



CITY OF WEST COVINA

GRADING PLAN REVIEW PROCEDURE

I. PROJECT DATA:

SITE ADDRESS

TR / PM / PP / CUP, NO

DESIGN ENGINEER/ APPLICANT

TELEPHONE NUMBER

APPLICANT ADDRESS

FAX NUMBER

OWNER

TELEPHONE NUMBER

OWNER ADDRESS

FAX NUMBER

ENGINEERED GRADING

REGULAR GRADING

PROJECT DESCRIPTION: _____

II. Instructions

Application for plan check is valid for 180 calendar days from 1st submittal date.

All corrections and comments identified on the returned check print must be incorporated into the plans. Revised plans must be resubmitted for review along with the check prints and any requested supporting information.

Your plans have been reviewed by _____. For questions and/or to schedule a meeting with the plan checker call (626) 939-8425.

After the 2nd review, plans are checked on an hourly basis.

All fees must be paid and bonds posted prior to having the plans approved (signed) by the City.

Plan Check Date:

Submittal Date	Review Completion Date	No. Of Review Hours
1st		
2nd		
3rd		
4th		

III. General Requirements

1. Submit 3 sets of drawings
2. Sheet size: 24" x 36"
3. Scale: 1 = 30 or less
4. City Title Block at the bottom right hand corner of each sheet.
5. North arrow on all sheets
6. Bench Mark Data
7. For grading on neighboring properties, a notarized letter from the property owner, is required
8. Submit 2 sets of Soil Report
9. Grading plans shall comply with soil report findings, municipal grading ordinance chapter 9 (copy attached) and UBC latest edition. Plan Checker to review and confirm.
10. Itemized cost estimate including landscaping and onsite lighting (Excluding Building). Separate landscaping and lighting plans to be submitted to planning department. Show location of the onsite lighting on the precise grading plans.
11. Initial plan check fee (2% of estimated construction cost, minimum \$500) is required when plans are submitted. Balance of Fees will be determined by the Engineering Division.
12. Walls retaining 30" or more and free standing walls over 6' in height require separate submittal of calculations and details.
13. Obtain Fire Department clearance.
14. Plans to be signed by Civil, Soil and/or Geological Engineers.

IV. Title Sheet to show the following:

1. Vicinity map.
2. Location map showing adjacent streets.
3. Index map
4. General grading notes.
5. Construction notes.
6. Typical lot drainage (on the Precise Grading Plan)
7. Any typical details or cut and fill sections as recommended in the soil report and/or Geologist report (e.g. terrace drains, downdrains, splash walls, etc)
8. Earth work (cut, fill and import) quantities.

V. Detail sheets to show the following:

1. Site plan
2. Horizontal control plan showing all dimensions
3. Existing contours of the entire site (5' contour intervals) and proposed finish grades
4. Vicinity streets with flow line and top of curb elevations
5. All drainage facilities should have enough details and elevation points to show proper fall to an approved public drainage facility. No cross lot drainage is allowed.
6. Location of any existing or proposed structures on the site and any structures on adjacent land within 15' of the property line, including existing or proposed streetlights, fire hydrant, catch basins, inlet and outlet structures etc.
7. Clearly draw top and toe of cut and fill slopes to scale.
8. Specify proposed steepness of cut and fill slopes on plan. (Ratio of Horizontal distance to vertical distance.)
9. Indicate cut and/or fill slope areas on plan by shading or other easily recognizable means.
10. Show location of cut-fill contact (daylight line) on plan.
11. Show slope setbacks from property lines or building locations to conform with minimum requirements.
12. Graded slopes may not extend into street right-of-way. (Without encroachment permit)
13. Fill slopes are shown with a surface gradient steeper than 2:1.
 - a. Soils engineer shall submit satisfactory soil test data and engineering calculations to substantiate the stability of all such slopes and slope surfaces under conditions of saturations.
 - b. A preventive program to protect the slopes from potential damage from borrowing rodents is required. Owner to inspect slopes periodically for evidence of burrowing rodents and at first evidence of their existence shall employ an exterminator for their removal.
14. Fill slopes in excess of 2:1 steepness ratio are to be constructed by the placement of soil a sufficient distance beyond the proposed finish slope to allow compaction equipment to be operated at the outer limits of the final slope surface. The excess fill is to be removed prior to completion of rough grading. (Other construction procedures may be used when it is demonstrated to the satisfaction of the City Engineer that the angle of slope, construction method and other factors will have equivalent effect.)
15. Fill placed over existing terrain steeper than 5:1 must be supported on horizontal benches cut into bedrock or other competent material. Show detail and dimensions of such benching to be provided.
16. Show toe of fill slope setback at least 6 feet horizontally from the top of an existing slope steeper than 3:1. A lesser setback may be approved if recommended by the soils engineer.
17. Combination fill-over-cut slopes cannot be approved unless specifically recommended by the soils engineer and geologist and a cross-sectional detail of each slope is shown on the plan.

