

ColRich 444 West Beech Street, Suite 300 San Diego, California 92101

May 21, 2020 P/W 1304-04 Report No. 1304-04-B-19 City of San Diego Project No. 651806

Attention: Mr. Jason Shepard

Geotechnical Addendum, Response LDR-Geology Cycle 2 Review Comments, Lumina Subject: III, Otay Mesa Area, City of San Diego, California.

**References:** Appendix

Gentlemen:

In accordance with your request and authorization, Advanced Geotechnical Solutions, Inc., has prepared this response to LDR-Geology Cycle Review Comments from the City of San Diego regarding the proposed Lumina III project, in Otay Mesa Area, City of San Diego, California. More specifically, this letter has been prepared in response to review comments 2 through 7 from the Cycle 2 Review Comments dated April 16, 2020. Unless superseded in the text of this addendum report, the conclusions and recommendations presented in referenced geotechnical report (AGS 2019a) remain valid and applicable and should be properly implemented. In preparing this response to cycle review comments, we have first presented the review comment followed by our response.

Item 2 - City of San Diego- The project's geotechnical consultant must submit an addendum geotechnical report or update letter for the purposes of an environmental review that specifically addresses the proposed development plans / tentative parcel map, and the following:.

AGS Response – Noted.

Item 3 -City of San Diego- In general accordance with the Subdivision Map Act, the project's geotechnical consultant should indicate whether or not there are any soil conditions within the area of the Tentative Map which, if not corrected, would lead to structural defects.

AGS Response - There are no known soil conditions within the area of the Tentative Map which, if not corrected, would lead to structural defects.

Page 2 Report 1304-04-B-19

<u>Item 4</u> -City of San Diego- Indicate if the presence of rocks or liquids containing deleterious chemicals which, if not corrected, could cause construction materials such as concrete, steel, and ductile or cast iron to corrode or deteriorate.

AGS Response – Based on available information (References), there are no rocks or liquids present on the project that contain deleterious chemicals that could cause construction materials such as concrete, steel, and ductile or cast iron to corrode or deteriorate.

Test results from AGS's investigations for adjacent parcels indicate that the water-soluble sulfate concentrations for the onsite soils tested ranged from 0.01% to 0.405% which correspond to a sulfate exposure classes S0 - Not applicable to S2 - Severe per ACI 318 Table 4.2.1. Some of the onsite soils are expected to be corrosive to concrete. Based upon the initial test results, higher strength concrete, low water to cement ratios (0.5 to 0.45) and specialized cement types (Type V) could be required to mitigate the adverse effects these aggressive soils could have on concrete.

Resistivity testing of the onsite soils ranged from 260 ohm-cm to 2,300 ohm-cm. These results indicate that some of the onsite soils are expected to be corrosive to ferrous metals. Typical mitigation methods for corrosive soil environments include use of select non-aggressive sand backfill, application of corrosion resistant coatings, or use of polyethylene encasement. Additional testing should be completed during grading to verify whether the soils tested produce similar test results.

<u>Item 5</u> -*City of San Diego- Clarify if the property within the proposed Tentative Map is presently safe from geologic hazards and is presently geotechnically suitable for the intended use.* 

AGS Response – At this time the site is considered to be safe from geologic hazards and geotechnically suitable for the intended use provided the recommendations contained in the referenced geotechnical report (AGS, 2019a) are implemented.

<u>Item 6</u> -City of San Diego- The geotechnical consultant should consider revising their description of geologic units in accordance with the recent Geologic Map of the San Diego Quadrangle (Kennedy and Tan 2008).

AGS Response – The project site is not located within the limits of the referenced map (Kennedy and Tan, 2008). The project site is located to the east within the boundaries of the El Cajon Quadrangle. As discussed in our referenced geotechnical report (AGS, 2019a), mapping for the project follows nomenclature used in the Preliminary Geologic Map of the El Cajon 30' x 60'Quadrangle (Todd, 2004) which encompasses the project. It is our opinion that the nomenclature used is suitable.

<u>Item 7</u> -City of San Diego- Submit a digital copy (on CD or USB data storage device) of all geotechnical documents submitted for review with the next re-submittal.

AGS Response – Digital copies of the project geotechnical reports have been made available to our client for submission with the next re-submittal.

Page 3 Report 1304-04-B-19

Advanced Geotechnical Solutions, Inc. appreciates the opportunity to provide you with geotechnical consulting services and professional opinions. Should you have any questions, please contact the undersigned at (619) 867-0487.

Respectfully Submitted, Advanced Geotechnical Solutions, Inc.

