City of Los Angeles
SOIL/GEOLOGY REPORT APPROVAL LIST

LA DBS
DEPARTMENT OF BUILDING AND SAFETY

LOG#_____ **DATE**_____ **SOIL/GEOLOGY FILE - 2**

JOB ADDRESS _____ **DISTRICT OFFICE** _____

TRACT_____ **COUNTY REF. #**_____

BLOCK_____

LOT_____ **ARB** _____

CURRENT REPORT _____ **DATED**_____

CURRENT REPORT _____ **DATED**_____

OVERSIZED DOCUMENTS **X-REF**_____**DATED**_____

PREVIOUS REPORT(S) _____ **DATED**_____

PREVIOUS REPORT(S) _____ **DATED**_____

PROJECT DESCRIPTION/COMMENTS_____

_____

_____

REVIEWED BY _____ **TELEPHONE** _____

REVIEWED BY _____ **TELEPHONE** _____

SEISMIC HAZARD INFORMATION

LIQUEFACTION STUDY ZONE?	9 YES	9 NO
SEISMIC-INDUCED LANDSLIDE STUDY ZONE?	9 YES	9 NO
EXEMPT FROM SEISMIC HAZARD ZONE REQUIREMENTS	9 YES	9 NO

The geology/soil engineering report(s) have been reviewed by the Grading Section of the Department and have been found to be acceptable provided the proposed construction complies with the conditions specified in this letter. The approval of the reports does not permit the violation of any section of the Building Code, or other local ordinance or state law.

NOTE: Numbers in parenthesis ( ) refer to Code sections of the 1998 edition of the California Building Code, Information Bulletin (P/BC).

INSTRUCTIONS

- All of the following listed and circled conditions shall apply: _____

  _____

- One copy of the subject geologic/soil engineering reports and this approval letter shall be attached to the field set of plans and one copy shall be provided to the Department Plan Checker prior to issuance of the permits.

PLANS

1. The geologist/soils engineer shall review and approve the detailed plans prior to issuance of any permits.

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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.

2. All recommendations of the report(s) which are in addition to or more restrictive than the conditions contained herein shall be incorporated into the plans.

3. All conditions of the Department letter(s) dated _____ shall apply, except as superseded herein.

GENERAL BUILDING

4. 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.
(1806.5.2)

5. Whenever the principal building on a site is added to, altered or repaired in excess of 50 percent of its replacement value, the entire site shall be brought up to the current Code standard.
(7005.9)

6. The LABC Soil Type underlying the site is S__.
(Table 16 A-J)

FOOTINGS/SLABS

7. Compacted fill shall extend beyond the footings a minimum distance equal to the depth of the fill below the bottom of footings or a minimum of 3 feet whichever is greater.

8. All footings shall be founded in _____ _____, as recommended.

9. The structural engineer shall verify the adequacy of the existing footings for underpinning.

10. Footings adjacent to a descending slope steeper than 3:1 in gradient shall be located a distance of one-third the vertical height of the slope but need not exceed 40 feet measured horizontally from the face of the slope; for in-ground pools the footing setback shall be one-sixth the slope height to a maximum of 20 feet.
(1806.5.3)(Figure 18-I-1)

11. Footings may be designed with a horizontal setback from the _____ _____of ____ feet, as recommended, in lieu of the standard setback prescribed by the Building Code.
(1806.5.6)

12. Footings supported on approved compacted fill or expansive soil shall be reinforced with a minimum of four (4) ½-inch diameter (#4) deformed reinforcing bars. Two (2) bars shall be placed near the bottom and two (2) bars placed bear the top.
(1804.4)

13. Pile, caisson and/or isolated foundation ties are required by Code Section 1807.2. Exceptions and modification to this requirement are provided in Information Bulletin P/BC 2001-30.

14. 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/BC 2001-50)

15. Concrete floor slabs placed on approved compacted fill or expansive soil shall be at least 3½ inches thick and shall be reinforced with ½-inch diameter (#4) reinforcing bars spaced a maximum of 16 inches on center each way.

