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SOILS REPORT APPROVAL LETTER

February 6, 2020

LOG # 111800 SOILS/GEOLOGY FILE - 2

Value Schools 680 Wilshire Place, Suite 315 Los Angeles, CA 90005

 TRACT:
 6780

 LOT(S):
 43-45

 LOCATION:
 233 - 241 N. Westmoreland Ave.

CURRENT REFERENCE	REPORT	DATE OF	
REPORT/LETTER(S)	<u>No.</u>	DOCUMENT	PREPARED BY
Soils Report	21536	01/30/2020	Geotechnologies, Inc.

The Grading Division of the Department of Building and Safety has reviewed the referenced report that provides recommendations for the proposed charter school consisting of two-story at-grade structures, smaller structures such as shade structures and privacy walls.

The earth materials at the subsurface exploration locations consist of up to 15 feet of uncertified fill underlain by silty sand, sand and silty clay.

The consultants recommend to support the proposed structures on conventional and/or drilled-pile foundations bearing on native undisturbed soils and/or compacted fill.

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 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 soils engineer shall review and approve the detailed plans prior to issuance of any permit. This approval shall be by signature on the plans that clearly indicates the soils engineer has reviewed the plans prepared by the design engineer; and, that the plans included the recommendations contained in their reports (7006.1).
- 2. All recommendations of the report that are in addition to or more restrictive than the conditions contained herein shall be incorporated into the plans.



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Page 2 233 - 241 N. Westmoreland Ave.

- 3. 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.
- 4. A grading permit shall be obtained for all structural fill and retaining wall backfill (106.1.2).
- 5. 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.
- 6. If import soils are used, no footings shall be poured until the soils engineer has submitted a compaction report containing in-place shear test data and settlement data to the Grading Division of the Department; and, obtained approval (7008.2).
- 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 three feet whichever is greater, except at locations where lateral over excavation is not possible (i.e., foundations adjacent to property lines or structures), in which case the foundations may be deepened to bear in native soils, as recommended (7011.3).
- 8. Existing uncertified fill shall not be used for support of footings, concrete slabs or new fill (1809.2, 7011.3).
- 9. Drainage in conformance with the provisions of the Code shall be maintained during and subsequent to construction (7013.12).
- 10. 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).
- 11. Excavations shall not remove lateral support from a public way, adjacent property or an existing structure. 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)
- 12. 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).
- 13. Prior to the issuance of the permits, the soils engineer and the structural designer shall evaluate all applicable surcharge loads for the design of the retaining walls and shoring.
- 14. Unsurcharged temporary excavation may be cut vertical up to 5 feet. Excavations over 5 feet shall be trimmed back at a uniform gradient not exceeding 1:1, from top to bottom of excavation, as recommended.

Page 3

233 - 241 N. Westmoreland Ave.

- 15. All foundations shall derive entire support from native undisturbed soils or compacted fill, as recommended and approved by the geologist and soils engineer by inspection.
- 16. The upper five feet of the existing piles shall be cut off and removed. The resulting void shall be backfilled with compacted fill, as recommended on page 10 of the referenced report.
- 17. 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.
- 18. The foundation/slab design shall satisfy all requirements of the Information Bulletin P/BC 2014-116 "Foundation Design for Expansive Soils" (1803.5.3).
- 19. 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 2014-030.
- 20. 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).
- 21. Existing uncertified fill shall not be used for lateral support of deep foundations (1810.2.1).
- 22. Slabs on uncertified fill shall be designed as a structural slab (7011.3).
- 23. Slabs placed on approved compacted fill shall be at least 4 inches thick and shall be reinforced with ½-inch diameter (#4) reinforcing bars spaced a maximum of 16 inches on center each way.
- 24. Concrete floor slabs placed on expansive soil shall be placed on a 4-inch fill of coarse aggregate or on a moisture barrier membrane.
- 25. 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.
- 26. Retaining walls up to 6 feet in height with a level backfill shall be designed for a minimum equivalent fluid pressure (EFP) of 30 PCF. All surcharge loads shall be incorporated into the design.
- 27. 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).
- 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 soils 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).

Page 4

233 - 241 N. Westmoreland Ave.

- 30. Prefabricated drainage composites (Miradrain, Geotextiles) may be only used in addition to traditionally accepted methods of draining retained earth.
- 31. 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 (7013.10).
- 32. An on-site storm water infiltration system at the subject site shall not be implemented, as recommended.
- 33. All concentrated drainage shall be conducted in an approved device and disposed of in a manner approved by the LADBS (7013.10).
- 34. The 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).
- 35. 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 [material] bedrock in a written field memorandum. (1803.5.5, 1705.1.2)
- 36. 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)
- 37. Prior to excavation an initial inspection shall be called with the LADBS Inspector. During the initial inspection, the sequence of construction; [shoring; ABC slot cuts; underpinning; pile installation;] protection fences; and, dust and traffic control will be scheduled (108.9.1).
- 38. Installation of shoring, underpinning, slot cutting and/or pile excavations shall be performed under the inspection and approval of the soils engineer and deputy grading inspector (1705.6, 1705.8).
- 39. 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).

Page 5 233 - 241 N. Westmoreland Ave.

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

Geotechnical Engineer II

Log No. 111800 213-482-0480

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