JOHN J. DONOVAN RCE 65051, RGE 2790, Reg. Exp. 6-30-21

Distribution:

(3) Addressee

Attachments:

References



PAUL J. DERISI CEG 2536, Reg. Exp. 5-31-21



### **REFERENCES**

- Advanced Geotechnical Solutions, Inc. (2013). "Geotechnical/Geologic Due Diligence Evaluation of Otay Canyon Ranch Project, Otay Mesa Area, City of San Diego, California," dated May 24, 2013, Report No. 1304-04-B-2.
- ---. (2015a). "Geotechnical/Geologic Due Diligence Evaluation of 'Jabir' Property, Otay Canyon Ranch, Cactus Road, Otay Mesa, City of San Diego, California," dated March 12, 2015, Report No. 1501-09-B-2.
- ---. (2015b). "Geotechnical/Geologic Due Diligence Evaluation of "Watson" Property, Otay Canyon Ranch, Cactus Road, Otay Mesa, City of San Diego, California," dated April 16, 2015, Report No. 1504-01-B-2.
- ---. (2017). "Geotechnical Review of Tentative Map, Otay Canyon Ranch, Otay Mesa Area, City of San Diego, California," dated May 26, 2017, Report No. 1304-04-B-6.
- ---. (2019a). "Geotechnical Review of Tentative Map, Lumina III, Lopez Parcel, Otay Mesa Area, City of San Diego, California," dated March 25, 2019, Report No. 1304-04-B-14.
- ---. (2019b). "Updated Grading Plan Review, Epoca, Otay Mesa Area, City of San Diego, California," dated December 13, 2019, Report No. 1304-04-B-15.
- Kennedy, M.P. and Tan, S.S. (2008). *Geologic Map of the San Diego 30' x 60' Quadrangle, California*, California Geological Survey, Regional Geologic Map, Scale 1:100,000
- Project Design Consultants (2020). Tentative Map for Lumina III. 40-Scale, dated January 8, 2020.
- Todd, V.R. (2004). Preliminary Geologic Map of the El Cajon 30'x60' Quadrangle, USGS OFR 2004-1361.



### THE CITY OF SAN DIEGO Development Services Department 1222 1st Avenue, San Diego, CA 92101-4154

# L64A-003A 1222 1st Avenue, San Diego, CA 92101-4154 Review Information Submitted: 01/15/2020 Cycle Type: 2 Submitted (Multi-Discipline) Submitted: 01/15/2020 Deemed Complete on 01/16/2020 Reviewing Discipline: LDR-Geology Cycle Distributed: 01/16/2020 Deemed Complete on 01/16/2020 Reviewer: Mills, Kreg (619) 446-5295 Assigned: 01/16/2020 Earted: 03/04/2020 Kmills@sandiego.gov Review Due: 02/24/2020 Column 10/2020 Column 10/2020

Completed: 03/05/2020 COMPLETED LATE Closed: 04/16/2020

Next Review Method: Submitted (Multi-Discipline)

The review due date was changed to 02/27/2020 from 02/27/2020 per agreement with customer.

. The reviewer has indicated they want to review this project again. Reason chosen by the reviewer: First Review Issues.

. We request a 2nd complete submittal for LDR-Geology on this project as: Submitted (Multi-Discipline).

. The reviewer has requested more documents be submitted.

. Your project still has 6 outstanding review issues with LDR-Geology (all of which are new).

. Last month LDR-Geology performed 78 reviews, 44.9% were on-time, and 74.6% were on projects at less than < 3 complete submittals.

## 651806-2 (3/5/2020)

#### REFERENCES REVIEWED:

Hours of Review: 3.00

<u>Cleared?</u> ⊠	<u>Issue</u> <u>Num</u> 1	Issue Text Geotechnical Review of Tentative Map, Lumina III, Lopez Parcel, Otay Mesa Area, City of San Diego, California, prepared by Advanced Geotechnical Solutions, Inc., dated December 31, 2019 (their job no. 1304-04) Development Plans for Lumina III Tentative Map No., prepared by Project Design Consultants, date plotted January 8, 2020 (their project no. 2357.35)
(New Issue)		
Cleared?	<u>lssue</u> Num	Issue Text
	2	The project's geotechnical consultant must submit an addendum geotechnical report or update letter for the purposes of an environmental review that specifically addresses the proposed development plans / tentative parcel map, and the following:
	3	(New Issue) In general accordance with the Subdivision Map Act, the project's geotechnical consultant should indicate whether or not there are any soil conditions within the area of the Tentative Map which, if not corrected, would lead to structural defects.
	4	(New Issue) Indicate if the presence of rocks or liquids containing deleterious chemicals which, if not corrected, could cause construction materials such as concrete, steel, and ductile or cast iron to corrode or deteriorate.
	5	(New Issue) Clarify if the property within the proposed Tentative Map is presently safe from geologic hazards and is presently geotechnically suitable for the intended use.
	6	(New Issue) The geotechnical consultant should consider revising their description of geologic units in accordance with the recent Geologic Map of the San Diego Quadrangle (Kennedy and Tan 2008) ftp://ftp.consrv.ca.gov/pub/dmg/pubs/rgm/RGM_003/ .
	7	(New Issue) Submit a digital copy (on CD or USB data storage device) of all geotechnical documents submitted for review with the next re-submittal.
		(New Issue)

For questions regarding the 'LDR-Geology' review, please call Kreg Mills at (619) 446-5295. Project Nbr: 651806 / Cycle: 2