

Soils Report Approval Letter

CITY OF LOS ANGELES

BOARD OF
BUILDING AND SAFETY
COMMISSIONERS

VAN AMBATIELOS PRESIDENT

E. FELICIA BRANNON VICE PRESIDENT

JOSELYN GEAGA-ROSENTHAL GEORGE HOVAGUIMIAN JAVIER NUNEZ



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

FRANK M. BUSH
GENERAL MANAGER
SUPERINTENDENT OF BUILDING

OSAMA YOUNAN, P.E. EXECUTIVE OFFICER

SOILS REPORT APPROVAL LETTER

June 18, 2019

LOG # 108619 SOILS/GEOLOGY FILE - 2

LIG 900, 910 & 926 E. 4th St. 405-411 S. Hewitt, LLC 6315 Bandini Blvd. Commerce, CA 90040

TRACT: F. P. HOWARD AND CO'S SUBDIVISION OF THE BLISS TRACT(M

R 12-42)

BLOCK:

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LOT(S):

1, 2, 3, 4, 5, 6

LOCATION:

405-411 S. Hewitt St., 900-926 E. 4th Street & 412 Colyton St.

DATE OF

REPORT/LETTER(S) Addendum Report	No. 21324	DOCUMENT 06/04/2019	PREPARED BY Geotechnologies, Inc.
PREVIOUS REFERENCE REPORT/LETTER(S) Dept. Approval Letter Addendum Report Dept. Approval Letter Soils Report	REPORT <u>No.</u> 106332 21324 96372 21324	DATE OF <u>DOCUMENT</u> 12/10/2018 11/21/2018 01/30/2017 12/29/2016	PREPARED BY LADBS Geotechnologies, Inc. LADBS Geotechnologies, Inc.

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The Department previously conditionally approved the above referenced reports for the proposed 15 story mixed-use building over 3 levels of basement in a letter dated 12/10/2018, Log #106332.

The Grading Division of the Department of Building and Safety has reviewed the referenced report that provide recommendations for the proposed updated site class.

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 2017 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. All conditions of the above referenced Department approval letter(s) shall apply.

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2. The seismic design shall be based on a Site Class D as previously recommended. All other seismic design parameters shall be reviewed by LADBS building plan check. (1613.3.2) Site class C is not approved for the proposed project.

ALAN DANG

Structural Engineering Associate II

AD/ad

Log No. 108619 213-482-0480

cc:

Geotechnologies, Inc., Project Consultant

LA District Office

CITY OF LOS ANGELES

BOARD OF
BUILDING AND SAFETY
COMMISSIONERS

VAN AMBATIELOS PRESIDENT

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

FRANK M. BUSH
GENERAL MANAGER
SUPERINTENDENT OF BUILDING

OSAMA YOUNAN, P.E. EXECUTIVE OFFICER

SOILS REPORT APPROVAL LETTER

December 10, 2018

LOG # 106332 SOILS/GEOLOGY FILE - 2

LIG 900, 910 & 926 E. 4th St. 405-411 S. Hewitt, LLC 6315 Bandini Blvd.
Commerce, CA 90040

TRACT: F. P. HOWARD AND CO'S SUBDIVISION OF THE BLISS TRACT(M

R 12-42)

BLOCK: E

LOT(S): 1, 2, 3, 4, 5, 6

LOCATION: 405-411 S. Hewitt St., 900-926 E. 4th Street & 412 Colyton St.

CURRENT REFERENCE REPORT/LETTER(S) Addendum Report	REPORT <u>No.</u> 21324	DATE OF <u>DOCUMENT</u> 11/21/2018	PREPARED BY Geotechnologies, Inc.
PREVIOUS REFERENCE	REPORT	DATE OF	
REPORT/LETTER(S)	<u>No.</u>	DOCUMENT	PREPARED BY
Dept. Approval Letter	96372	01/30/2017	LADBS
Soils Report	21324	12/29/2016	Geotechnologies, Inc.

The Grading Division of the Department of Building and Safety has reviewed the referenced report that provide recommendations for the proposed 15 story mixed-use building over 3 levels of basement. The consultants recommend to support the proposed structure(s) on mat-type foundations bearing on native undisturbed soils.

The Department previously conditionally approved the above referenced reports dated 12/29/2016 for the proposed structure in a letter dated 01/30/2017, Log #96372 which provided recommendations for the proposed 12 story mixed use structure over 3 levels of basement. The earth materials at the subsurface exploration locations consist of up to 5 feet of uncertified fill underlain by native. The consultants recommend to support the proposed structure(s) on conventional foundations bearing on native undisturbed soils.

