



AGS

ADVANCED GEOTECHNICAL SOLUTIONS, INC.

485 Corporate Drive, Suite B

Escondido, California 92029

Telephone: (619) 867-0487 Fax: (714) 409-3287

Mark Khouli

c/o Walsh Engineering & Surveying, Inc.

607 Aldwych Road

El Cajon, California 92020

August 16, 2024

P/W 2207-06

Report No. 2207-06-B-3

Attention: Mr. Brendan Hofstee

Subject: *Plan Review and Response to County of San Diego Review Comments, Proposed 7-Lot Residential Subdivision, TM 5636, Northwest of Grand Avenue & Date Street, Spring Valley Area, County of San Diego*

References: See Appendix

Gentlepersons,

Advanced Geotechnical Solutions, Inc., (AGS) has reviewed the referenced Preliminary Grading Plan for the subject 7-lot residential subdivision prepared by Walsh Engineering and Surveying, Inc. It is our understanding that the site will be graded on an individual lot basis with the exception of Lots 6 and 7 which will be graded concurrently. Based on our review of the plans, it is our opinion that this is feasible from a geotechnical perspective. It should be noted that excavations in the site bedrock can be difficult and care must be exercised by the grading contractor(s) when removing rock outcrops and excavating for slopes, foundations, retaining walls, etc. so as to prevent undercutting design grades or encroaching into adjacent parcels. The individual lot owners/developers should retain a geotechnical consultant to provide site specific grading and foundation recommendations and utilize a licensed grading contractor with experience in hard rock excavation.

In addition, the County had informal comments regarding the proposed tree well infiltration BMPs. The County comments followed by our responses are presented below.

County of San Diego: Does the Geotechnical Engineer have concerns about placing tree wells (infiltration SSD-BMPs) directly adjacent to retaining walls? Please address the new site layout and the tree well infiltration specifically.

AGS Response: Infiltration testing was not performed as part of the scope of work for the referenced Geologic Reconnaissance report. The site is underlain by hard metavolcanic bedrock which possesses negligible permeability. Infiltration in the form of fracture flow is anticipated. Placement of an underdrain should be considered to mitigate the potential for ponding water. The tree wells will be excavated in hard metavolcanic bedrock and are anticipated to be stable from a geotechnical perspective. The placement of retaining walls adjacent to the infiltration BMPs onsite may be suitable from a geotechnical perspective with proper design, implementation, and maintenance of the BMPs.

Tree roots can cause distress to nearby improvements, including retaining walls, and trees can surcharge retaining walls without proper selection and maintenance. The proper selection of a tree with minimally invasive roots, proper trimming and maintenance to control growth, design of a root barrier system,

ADVANCED GEOTECHNICAL SOLUTIONS, INC.

etc., can mitigate the potential for damage of the retaining wall. These issues are outside the purview, control, and/or expertise of AGS.


County of San Diego: Does the Geotechnical Engineer have concerns with tree roots growing adjacent to the retaining walls and undermining the foundations? Please review of any of the newly proposed retaining walls or stem walls that are a part of the lot by lot grading.

AGS Response: As discussed in our response to the previous review comment, root intrusion over time can damage foundations; however, it is unlikely that they will undermine foundations considering they will be founded in hard volcanic bedrock. The potential for root intrusion should be considered when determining the species of tree for the proposed tree wells. The use of a root barrier should be considered to further mitigate root intrusion.

The proposed retaining walls are considered feasible from a geotechnical perspective. The proposed retaining wall on the north side of the driveway for Lots 6 and 7 will have limited room for a temporary backcut to accommodate typical wall footings. If the temporary excavation for the proposed wall cannot be safely accomplished without encroaching into the adjacent lot, temporary shoring or use of an alternative wall design (e.g. soil nail wall, permanent shored wall, trench wall) may be necessary. The individual lot owners/developers should retain a geotechnical consultant to provide site specific recommendations.

The opportunity to be of service is sincerely appreciated. If you should have any questions, please do not hesitate to contact the undersigned.

Respectfully Submitted,
Advanced Geotechnical Solutions, Inc.



JOHN J. DONOVAN
RCE 65051, RGE 2790, Reg. Exp. 6-30-25



PAUL J. DERISI
CEG 2536, Reg. Exp. 5-31-25

Attached: Appendix – References
Distribution: (1) Addressee (pdf)



APPENDIX
REFERENCES

**APPENDIX
REFERENCES**

Advanced Geotechnical Solutions, Inc. (2022). "Geologic Reconnaissance, Proposed 7-Lot Residential Subdivision, TM 5636, Northwest of Grand Avenue & Date Street, Spring Valley Area, County of San Diego," Report No. 2207-06-B-2, August 5, 2022.

Walsh Engineering & Surveying, Inc., 2024, Preliminary Grading Plan, PDS2019-TM-5636, Grand Avenue Subdivision, 50-Scale, dated April 17, 2024.