ENG17-00037 GRA17-00053 SOL17-00037

SITE SURVEYING

42919 NORTH CHICORY AVENUE LANCASTER, CALIFORNIA 93534 (661) 948-2428 VOICE/FAX LHSITE@VERIZON.NET

JANUARY 18, 2018

ELEVATIONS OF FINISHED GRADE OF PROPOSED GARAGE UNDER CONSTRUCTION: 26767 SAND CANYON RD., SANTA CLARITA, CALIFORNIA, PER SHEET ONE OF TWO OF OVER EXCAVATION PLAN DATED 12/18/2017.

T.B.M.: N.E. CORNER OF EXISTING TENNIS COURT, ELEVATION: 1720.0

I HEREBY CERTIFY TO CHRIS SEIDENGLANZ THAT ON THIS DATE THE ELEVATION OF THE FINISHED GRADE WITHIN THE EXISTING FORMED PROPOSED GARAGE IS 1721.6, PER PLAN SPECIFICATION.

ADDITIONALLY, THE ELEVATION OF THE EXISTING PERIMETER FORMS IS 1722.53.

J. LANCE HILLER

L.S. 4089



ACCEPTED CITY OF SANTA CLARITA ENGINEERING SERVICES DIVISION SIGNATURS DATE 1/30/18



City of Santa Clarita Engineering Services Division 23920 Valencia Boulevard, Suite 300 Santa Clarita, CA 91355

ROUGH GRADE CERTIFICATION

Tract or Parcel No.: _ APN: 2841-018-060

Lot No. (s):

Address or Location of Property: 26767 Sand Canyon Rd., Canyon Country

Owner: Mr. Chris Seidenglanz

Contractor: KIP Construction

FIELD ENGINEER

Based upon observations, rough grading of the lots listed above has been completed in conformance with plans therefore marked "APPROVED" by the City, and Title 17, Division 3, of the Unified Development Code. The work includes but is not limited to the following: grading to approximate final elevations; staking of property lines; location and gradient of cut and fill slopes; location, cross-sectional configuration and flow line gradient of drainage swales and terraces (graded ready for paving); berms installed where indicated; and required slopes provided on building pads.

Plan Approval Date or Latest Plan Revision Date:

Lot No. (s):______
Other Areas:______
Remarks: ______
Signature: ______
Date: _____

× SOIL ENGINEER

Based upon tests and observations, the earth fills placed on the lots listed above were installed upon properly prepared base material and compacted in compliance with requirements of Chapter 17.27.020 of the Unified Development Code. Fill slope surfaces have been compacted and buttress fills or similar stabilization measures have been installed in accordance with my recommendations as approved by the City. Subdrains have been provided where required and locations of said subdrains are shown on plans dated ______.

See report dated <u>I& U+ I+</u> other special recommendations.		_ for compaction data and procedure, recommended allowable soil bearing values and			
Lot No. (s):					
Expansive Soils	[Yes] x [No]	Lot No. (s):			
Buttress Fills	[Yes] ×[No]	Lot No. (s):			
Reinforced Earth Walls	[Yes] x [No]	Lot No. (s):			
Restricted Use Areas	[Yes] x [No]	Lot No. (s):			
Remarks: Applies to the Signature:	detached garage	building pad only	Engineers Seal and Exp. Date (Below)		
Date: 12/2//17			0 5		
S:\PW\ENGINEERING\FORMS\Grad	ing\(RGC) Rough Grade C	ertification_(04.04.2016).doc	OF ATE OF CALIFORNIE		

CASE NO.:____

Engineer's Seal and Exp. Date (Below)



December 27, 2017

J.N. 17-133

Mr. Chris Seidenglanz California Commercial Construction Co. 26767 Sand Canyon Rd. Canyon County, CA 91387

Project:	Proposed Detached Garage located at 26767 Sand Canyon Rd., Canyon
	Country, Los Angeles County, California; APN 2841-018-060

- Subject: Final Rough Grading Compaction Report with Certification for Proposed Detached Garage Building Pad
- References: Geotechnical Investigation Report for Proposed Detached Garage located at 26767 Sand Canyon Rd., Canyon Country, Los Angeles County, California; APN 2841-018-060, dated October 31, 2017, prepared by Bruin Geotechnical Services Inc. J.N. 17-133

This report has been prepared to document the compaction testing and observations performed by Bruin Geotechnical Services, Inc. (BGSI) during rough grading of the referenced project.

The principal parties involved in the rough grading of the subject project are:

Owner: Mr. Chris Seidenglanz

Geotechnical Consultant: Bruin GSI

Contractor: KIP Construction

Grading of the site began on December 18, 2017 with clearing and grubbing of vegetation from the area to be graded as required.

Rough grading of the site consisted of engineered graded pad for the proposed detached garage building pad.

BRUIN GEOTECHNICAL SERVICES, INC.

The soil was excavated a minimum of four (4) feet below existing grade, a minimum of five (5) feet beyond the limits of the proposed foundation.