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

405-411 S. Hewitt St., 900-926 E. 4th Street & 412 Colyton St.

(Note: Numbers in parenthesis () refer to applicable sections of the 2017 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. All conditions of the above referenced Department approval letter(s) shall apply except as specifically modified herein.
- 2. Temporary excavations that remove lateral support to the public way, adjacent property, or adjacent structures shall be supported by shoring. 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)
- 3. Where any excavation, not addressed in the approved reports, would remove lateral support (as defined in 3307.3.1) from a public way, adjacent property or structures, a supplemental report shall be submitted to the Grading Division of the Department containing recommendations for shoring, underpinning, and sequence of construction. Shoring recommendations shall include the maximum allowable lateral deflection of shoring system to prevent damage to adjacent structures, properties and/or public ways. Report shall include a plot plan and cross-section(s) showing the construction type, number of stories, and location of adjacent structures, and analysis incorporating all surcharge loads that demonstrate an acceptable factor of safety against failure. (7006.2 & 3307.3.2)
- 4. Shoring shall be designed for the lateral earth pressures specified on page 3 of the 12/05/2018 report; all surcharge loads shall be included into the design.
- 5. All mat foundations shall derive entire support from native undisturbed soils, as recommended.

ALAN DANG

Structural Engineering Associate II

AD/ad

Log No. 106332

213-482-0480

cc: Geotechnologies, Inc., Project Consultant

LA District Office

CITY OF LOS ANGELES

BOARD OF **BUILDING AND SAFETY** COMMISSIONERS

> VAN AMBATIELOS PRESIDENT

E. FELICIA BRANNON VICE PRESIDENT

JOSELYN GEAGA-ROSENTHAL GEORGE HOVAGUIMIAN **JAVIER NUNEZ**



ERIC GARCETTI MAYOR

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

> FRANK BUSH GENERAL MANAGER

OSAMA YOUNAN, P.E. **EXECUTIVE OFFICER**

SOILS REPORT APPROVAL LETTER

January 30, 2017

LOG # 96372 SOILS/GEOLOGY FILE - 2

LIG 900, 910 & 926 E. 4th St. 405-411 S. Hewitt, LLC 6315 Bandini Blvd. Commerce, CA 90040

TRACT:

F. P. HOWARD AND CO'S SUBDIVISION OF THE BLISS TRACT(M R 12-42)

BLOCK:

E

LOT(S):

1, 2, 3, 4, 5, 6

LOCATION:

405-411 S. Hewitt St., 900-926 E. 4th Street & 412 Colyton St.

CURRENT REFERENCE

REPORT

DATE(S) OF

REPORT/LETTER(S)

No.

DOCUMENT

PREPARED BY

Soils Report

21324

12/29/2016

Geotechnologies, Inc.

The Grading Division of the Department of Building and Safety has reviewed the referenced report that provide recommendations for the proposed 12 story mixed use structure over 3 levels of basement. The earth materials at the subsurface exploration locations consist of up to 5 feet of uncertified fill underlain by native. The consultants recommend to support the proposed structure(s) on conventional foundations bearing on native undisturbed soils.

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

(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.)

- If tie back anchors will extend offsite, provide a notarized letter from all adjoining 1. property owners allowing tie-back anchors on their property. (7006.6)
- 2. 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)
- 3. All recommendations of the report that are in addition to or more restrictive than the conditions contained herein shall be incorporated into the plans.

405-411 S. Hewitt St., 900-926 E. 4th Street & 412 Colyton St.

- 4. 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)
- 5. A grading permit shall be obtained for all structural fill and retaining wall backfill. (106.1.2)
- 6. 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)
- 7. Existing uncertified fill shall not be used for support of footings, concrete slabs or new fill. (1809.2, 7011.3)
- 8. Drainage in conformance with the provisions of the Code shall be maintained during and subsequent to construction. (7013.12)
- 9. 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)
- 10. Temporary excavations that remove lateral support to the public way, adjacent property, or adjacent structures shall be supported by shoring 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)
- 11. Where any excavation, not addressed in the approved reports, would remove lateral support (as defined in 3307.3.1) from a public way, adjacent property or structures, a supplemental report shall be submitted to the Grading Division of the Department containing recommendations for shoring, underpinning, and sequence of construction. Report shall include a plot plan and cross-section(s) showing the construction type, number of stories, and location of adjacent structures, and analysis incorporating all surcharge loads that demonstrate an acceptable factor of safety against failure. (7006.2 & 3307.3.2)
- 12. 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. (3307.1)
- 13. The soils engineer shall review and approve the shoring and/or underpinning plans prior to issuance of the permit. (3307.3.2)
- 14. 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

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actual surcharge loads, the soil engineer shall submit a supplementary report with revised recommendations to the Department for approval.

