity requirements.
- 4) Hydraulic calculations for all drainage facilities.

#### V. EROSION AND SEDIMENT CONTROL

An Erosion and Sediment Control Plan is required for any grading and is a part of the grading plan. The plan shall be updated each year, prior to October 15, to reflect the conditions of the site during that raining season. A duplicate of the grading plan may be used if adequately screened. Additional information regarding Best Management Practices (BMP's) may be obtained online at <a href="https://www.cabmphandbooks.com">www.cabmphandbooks.com</a> and <a href="https://www.ocwatersheds.com">www.ocwatersheds.com</a>

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

#### **VI. PLAN CHECKING**

#### A. FIRST PLAN CHECK

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

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 forwarded to the designer. The designer 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. 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 designer 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 designer will be notified as soon as the plan check is complete and ready for pick up.

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

# VII. 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. Originals are to be in ink on 4 mil double-matt mylar or photographic mylar process if submitting duplicate mylar. 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 Official, Planning Services Division Manger, the Development Services Manager and the City Engineer. All conditions must be met prior to plan approval.

The designer 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) Three (3) prints of the approved grading plan.
- 2) Grading permit fee as approved by City Council.
- 3) Excavation contractor's name, address, email, telephone number, State contractor's license number and City business license number.
- 4) Hauling contractor's name, address, email, telephone number as per Section <u>17.04.230.040</u> (if different from excavati on contractor).

# VIII. REVISIONS/DELTAS

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"; additional prints may be required.
- 2) Additionl service fee 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 designer shall certify on the title sheet "Revision number was made under my supervision."

#### IX. 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 (ExhibitD).

Two copies of the civil engineer's certification and one copy of the soils report will be sent to the field engineer for veri fication. 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) Two (2) prints of the original grading plan with an As Graded certification (<u>ExhibitE</u>) 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, if applicable.

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 blueprinted to pick up the plan and return to Engineering Records with one (1) electronic copy of record drawing plans on CD.

Allow approximately two weeks to receive Engineering Clearance for occupancy.

# X. EXHIBITS (EXHIBITS ARE PDF and/or DWG FILES)

You will need the Acrobat Reader to view documents B-1 and B-2. If you do not have Acrobat Reader, clickhere to



EXHIBITA-1 IN.DWG - STANDARD CITY TITLE BLOCKS - G1-FL (TITLE SHEET)

EXHIBITA-2 IN.DWG - STANDARD CITY TITLE BLOCKS - G2 (OTHER SHEETS)

**EXHIBITB-1** GENERAL NOTES

**EXHIBITB-2** - EROSION AND SEDIMENT CONTROL GENERAL NOTES

**EXHIBITC** - DRAINAGE DESIGN CRITERIA CHART

**EXHIBITD** - PAD CERTIFICATION LETTER

**EXHIBITE - FINAL AS GRADE CERTIFICATION-LOT CERTIFICATION**