GEOLOGY AND SOILS REPORT APPROVAL LETTER

December 21, 2007

LOG # 52404-02
SOILS/GEOLGY FILE - 2
LAN

Canyon Properties, LLC
23901 Calabasas Road # 2005
Calabasas, CA 91302

TRACT: 1033
LOT: 52 / 51 / 50 / 49
LOCATION: 10501 / 10505 / 10511 / 10515 W. Seabury Lane

CURRENT REFERENCE REPORT LETTER(S) REPORT NO. DATE(S) OF PREPARED BY

PREVIOUS REFERENCE REPORT LETTER(S) REPORT NO. DATE(S) OF PREPARED BY
Dept. Correction Letter 52404 04/19/2006 LADBS
Dept. Correction Letter 52404-01 07/31/2007 LADBS

The referenced reports concerning the proposed new 3-level single-family residence have been reviewed by the Grading Division of the Department of Building and Safety. Cross-section A-A' shows that a stepped cut is proposed along the northerly side property line up to some 48 feet in height to be supported by four stacked retaining and basement walls, 2 of which are soldier pile support to create a pad to be occupied by a three-story building.

The site is located in a designated seismically induced landslide hazard zone as shown on the "Seismic Hazard Zones" map issued by the State of California. The above reports include an acceptable seismic slope stability analysis and the requirements of the State of California Public Resources Code, Section 2690 et. seq., have been satisfied.

It is noted that the number and height of proposed retaining walls exceed those allowed in the hillside retaining wall Ordinance No. 176,445. We have reviewed the current report at the request of the Plan Department to assist them in their consideration of and processing of a request for a variance to allow the proposed project.
The reports are conditionally acceptable, provided the following conditions are complied with during site development:

(Note: Numbers in parenthesis ( ) refer to applicable sections of the 2002 City of LA Building Code. P/BC numbers refer the applicable Information Bulletin. Information Bulletins can be accessed on the internet at LADBS.ORG.)

1. It is a condition of this approval is that no permits be issued until clearance has been obtained from the Zoning Administrator for proposed plans that the current reference report is based on, as allowed by City Ordinance No. 176, 445.

2. It is a condition of this approval that the stabilization soldier pile rows supporting the upper slope retaining wall and the middle basement wall shown in Section A-A' and the upper slope retaining wall shown in Section C-C' be constructed, over the extent shown in the Site Geologic Map of the current report. Soldier piles shall be designed for the “Stabilization Force(s)” and passive resistance shall be taken below the depth as indicated in Plate C-1 and the text of the current report. Where cantilevered retaining wall foundations surcharge lower stabilization soldier pile, the surcharge pressures shall be determined in accordance with Plate C-2 of the current report.

3. Approval shall be obtained from the Department of Public Works, Bureau of Engineering, Constituent Service Division for the proposed removal of support and/or retaining of slopes adjoining to public way. (3301.2.3.2)
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4. The geologist and soils engineer shall review and approve the detailed plans prior to issuance of any permits. This approval shall be by signature on the plans which clearly indicates that the geologist and soils engineer have reviewed the plans prepared by the design engineer and that the plans include the recommendations contained in their reports.

5. All recommendations of the reports which are in addition to or more restrictive than the conditions contained herein shall be incorporated into the plans.

6. A copy of the subject and appropriate referenced reports and this approval letter shall be attached to the District Office and field set of plans. Submit one copy of the above reports to the Building Department Plan Checker prior to issuance of the permit. (7006.1)

7. A grading permit shall be obtained (106.1.2). The proposed basement excavation exceeds 1,000 cubic yards of export and is subject to the requirements of Section 7006.7.4 of the Building Code.

8. All man-made fill shall be compacted to a minimum 90 percent of the maximum dry density of the fill material per the latest version of ASTM D 1557. Where cohesionless soil having less than 15 percent finer than 0.005 millimeters is used for fill, it shall be compacted to a minimum of 95 percent relative compaction based on maximum dry density (D1556). Placement of gravel in lieu of compacted fill is allowed only if complying with Section 91.7011.3 of the Code. (7011.3)
9. Existing uncertified fill shall not be used for support of footings, concrete slabs or new fill. (7011.3 & 1806.1)

10. All graded, brushed or bare slopes shall be planted in conformance with Code Section 7012.

11. Grading shall be scheduled for completion prior to the start of the rainy season, or detailed temporary erosion control plans shall be filed in a manner satisfactory to the Grading Division of the Department and the Department of Public Works, Bureau of Engineering, B-Permit Section, for any grading work in excess of 200 cu yd. (7007.1)

12. All loose foundation excavation material shall be removed prior to commencement of framing. Slopes disturbed by construction activities shall be restored. (7005.3)

13. The applicant is advised that the approval of this report does not waive the requirements for excavations contained in the State Construction Safety Orders enforced by the State Division of Industrial Safety. (3301.1)

14. Construction of trenches or excavations which are 5 feet or deeper and into which a person is required to descend requires a permit from the State Division of Industrial Safety prior to obtaining a grading permit. (3301.1)