- 15. Unsurcharged temporary excavations over 5 feet exposing soil shall be shored, as recommended.
- 16. Shoring shall be designed for the lateral earth pressures specified on page 27 of the report; all surcharge loads shall be included into the design.
- 17. Shoring shall be designed for a maximum lateral deflection of ½ inch where a structure is within a 1:1 plane projected up from the base of the excavation, and 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.
- 18. A shoring monitoring program shall be implemented to the satisfaction of the soils engineer.
- 19. All foundations shall derive entire support from native undisturbed soils, as recommended.
- 20. Footings for miscellaneous small outlying structures, such as property line walls and trash enclosures, not to be tied-in to the proposed building, shall derive entire support from native undisturbed soils or properly placed fill soils, as recommended.
- 21. 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.
- 22. The foundation/slab design shall satisfy all requirements of the Information Bulletin P/BC 2014-116 "Foundation Design for Expansive Soils" (1803.5.3).
- 23. 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.
- 24. Retaining walls shall be designed for the lateral earth pressures specified on page 19 of the report. All surcharge loads shall be included into the design.
- 25. Retaining walls higher than 6 feet shall be designed for lateral earth pressure due to earthquake motions as specified on page 21 of the 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. The height of a stacked retaining wall shall be considered as the summation of the heights of each wall.
- 26. Basement walls and other walls in which horizontal movement is restricted at the top shall be designed for at-rest pressure as specified on page 20 of the report (1610.1). All surcharge loads shall be included into the design.
- 27. 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)

- 28. 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 soil report shall be incorporated into the foundation plan which shall be reviewed and approved by the soils engineer of record. (1805.4)
- 29. Installation of the subdrain system shall be inspected and approved by the soils engineer of record and the City grading/building inspector. (108.9)
- 30. Basement walls and floors shall be waterproofed/damp-proofed with an L.A. City approved "Below-grade" waterproofing/damp-proofing material with a research report number. (104.2.6)
- 31. Prefabricated drainage composites (Miradrain) (Geotextiles) may be only used in addition to traditionally accepted methods of draining retained earth.
- 32. Where the ground water table is lowered and maintained at an elevation not less than 6 inches below the bottom of the lowest floor, or where hydrostatic pressures will not occur, the floor and basement walls shall be damp-proofed. Where a hydrostatic pressure condition exists, and the design does not include a ground-water control system, basement walls and floors shall be waterproofed. (1803.5.4, 1805.1.3, 1805.2, 1805.3)
- 33. All roof and pad drainage shall be conducted to the street in an acceptable manner.(7013.10)
- 34. All concentrated drainage shall be conducted in an approved device and disposed of in a manner approved by the LADBS. (7013.10)
- 35. 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. (7008.2, 7008.3)
- 36. 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)
- 37. Prior to the pouring of concrete, a representative of the consulting soils engineer shall inspect and approve the footing excavations. He/She 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)
- 38. Prior to excavation, an initial inspection shall be called with LADBS Inspector at which time sequence of construction, shoring, protection fences and dust and traffic control will be scheduled. (108.9.1)
- 39. Installation of shoring, underpinning, slot cutting excavations and/or pile installation shall be performed under the inspection and approval of the soils engineer and deputy grading inspector. (1705.6)

- 40. The installation and testing of tie-back anchors shall comply with the recommendations included in the report or the standard sheets titled "Requirement for Tie-back Earth Anchors", whatever is more restrictive. (Research Report #23835)
- 41. Prior to the placing of compacted fill, a representative of the soils engineer shall inspect and approve the bottom excavations. He/She 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 LADBS Grading 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)
- 42. In the event that on-site infiltration systems are proposed, the consultant shall provide an evaluation on the items discussed in Information Bulletin P/BC 2014-118 in a supplemental report with plans drawn to scale and suitable for reproduction and archiving purposes that clearly shows the location of the infiltration facility, all property lines, proposed and existing grades and structures, and the location of the proposed infiltration system. The plan shall be provided on the soils consultant's stationary or shall be signed and stamped by the soils engineer. Note: On-site infiltration systems are required to be a minimum of 10 feet (in any direction) from any foundation, and a minimum of 10 feet horizontally from private property lines.

ALAN DAN Structural Engineering Associate II

AD/ad Log No. 96372 213-482-0480

cc: Geotechnologies, Inc., Project Consultant LA District Office