The depth, width and length of the scarification were verified by the Geotechnical Consultant prior to fill placement.

The location of the proposed building pad on the site relative to the property lines was the client's responsibility.

The excavation bottom was scarified then moisture conditioned to near optimum moisture content, and compacted to 90% relative compaction as determined by ASTM D 1557 test method with heavy earth-moving equipment.

Compaction tests (ASTM D 6938 nuclear test method) were performed at various locations and elevation to verify density and moisture content compliance. A total of thirteen (13) compaction tests were performed. Final test results on the compacted engineered fill met or exceeded the required 90% relative compaction (95% in the upper 2'). A minimum of ten (10) percent of the compaction tests were performed in accordance with ASTM D 1556 sand cone test method as required.

A plot map of the test locations and horizontal limits of scarification are presented in Appendix A. Test results are shown in Appendix B entitled "Summary of Compaction Test Data."

Samples of the native soil used for grading were obtained for laboratory testing to determine compaction and expansion characteristics. Results are included in Appendix B entitled "Summary of Laboratory Tests."

The native soil used in grading was similar to those described in the referenced reports. The recommendations remain valid for construction. Expansion Index (0) of the native soil tested indicated "very low" expansion potential. Foundations shall be as required by the structural engineer.

Approval and 111 Statement

Bruin Geotechnical Services Inc. performed observations and testing during rough grading of the referenced project. The rough grading was performed in general compliance with the referenced reports and over-excavation recommendations. It is our professional opinion the completed rough grading and proposed structure on this site will not be subject to hazards from landslide, settlement, or slippage. The completed grading performed on this site will not adversely affect the site stability or stability of adjacent properties.

California Commercial Construction Co. December 27, 2017

Limitations

Bruin Geotechnical Services Inc. has performed compaction testing and observations in accordance with generally accepted engineering practice. No guarantee or warranty of the contactors' work is made or implied. Test results indicate adequate compaction at the areas tested.

Respectfully Submitted:

Bruin Geotechnical Services, Inc.

Ryan D. Duke, P.E. n HH H RDD/mes Dist: 4-client

APPENDIX A

PLOT MAP



APPENDIX B

SUMMARY OF COMPACTION TESTS AND LABORATORY TEST DATA



BRUIN GEOTECHNICAL SERVICES, INC.

44732 Yucca Avenue Lancaster, California 93534 Tel. (661) 273-9078 www@bruingsi.net

SUMMARY OF COMPACTION TEST DATA

Area Tested:	Detached Garage Building Pad	Date:	12/19/17
PROJECT NAME:	KIP Construction	Job No.:	17-133
Location:	26767 Sand Canyon Road, Canyon Country	Tract/CC No.:	

	Test		Test	Dry	Moisture	Rel.	Max.
Date	No.	Location	Depth	Density	%	Comp.	Density
12-19-17	1	North End BTM	4' BEG	124.7	8.1	93	134.0
12-19-17	2	Southwest Corner BTM	4' BEG	125.1	9.3	93^	134.0
12-19-17	3	East Middle of Pad BTM	4' BEG	123.0	10.1	92	134.0
12-19-17	4	Middle of Pad	2' BEG	126.3	10.8	94	134.0
12-19-17	5	Northwest Corner on Pad	2' BEG	122.9	9.9	92	134.0
12-19-17	6	Southeast Corner on Pad	2' BEG	124.6	11.1	93	134.0
12-20-17	7	Northeast on Pad	1.5'BFG	125.6	10.2	95	132.0
12-20-17	8	West on Pad	1.5' BFG	125.6	8.6	95	132.0
12-20-17	9	Southeast on Pad	1.5' BFG	125.1	9.4	95	132.0
12-22-17	10	South End of Pad	FG	127.1	10.0	97^	132.0
12-22-17	11	Middle of Pad	FG	124.9	9.7	95	132.0
12-22-17	12	North End of Pad	FG	126.7	10.3	96	132.0
12-22-17	13	Middle of Pad	FG	124.8	8.4	95	132.0

* Denotes Failing Test

FG FSG BFSG

FINISH GRADE FINISH SUBGRADE BELOW FINISH SUBGRADE IN-PLACE DENSITY EXISTING GRADE

IPD

EG

** Denotes Passing Retest Denotes Sand-Cone Test

The above tests were performed in accordance with ASTM D 6938. Maximum Density/Option Moisture was determined in accordance with ASTM D 1557.



TESTING AND INSPECTIONS

MAXIMUM DENSITY/OPTIMUM MOISTURE DETERMINATION (ASTM D 1557)

Soil Description	Maximum Density	Optimum Moisture	Sample I.D.
Moderate brown slightly silty fine to coarse sand with # 4-1" gravel (SM)	134.0 pcf	8.5 %	1
Soil Description	Maximum Density	Optimum Moisture	Sample I.D.
Dark brown slightly silty fine to coarse sand with # 4 gravel, occ. ½" gravel (SM)	132.0 pcf	7.5 %	2