15. Where any excavation, not addressed in the approved reports, would remove lateral support (3301.2.3.1) to the public way or adjacent structures, a supplemental report shall be submitted to the Grading Division of the Department containing recommendations for shoring, underpinning, and sequence of construction. A plot plan and cross-section(s) showing the construction type, number of stories, and location of the structures adjacent to the excavation shall be provided. (7006.2 & 3301.2.3.2)

16. Prior to the issuance of any permit which authorizes an excavation where the excavation is to be of a greater depth than are the walls or foundation of any adjoining building or structure and located closer to the property line than the depth of the excavation, the owner of the subject site shall provide the Department with evidence that the adjacent property owner has been given a 30-day written notice of such intent to make an excavation. (3301.2.1)

17. Temporary excavations may be cut vertically up to 4 feet. Excavations exceeding 4 feet shall be trimmed back at a uniform gradient not exceeding 1:1 (horizontal to vertical) from the top to bottom of excavation, as recommended.

18. Shoring shall be designed for the minimum lateral earth pressures specified in the section titled “Temporary Shoring" starting on page 10 of the 02/03/2006 report.

19. The soils engineer shall review and approve shoring plans prior to issuance of the permit. (7006.2)

20. Installation of shoring excavations shall be performed under the inspection and approval of the soils engineer. (7006.2)
21. Foundations shall penetrate into competent bedrock, as recommended and as approved by the geologist and soils engineer by inspection.

22. Foundations adjacent to a descending slope steeper than 3:1 in gradient shall be a minimum distance of one-third the vertical height of the slope but need not exceed 40 feet measured horizontally from the foundation bottom to the face of the bedrock slope. (1806.5.3)

23. Buildings adjacent to ascending slopes shall be set back from the toe of the slope a level distance equal to one half the vertical height of the slope, but need not exceed 15 feet in accordance with Code Section 1806.5.2.

24. Pile caisson and/or isolated foundation ties are required by Code Section 91.1807.2. Exceptions and modification to this requirement are provided in Information Bulletin P/BC2002-030.

25. Pile and/or caisson shafts shall be designed for a lateral load of 1000 pounds per linear foot of shaft exposed to fill, soil and weathered bedrock. (P/BC2002-050)

26. The LABC Soil Type underlying the site is S_{co} and the minimum horizontal distance to known seismic sources shall be in accordance with "Maps of Known Active Fault Near Source Zones" published by ICBO. (1636A)

27. Retaining walls shall be designed for the minimum lateral earth pressures specified in the section titled "Retaining Walls" starting on page 15 of the 02/03/2006 report. Where cantilevered retaining wall foundations surcharge lower retaining walls, the surcharge pressures shall be determined in accordance with Plate C-2 of the current report. All other surcharge loads shall be incorporated into the design.

28. Retaining walls supporting ascending slopes shall be provided with a minimum freeboard of 3 feet, as recommended. Freeboard shall be designed for a pressure due to an equivalent fluid pressure (EFP) of 125 psf.

29. All retaining walls shall be provided with a standard surface backdrain system and all drainage shall be conducted to the street in an acceptable manner and in a non-erosive device. (7013.11)

30. All retaining walls shall be provided with a subdrain system to prevent possible hydrostatic pressure behind the wall. Prior to issuance of any permit, the retaining wall subdrain system recommended in the soil report shall be incorporated into the foundation plan which shall be reviewed and approved by the soils engineer of record. (7015.5 & 108.9)

31. Installation of the subdrain system shall be inspected and approved by the soils engineer of record and the City grading/building inspector. (7015.5 & 108.9)

32. Prefabricated drainage composites (Miradrain) (Geotextiles) may be only used in addition to traditionally accepted methods of draining retained earth.

33. The dwelling shall be connected to the public sewer system. (P/BC 2002-27)
34. All roof and pad drainage shall be conducted to the street in an acceptable manner. (7013.10)

35. Prior to excavation, an initial inspection shall be called with LADBS Inspector at which time sequence of shoring, protection fences and dust and traffic control will be scheduled.

36. The geologist and soil engineer shall inspect all excavations to determine that conditions anticipated in the report have been encountered and to provide recommendations for the correction of hazards found during grading. (7008.3)

37. Any recommendations prepared by the geologist and/or the soils engineer for correction of geological hazards found during grading shall be submitted to the Grading Division of the Department for approval prior to utilization in the field. (7008.3)

38. All soldier or friction piles or caisson drilling and installation shall be performed under the continuous inspection and approval of the geologist and soils engineer. The geologist shall indicate the distance that soldier, friction piles or caissons penetrate into competent bedrock in a written field memorandum to the City Building Inspector. (1807.1)

39. A registered grading deputy inspector approved by and responsible to the soils engineer shall be required to provide continuous inspection for the proposed shoring. (1701.5.13)

40. Prior to the pouring of concrete, a representative of the geologist and soils engineer shall inspect and approve the footing excavations. They shall post a notice on the job site for the LADBS Building Inspector and the Contractor stating that the work so inspected meets the conditions of the report, but that no concrete shall be poured until the City Building Inspector has also inspected and approved the footing excavations. A written certification to this effect shall be filed with the Grading Division of the Department upon completion of the work. (108.9 & 7008.2)

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