16. Concrete floor slabs placed on expansive soil shall be placed on a 4-inch-thick fill of coarse aggregate or on a moisture barrier membrane. The slabs shall be at least 3½ inches thick and shall be reinforced with ½-inch diameter (#4) reinforcing bars spaced a maximum of 16 inches on center each way.
(1804.4)

17. Concrete floor slabs placed on uncertified fill shall be designed as structural slabs.

18. Existing uncertified fill shall not be used for support of footings, concrete slabs or new fill.

19. If import soils are used, no footings shall be poured until the soil engineer has submitted a compaction report containing in-place shear test data and settlement data to the Department, and obtained approval

20. The building design shall incorporate provisions for anticipated differential settlements in excess of one-fourth inch.

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

GRADING/SLOPES

22. All new fill slopes shall be no steeper than 2:1.
(7011.2)

23. All new cut slopes in bedrock shall be no steeper than_____and/or no steeper than any unsupported bedding planes, foliation planes, continuous joints or faults.
(7010.2)

24. All nonconforming street cut slopes shall be trim-graded back to a slope gradient no steeper than_____ or retained by a designed retaining wall.

25. A grading permit shall be obtained.

26. 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

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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.

27. For grading involving import or export of more than 1000 cubic yards of earth materials within the *grading hillside area*, approval is required by the Board of Building and Safety. Application for approval of the haul route must be filed with the Grading Section. Processing time for application is approximately 8 weeks to hearing plus 10-day appeal period.

28. 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 Department and the Department of Public Works, for any grading work in excess of 200 cu yd.

DRAINAGE

29. All roof and pad drainage shall be conducted to the street in an acceptable manner; water shall not be dispersed on to descending slopes without specific approval from the Grading Section and the consulting geologist and soil engineer.

(7013.10)

30. Pool deck drainage shall be collected and conducted to an approved location via a non-erosive device.

31. All deck drainage shall be collected and conducted to an approved location in a non-erosive device, or the deck shall be constructed with open-spaced flooring.

32. All deck drainage shall be collected and conducted to an approved location in a non-erosive device.

POOLS

33. The proposed swimming pool shall be designed for a freestanding condition.

(P/BC 2001-01)

34. Pools adjacent to ascending slopes shall be set back from the toe of the slope a level distance equal to one-fourth the vertical height of the slope, but need not exceed 7.5 feet.

(1806.5.4)

TEMPORARY EXCAVATIONS/RETAINING WALLS

35. 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.

36. A supplemental report shall be submitted to the Grading Section containing recommendations for shoring, underpinning, and sequence of construction in the event that any excavation would remove lateral support to the public way or adjacent structures.

37. 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

38. Unsurcharged temporary excavations may be cut vertical up to a height of _____ feet. Portions of the excavation above this height shall be trimmed to no steeper than _____(horizontal to vertical), as recommended.

39. Slot cuts shall made using the A-B-C method, shall be no wider than ____feet, no higher than ____ feet _____ _____.

40. Suitable arrangements shall be made with the Department of Public Works for the proposed removal of support and/or retaining of slopes adjoining the public way.

41. Retaining walls up to a maximum height of _____ feet with a backslope angle no steeper than _____ shall be designed for a minimum equivalent fluid pressure of _____ pcf, as recommended.

42. 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.

43. The rear yard retaining walls located at the toe of the ascending slope shall be provided with a minimum freeboard of _____, as recommended.

44. The recommended equivalent fluid pressure (EFP) for the proposed retaining wall shall apply from the top of the freeboard to the bottom of the wall footing.

45. All retaining walls shall be provided with a subdrain system to prevent possible hydrostatic pressure behind the wall. Installation of the subdrain system shall be inspected and approved by the soil engineer and the City grading/building inspector.

CONSTRUCTION INSPECTION AND REPORTING

46. Prior to the placing of compacted fill, a representative of the consulting soil engineer shall inspect and approve the bottom excavations. He shall post a notice on the job site for the City Grading Inspector and the Contractor stating that the soil inspected meets the conditions of the report, but that no fill shall be placed until the City Grading Inspector has also inspected and approved the bottom excavations. A written certification to this effect shall be filed with the Department upon completion of the work. The fill shall be placed under the inspection and approval of the soil

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engineer. A compaction report shall be submitted to the Department upon completion of the compaction.

47. Prior to the pouring of concrete, a representative of the consulting geologist and soil engineer shall inspect and approve the footing excavations. He shall post a notice on the job site for the City 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 Department upon completion of the work.

48. The soil engineer and the geologist 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.

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

50. Installation of shoring, underpinning, and/or slot cutting excavations shall be performed under the inspection and approval of the soils engineer and deputy grading inspector.

ADDITIONAL COMMENTS