

Appendix G-1:  
Geotechnical Correction Letter (2016)

BOARD OF  
BUILDING AND SAFETY  
COMMISSIONERS

VAN AMBATIELOS  
PRESIDENT

E. FELICIA BRANNON  
VICE-PRESIDENT

JOSELYN GEAGA-ROSENTHAL  
GEORGE HOVAGUIMIAN  
JAVIER NUNEZ

CITY OF LOS ANGELES  
CALIFORNIA



ERIC GARCETTI  
MAYOR

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

RAYMOND S. CHAN, C.E., S.E.  
GENERAL MANAGER

FRANK BUSH  
EXECUTIVE OFFICER

**GEOLOGY AND SOILS REPORT CORRECTION LETTER**

April 07, 2016

LOG # 92340  
SOILS/GEOLOGY FILE - 2  
LAN

Manny Valencia

TRACT: -- (MP SW ¼ NE ¼ SEC 4 T1S R14W)  
LOT(S): PT SW ¼ NE ¼ SEC 4 T1S R14W (Arb. 22)  
LOCATION: 3003 N. Runyon Canyon Road

<u>CURRENT REFERENCE</u> <u>REPORT/LETTER(S)</u>	<u>REPORT</u> <u>No.</u>	<u>DATE(S) OF</u> <u>DOCUMENT</u>	<u>PREPARED BY</u>
Geology/Soils Report	IC 16010-C	03/11/2016	Irvine Geotechnical, Inc.
Oversized Doc(s).	``	``	``
Laboratory Test Report	SL16.2127	02/26/2016	Soil Labwork LLC

<u>PREVIOUS REFERENCE</u> <u>REPORT/LETTER(S)</u>	<u>REPORT</u> <u>No.</u>	<u>DATE(S) OF</u> <u>DOCUMENT</u>	<u>PREPARED BY</u>
Dept. Approval Letter	26176	11/12/1998	LADBS
Addendum Report	17848-I	11/12/1998	J. Byer Group
Geology/Soils Report	17848-I	09/30/1998	J. Byer Group

The Grading Division of the Department of Building and Safety has reviewed the referenced report providing recommendations for the proposed three-story residence, swimming pool, patios, and tunnel. The lower floor levels will be partially subterranean. Retaining walls ranging up to 13 feet in height are proposed for the lower floor levels and an expansion of the driveway. An onsite wastewater treatment system (OWTS) currently services the existing residence. New seepage pits are proposed along the driveway area to service the new residence. The new residence and existing residence will be connected by the proposed tunnel.

The subject property is developed with a multi-story residence and swimming pool. The building pad is situated along the north-south trending ridge with slopes descending to the south, west, and east. Slopes range as high as 340 feet with gradients of about 1½:1 (H:V) to 1:1 locally. Subsurface exploration performed by the consultant consisted of eight test pits supplemented with field mapping of the bedrock outcrops. The earth materials at the subsurface exploration locations consist of up to 3 feet of uncertified fill underlain by soil and sedimentary and granitic bedrock. Geologic structure observed by the consultant within the sedimentary bedrock consisted of a northeasterly dip of 50

degrees. Geologic structure observed within the granitic bedrock consisted of varying orientations of joints. The consultants recommend to support the proposed structure(s) on conventional and/or drilled-pile foundations bearing on competent bedrock.

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 review of the subject report can not be completed at this time and will be continued upon submittal of an addendum to the report which shall include, but not be limited to, the following:

(Note: Numbers in parenthesis ( ) refer to applicable sections of the 2014 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 consultant indicates that non-conforming slopes will be trimmed. Clearly identify/label on the geologic map all non-conforming slopes to be trimmed or supported by new retaining walls.

Note: Please be aware that all existing cut slopes steeper than 2H:1V will be considered as non-conforming. The Department will allow cut slopes evaluated as stable with the required minimum factor of safety of 1.5 for gross and surficial stability and exposing hazard-free geology, up to a maximum horizontal to vertical slope gradient of 1.5H:1V (33 degrees) on private property and up to a maximum horizontal to vertical slope gradient of 1H:1V (45 degrees) for street cuts.

2. Provide static and seismic slope stability analyses along cross-section C based on the expected zone of saturation from the proposed seepage pits. Note: Multiple search analyses shall be utilized in the analyses, not only specified failure planes.

Note: In the event the safety factor is less than 1.5 and piles are recommended to raise the safety factor, provide calculations to determine the required lateral force on the piles to bring the safety factor to 1.5. Passive resistance of the piles shall be considered below the lowest 1.5-safety factor plane determined without piles.

3. Clarify whether the existing OWTS will be utilized or abandoned and clearly show the location of the existing OWTS on the geologic map and cross-sections.
4. In the event the existing OWTS will be abandoned, provide recommendations for proper abandonment (P/BC 2014-027).
5. For rock slopes 1:1 (H:V) or steeper, provide additional geologic mapping and analysis that incorporates, but not limited to, the following:

- a. Detailed mapping and description of discontinuities along the existing cut slope; such as bedding planes, lithologic contacts, joints, fractures, and faults, with characteristics such as orientation, spacing, presence of infilling or openness, continuity, etc.
- b. Kinematic analysis of discontinuities relative to the slope face, using stereographic

methods to assess potential planar, wedge and topple type failures.

- c. Slope stability analysis of the potential failures using appropriate methods for type of failure identified from the kinematic analysis.
6. Provide a detailed sequence of excavation and implementation of construction techniques for the areas to be tunneled. Provide details of temporary support/shoring for the tunneling such as the minimum reinforcement and spacing of support columns/beams and ribbing.

The geologist and soils engineer shall prepare a report containing the corrections indicated in this letter. The report shall be in the form of an itemized response. It is recommended that once all correction items have been addressed in a response report, to contact the report review engineer and/or geologist to schedule a verification appointment to demonstrate compliance with all the corrections. Do not schedule an appointment until all corrections have been addressed. Bring three copies of the response report, including one unbound wet-signed original for microfilming in the event that the report is found to be acceptable.



EDMOND LEE  
Engineering Geologist Associate II



YING LIU  
Geotechnical Engineer I

Log No. 92340  
213-482-0480

cc: Chris Drugan, Applicant  
Irvine Geotechnical, Inc., Project Consultant  
Soil Labwork LLC, Project Consultant  
LA District Office