CITY OF LOS ANGELES
CALIFORNIA

DEPARTMENT OF
BUILDING AND SAFETY
201 NORTH FIGUEROA STREET
LOS ANGELES, CA 90012

OSAMA YOUNAN, P.E.
GENERAL MANAGER
SUPERINTENDENT OF BUILDING

JOHN WEIGHT
EXECUTIVE OFFICER

GEOLOGY AND SOILS REPORT APPROVAL LETTER

July 10, 2023

LOG # 117233-03
SOILS/GEOLOGY FILE - 2
LAN

Ararat Home of Los Angeles, Inc.
15105 Mission Hills Road
Los Angeles, CA 91345

TRACTS:	PARCEL MAP 2889 | TR 3660 | EX MISSION DE SAN FERNANDO (DCC 1526 CF 896 RF 238) | SUBDIVISION NO. 1 OF THE PROPERTY OF THE PORTER LAND AND WATER COMPANY (MR 31-3/6)
LOTS:	A & B | PT LT 3 (Arbs. 18, 19) | PT SEC 4 T2N R15W (Arbs. 22 & 23) | FR 63 SEC 4 T2N R15W
LOCATION:	15149, 15151, 15155 W. Mission Hills Road

CURRENT REFERENCE REPORT/LETTER	REPORT No.	DATE OF DOCUMENT	PREPARED BY
Response Report	17-641-22	07/06/2022	Applied Earth Sciences

PREVIOUS REFERENCE REPORT/LETTER(S)	REPORT No.	DATE OF DOCUMENT	PREPARED BY
Dept. Review Letter	117233-02	06/14/2022	LADBS
Addendum Report No. 2	17-641-22	05/10/2022	Applied Earth Sciences
Dept. Review Letter	117233-01	02/23/2022	LADBS
Addendum Report No. 1	17-641-26	01/24/2021	Applied Earth Sciences
Dept. Review Letter	117233	05/24/2021	LADBS
Geology/Soils Report	17-641-26	03/20/2020	Applied Earth Sciences

The Grading Division of the Department of Building and Safety has reviewed the referenced reports that provide recommendations for the proposed stabilization of site slopes with a row of stabilization piles designed for 70 kips; grading of all existing fill slopes to no steeper than 2H:1V; and, construction of an OSHPD skilled nursing facility, assisted living facility, apartment and townhome structures, retaining walls, grading and driveway improvements. The proposed improvements are located on, above and below up to 100 foot high up to 1:1 slopes.

The earth materials at the subsurface exploration locations consist of up to 20 feet of uncertified fill underlain by colluvium, recent alluvium, older alluvium, Pacoima Formation breccia and conglomerate and Modelo Formation shale and sandstone bedrock. Groundwater was encountered as shallow as 2 feet below the ground surface at the subject site. The subject site is located on an

anticline with bedrock and alluvium dip to the north and south up to 80 degrees. The consultants recommend to support the proposed structures on conventional and/or drilled-pile foundations bearing on native undisturbed soils and/or competent bedrock.

The project is not located within a Fault Zone identified by the State of California Alquist-Priolo Act. However, a surface fault rupture hazard investigation was performed to satisfy California Geological Survey requirements for OSHPD facilities.

The referenced reports are acceptable, provided the following conditions are complied with during site development:

(Note: Numbers in parenthesis ( ) refer to applicable sections of the 2020 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. The entire site shall be made to conform to the provisions of Chapters 18 and 70 of the LABC (7005.9).

2. Conformance with the Zoning Code Section 12.21 C8, which limits the heights and number of retaining walls, will be determined during structural plan check.

3. Approval shall be obtained from the Department of Public Works, Bureau of Engineering, Development Services and Permits Program where removal of support and/or retaining of slopes adjoining to a public way is proposed (3307.3.2).

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4. Secure the notarized written consent from all owners upon whose property proposed grading/construction access is to extend, in the event off-site grading and/or access for construction purposes is required (7006.6). The consent shall be included as part of the final plans.

5. 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 that clearly indicates 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 (7006.1).

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

7. 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 (7006.1). Submit one copy of the above reports to the Building Department Plan Checker prior to issuance of the permit.

8. A grading permit shall be obtained for all structural fill and retaining wall backfill (106.1.2).

9. All graded, brushed or bare slopes shall be planted with low-water consumption, native-type plant varieties to protect slopes against erosion (7012).

10. All new graded slopes shall be no steeper than 2H:1V (7010.2 & 7011.2).

11. 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. Placement of gravel in lieu of compacted fill is only allowed if complying with LAMC Section 91.7011.3.

12. Existing uncertified fill shall not be used for support of footings, concrete slabs or new fill (1809.2, 7011.3).

13. Drainage in conformance with the provisions of the Code shall be maintained during and subsequent to construction (7013.12).

14. 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 cubic yards (7007.1).

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

16. The applicant is advised that the approval of this report does not waive the requirements for excavations contained in the General Safety Orders of the California Department of Industrial Relations (3301.1).

17. Temporary excavations that remove lateral support to the public way, adjacent property, or adjacent structures shall be supported by shoring, as recommended. Note: Lateral support shall be considered to be removed when the excavation extends below a plane projected downward at an angle of 45 degrees from the bottom of a footing of an existing structure, from the edge of the public way or an adjacent property. (3307.3.1)

18. Prior to the issuance of any permit that 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 (3307.1).

19. The soils engineer shall review and approve the shoring plans prior to issuance of the permit (3307.3.2).

20. Prior to the issuance of the permits, the soils engineer and/or the structural designer shall evaluate the surcharge loads used in the report calculations for the design of the retaining walls and shoring. If the surcharge loads used in the calculations do not conform to the actual surcharge loads, the soil engineer shall submit a supplementary report with revised recommendations to the Department for approval.

21. Unsurcharged temporary excavation may be cut vertical up to 4 feet, as recommended. Excavations over 4 feet up to 10 feet shall be trimmed back at a uniform gradient not exceeding 0.75H:1V, from top to bottom of excavation, as recommended. Excavations over 10 feet shall be shored, as recommended.

22. Shoring shall be designed for a minimum EFP shown in the table "Summary of Wall Pressures" included in Data Sheet No.1, 01/24/2021 report; all surcharge loads shall be included into the design, as recommended.

23. Shoring shall be designed for a maximum lateral deflection of 1 inch, provided there are no structures within a 1:1 plane projected up from the base of the excavation. Where a structure is within a 1:1 plane projected up from the base of the excavation, shoring shall be designed for a maximum lateral deflection of ½ inch, or to a lower deflection determined by the consultant that does not present any potential hazard to the adjacent structure.

24. A shoring monitoring program shall be implemented to the satisfaction of the soils engineer.

25. All foundations shall derive entire support from native undisturbed soils or competent bedrock, as recommended and approved by the geologist and soils engineer by inspection.

26. Foundations adjacent to a descending slope steeper than 3:1 (horizontal to vertical) 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 footing bottom to the face of the slope (1808.7.2).

27. Buildings adjacent to ascending slopes steeper than 3H:1V in gradient shall be setback from the toe of the slope a level distance measured perpendicular to slope contours equal to one-half the vertical height of the slope, but need not exceed 15 feet (1808.7.1).

28. 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 near the top of the footing.

29. The foundation/slab design shall satisfy all requirements of the Information Bulletin P/BC 2017-116 "Foundation Design for Expansive Soils" (1803.5.3).

30. Pile caisson and/or isolated foundation ties are required by LAMC Sections 91.1809.13 and/or 91.1810.3.13. Exceptions and modification to this requirement are provided in Information Bulletin P/BC 2020-030.

31. 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 per P/BC 2020-050.

32. The design passive pressure shall be neglected for a portion of the pile with a horizontal setback distance less than five feet from fill, soil or weathered bedrock.

33. The group effects on lateral behavior of the piles shall be included in the design of the deep foundation, as specified in the response to Comment 14 included in the 01/24/2021 report. (1810.2.5)

34. When water is present in drilled pile holes, the concrete shall be tremied from the bottom up to ensure minimum segregation of the mix and negligible turbulence of the water (1808.8.3).

35. Existing uncertified fill shall not be used for lateral support of deep foundations (1810.2.1).

36. Slabs on uncertified fill shall be designed as a structural slab (7011.3).

37. Slabs placed on approved compacted fill shall be at least 5 inches thick and shall be reinforced with ½-inch diameter (#4) reinforcing bars spaced a maximum of 16 inches on center each way.

38. Concrete floor slabs placed on expansive soil shall be placed on a 4-inch fill of coarse aggregate or on a moisture barrier membrane. The slabs shall be at least 5 inches thick and shall be reinforced with ½-inch diameter (#4) reinforcing bars spaced a maximum of 16 inches on center each way.

39. The seismic design shall be based on a Site Class D, as recommended. All other seismic design parameters shall be reviewed by LADBS building plan check.

40. Retaining walls shall be designed for the lateral earth pressures specified in the table "Summary of Wall Pressures" included in Data Sheet No.1, 01/24/2021 report. All surcharge loads shall be included into the design.

41. Retaining walls higher than 6 feet supporting sloping ground shall be designed for lateral earth pressure due to earthquake motions of 63 PCF, as recommended in the response to Comment 2, included in the 07/06/2022 report (1803.5.12).

    Note: Lateral earth pressure due to earthquake motions shall be in addition to static lateral earth pressures and other surcharge pressures.

42. Retaining walls at the base of ascending slopes shall be provided with a minimum freeboard of 2 feet, as recommended.

43. 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.

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

45. With the exception of retaining walls designed for hydrostatic pressure, 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 soils report shall be incorporated into the foundation plan which shall be reviewed and approved by the soils engineer of record (1805.4).

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

47. Basement walls and floors shall be waterproofed/damp-proofed with an LA City approved "Below-grade" waterproofing/damp-proofing material with a research report number (104.2.6).

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

49. The structures shall be connected to the public sewer system per P/BC 2020-027.

50. All roof, pad and deck drainage shall be conducted to the street in an acceptable manner in non-erosive devices or other approved location in a manner that is acceptable to the LADBS and the Department of Public Works; water shall not be dispersed on to descending slopes without specific approval from the Grading Division and the consulting geologist and soils engineer (7013.10).

51. An on-site storm water infiltration system at the subject site shall not be implemented.

52. All concentrated drainage shall be conducted in an approved device and disposed of in a manner approved by the LADBS (7013.10).

53. Sprinkler plans for irrigation shall be submitted and approved by the Mechanical Plan Check Section (7012.3.1).

54. 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 use in the field (7008.2, 7008.3).

55. The geologist and soils 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, 1705.6 & 1705.8).

56. All friction pile or caisson drilling and excavations shall be performed under the inspection and approval of the geologist and soils engineer. The geologist shall indicate the distance that friction piles or caissons penetrate into competent native soils and/or bedrock in a written field memorandum. (1803.5.5, 1705.1.2)

57. Prior to pouring concrete, a representative of the consulting soils engineer shall inspect and approve the footing excavations. The representative shall post a notice on the job site for the LADBS Inspector and the Contractor stating that the work inspected meets the conditions of the report. No concrete shall be poured until the LADBS 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)

58. Prior to excavation an initial inspection shall be called with the LADBS Inspector. During the initial inspection, the sequence of construction; shoring; pile installation; protection fences; and, dust and traffic control will be scheduled (108.9.1).

59. Installation of shoring and/or pile excavations shall be performed under the inspection and approval of the soils engineer and deputy grading inspector (1705.6, 1705.8).

60. Prior to the placing of compacted fill, a representative of the soils engineer shall inspect and approve the bottom excavations. The representative shall post a notice on the job site for the LADBS Inspector and the Contractor stating that the soil inspected meets the conditions of the report. No fill shall be placed until the LADBS Inspector has also inspected and approved the bottom excavations. A written certification to this effect shall be included in the final compaction report filed with the Grading Division of the Department. All fill shall be placed under the inspection and approval of the soils engineer. A compaction report together with the approved soil report and Department approval letter shall be submitted to the Grading Division of the Department upon completion of the compaction. In addition, an Engineer's Certificate of Compliance with the legal

description as indicated in the grading permit and the permit number shall be included (7011.3).

61. No footing/slab shall be poured until the compaction report is submitted and approved by the Grading Division of the Department.

CASEY LEE JENSEN
Engineering Geologist Associate III

DAN L. STOICA
Geotechnical Engineer I

CLJ/DLS:clj/dls
Log No. 117233-03
213-482-0480

cc: Eric Lieberman, Applicant
Applied Earth Sciences, Project Consultant
VN District Office

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
Grading Division

District	VN	Log No.	117233-3

APPLICATION FOR REVIEW OF TECHNICAL REPORTS

INSTRUCTIONS

A. Address all communications to the Grading Division, LADBS, 221 N. Figueroa St., 12th Fl., Los Angeles, CA 90012
Telephone No. (213) 482-0480.
B. Submit two copies (three for subdivisions) of reports, one "pdf" copy of the report on a flash drive, and one copy of application with items "1" through "10" completed.
C. Check should be made to the City of Los Angeles.

1. LEGAL DESCRIPTION
Tract: PT SEC 4 T2N R15W (ARBS 22/23)
Block: _____ Lots: _____

2. PROJECT ADDRESS: 15149 15151-15155 MISSION HILLS RD

3. OWNER: ARMRAT HOME OF LOS ANGELES
Address: 15105 MISSION HILLS RD.
City: LOS ANGELES Zip: 91345
Phone (Daytime): _____

4. APPLICANT ERIC LIEBERMANN (AES, INC.)
Address: 14549 ARCHWOOD ST # 308
City: VAN NUYS CA Zip: 91405
Phone (Daytime): 818-997-6033
E-mail address: ERICL@AESLABS.COM

5. Report(s) Prepared by: AES
6. Report Date(s): 7/6/2022

7. Status of project: ☑ Proposed ☐ Under Construction ☐ Storm Damage
8. Previous site reports? ☑ YES if yes, give date(s) of report(s) and name of company who prepared report(s)

9. Previous Department actions? ☑ YES if yes, provide dates and attach a copy to expedite processing.
Dates: MAY 24 2021
10. Applicant Signature: _____ Position: _____

(DEPARTMENT USE ONLY)

REVIEW REQUESTED	FEES	REVIEW REQUESTED	FEES
☐ Soils Engineering		No. of Lots	
☐ Geology		No. of Acres	
☐ Combined Soils Engr. & Geol.		☐ Division of Land	
☐ Supplemental		Other	
☒ Combined Supplemental	363	☒ Expedite	181.50
☐ Import-Export Route		☐ Response to Correction	
Cubic Yards:		☐ Expedite ONLY	
		Sub-total	544.50
		Surcharge	129.80
		TOTAL FEE	674.30

Fee Due: 674.30
Fee Verified By: POV Date: 6/15/23
(Cashier Use Only)

#16064434
6/15/23

ACTION BY:

THE REPORT IS: ☐ NOT APPROVED
☐ APPROVED WITH CONDITIONS ☐ BELOW ☐ ATTACHED

For Geology _____ Date _____

For Soils _____ Date _____