18. No fill may toe out existing terrain that has a slope steeper than 2:1
19. Show subdrains under all fills to be placed in natural drainage courses unless the omission of such drains is specifically recommended by the soils engineer. Provide a detail of suburban construction and materials as recommended by the soils engineer.
20. Show location and cross-sectional detail of all buttress fills as recommended by the geologist or soils engineer.
21. Show proposed drainage pattern of graded areas.
22. Roof drainage must be diverted from graded slopes.
23. Drainage is not permitted to sheet over graded slopes steeper than 5:1. Concentrated drainage is not permitted to discharge onto any graded slope.
24. Show locations of existing and proposed catch basins, inlet structures, and outlet structure.
25. Provide a paved swale at top of cut slope (s).
26. A berm is required at the top of all fill slopes. Show detail.
27. Provide rip-rap or other velocity reducer at discharge end of drain. Show detail.
28. All drainage terraces required to be paved must be 3" minimum concrete or gunite reinforced with 6x6 – 10/10-wire mesh. Show detail.
29. Show locations, dimensions and details of splash walls.
30. The maximum length of terrace or swale that may contribute to any down drain is 300 feet.
31. Provide open down drains unless otherwise approved by the City Engineer and supported by hydrology.
32. Provide detail of transition structures for open drains where the grade changes from a steep to a relatively flat slope.
33. Show flow line elevations of all drainage terraces at each change in grade and at approximately 100' intervals in between so that a 5% minimum, 12% maximum, flow line gradient is provided. There shall be no reduction in grade along the direction of flow unless it can be shown that the velocity of flow will be such as to prevent silt deposition.
34. Access is required at all points of closed drains where the grade changes from a steep to a relatively flat slope. Detail the access device.

VI. Precise Grading Plan

The plans shall include (but not limited to) the following in addition to the above items listed for Rough Grading Plan:

1. The footprint or allowable building area of all proposed structures (including appurtenances).
2. Setback distances between structures and top and toe of slopes.
3. Detailed finish grade and finish floor elevations.
4. Flow-lines for lot drainage.
5. Details for building footing and side-yard swale relationship (including extra-height of footing)
6. All proposed paving including, but not limited to, sidewalks, driveways and parking lots.
7. Show the finish elevations at the corners of lot pad (building site) so that such pad area will have a minimum slope of 2% toward the intended drainage outlet.
8. Show the graded swale, high point elevation (.3' lower than pad elevation) and swale elevations at the proposed building corners. All graded swales must have a minimum slope of 1% towards the street or designed outlet. No concentrated flow of the swale allowed over the sidewalk.
9. Show typical side swale detail for adjacent lots of the same elevation and of different elevations.
10. Show detail of the method to be used in side swale when a stoop, fireplace, and or other obstruction extends within five feet of the property line/ or top or toe of slope.

The precise grading plan shall identify all previous preliminary grading permits issued for the project site. It may include sheets from the preliminary grading plan, which show original topography in lieu of reproducing original contours on the precise plan.

VII. Erosion Control Plans

In addition to the required general notes and details, the plans must comply with the regulations of LACRWCB (Los Angeles County Regional Water Quality Board) and Article II of Chapter 9 of the WCMC (West Covina Municipal Code) and must submit SWPPP and proof of NOI (Notice of Intent) to LACRWQCB and to the City for review and comments.

VIII. Permit Requirement:

A.) Grading Permit

1. An itemized cost estimate for all on –site and off-site improvements to be constructed (except buildings) shall be submitted to the Engineering Division for approval. Based upon the approved cost estimates, required fees shall be paid and improvement securities for all on-site and off-site improvements (except buildings) and 100% labor/material securities for all off-site improvements shall be posted prior to final approval of the plans.
2. Provide 3 sets of approved grading plans along with the original mylar.
3. See attached sheet for other requirements.

B.) Building Permit

Requirements for engineering sign-off before a Building permit is issued. After satisfactory completion of the grading operation, provide the following:

1. Grading Certification (on city form) signed by: the civil engineer, the soil engineer, the geologist if applicable and the grading contractor.
2. Final compaction report signed by the soils engineer.

IX. Attachments:

1. West Covina Municipal Code (WCMC) Chapter 9 (Available on-line at www.westcov.org)
2. General Grading Notes
3. General (other) permit requirement sheet
4. Sample Plan

X. Additional Comments:
