Appendix D:
Geotechnical Investigation Report

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ALTA CALIFORNIA
GEOTECHNICAL INC.

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Corona, CA 92880
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TOFFOLI INVESTMENTS
Three Hughes
Irvine, California 92618

June 7, 2021
Project No. 1-0394

Attention: Mr. Alan Toffoli

Subject: ***GEOTECHNICAL FEASIBILITY REPORT***
Ball Road and Anaheim Boulevard
City of Anaheim, California

References: Appendix A

DEPARTMENT OF PUBLIC WORKS
DEVELOPMENT SERVICES
APPROVED
Cesar Morales, Associate Engineer
5/9/2022, 8:37:58 AM
ANAH-OTH2021-01374
Cesar Morales

Dear Mr. Toffoli:

Alta California Geotechnical, Inc. (Alta) is pleased to present this geotechnical feasibility report for the proposed residential/commercial development, located southeast of the intersection of Ball Road and Anaheim Boulevard, in the City of Anaheim, California. This feasibility report and scope of work is based on discussions with you, review of the readily available referenced geologic and geotechnical information, review of aerial photos, and our experience with similar projects in the area.

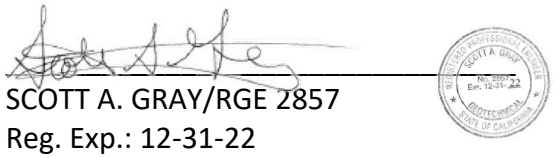
Alta anticipates that this report will be utilized for initial, preliminary due diligence, value engineering and construction cost estimates. This report has been completed without the benefit of the drilling, sampling and testing. As such, the discussions and conclusions should be considered "assumed" and will be subject to modification when the proposed drilling, sampling and testing is completed.

In summary, Alta's review of the data indicates that the proposed development is feasible, from a geotechnical standpoint, provided that a subsurface investigation is undertaken, and the recommendations presented in this report and subsequent reports are incorporated into the project plans and implemented during site development. Included in this report are:

- Discussion of the site geotechnical conditions.
- Preliminary unsuitable soil removal recommendations.
- Preliminary geotechnical site construction recommendations.
- Preliminary improvement design recommendations.

If you have any questions or should you require any additional information, please contact the undersigned at (951) 509-7090. Alta appreciates the opportunity to provide geotechnical consulting services for your project.

Sincerely,
Alta California Geotechnical, Inc.



SCOTT A. GRAY/RGE 2857
Reg. Exp.: 12-31-22
Registered Geotechnical Engineer
President

Distribution: (1) Addressee

SAG: FR: 1-0394, June 7, 2021 (Geotech Feasibility Report, Ball Ave and Anaheim Boulevard)

1.0 PROJECT DESCRIPTION

The following report presents Alta's preliminary, desktop findings, conclusions, and geotechnical recommendations related to the feasibility of the proposed residential/commercial development, located southeast of intersection of Ball Road and Anaheim Boulevard, in the City of Anaheim, California.

1.1 Purpose

The purpose of this report is to examine the geotechnical conditions that may affect the proposed development.

1.2 Scope of Work

Alta's *Scope of Work* for this geotechnical investigation included the following:

- Review of pertinent, referenced reports, literature, maps and air photos.
- Discuss site geologic conditions.
- Discuss anticipated engineering characteristics of the onsite soils.
- Provide a preliminary assessment of the infiltration characteristics of the onsite soil and their impact on storm water disposal.
- Discuss anticipated unsuitable soil removals and other grading recommendations.
- Discuss preliminary foundation types which would likely be suitable for the project.
- Discuss anticipated seismic hazards.
- Preparation of a Geotechnical Feasibility Report containing Alta's anticipated findings, conclusions, and recommendations.

1.3 Report Limitations

The conclusions and recommendations in this report are based on the information generated during this "desktop" geotechnical review. This report is not of sufficient detail to be used for bidding or construction. The information

contained in this report is intended to be utilized for initial, preliminary due diligence, value engineering and construction cost estimates.

2.0 PROJECT DESCRIPTION

2.1 Site Location and Existing Conditions

The irregular-shaped site is relatively flat and is currently occupied by commercial structures and asphalt parking lots. The site is bounded to the north by Ball Road, to the west by Anaheim Blvd, to the east by Claudina Street and commercial properties, and to the south by commercial properties.

Online review of vintage air photographs indicates the site was previously used for agriculture purposes in 1953 (Historic Aerials, 2021). By 1963 some of the structures onsite had been constructed. By 1972 the remaining structures onsite were built. Since then, the site has remained relatively unchanged.

2.2 Proposed Development

Alta anticipates that conventional cut and fill grading techniques will be used to develop the site for the support of wood-frame residential/commercial construction with shallow foundations and reinforced concrete slabs-on-grade, and associated improvements (Figure 1). Final design elevations for this project are not known at this time. Grading of slopes to significant heights are not anticipated for the project.

3.0 GEOLOGIC CONDITIONS

3.1 Stratigraphy

Review of the referenced reports indicates that the property is underlain by alluvium (CDMG, 1997). Minor amounts of artificial fill are likely present.

3.2 Geologic Structure

Based upon our literature research, the onsite alluvium deposits have not been folded, faulted or fractured.

3.3 Groundwater

Based on state-provided information historic high groundwater is greater than 50 feet below the ground surface (CDMG, 1997). A nearby well (State Well No. 338111N1179107W001) indicates that the groundwater was approximately 162 feet below the ground surface in October of 1996 (CDWR, 2021).

3.4 Earthquake Hazards

The subject site is located in southern California, which is a tectonically active area. The type and magnitude of seismic hazards affecting a site are dependent on the distance to the causative fault and the intensity and magnitude of the seismic event. The seismic hazard may be primary, such as surface rupture and/or ground shaking, or secondary, such as liquefaction and/or ground lurching.

3.4.1 Surface Rupture

Active faults are not known to exist within the project and a review of Special Publication 42 indicates the site is not within a California State designated earthquake fault zone. Accordingly, the potential for fault surface rupture on the subject site is very low.

3.4.2 Liquefaction

Seismic agitation of relatively loose saturated sands, silty sands, and some silts can result in a buildup of pore pressure. If the pore pressure exceeds the overburden stresses, a temporary quick condition known as liquefaction can occur. Liquefaction effects can manifest in several ways

including: 1) loss of bearing; 2) lateral spread; 3) dynamic settlement; and 4) flow failure. Lateral spreading has typically been the most damaging mode of failure.

In general, the more recent that a sediment has been deposited, the more likely it will be susceptible to liquefaction. Other factors that must be considered are groundwater, confining stresses, relative density, and the intensity and duration of seismically induced ground shaking.

Based on our literature research (CGS, 1997) and anticipated onsite soil conditions, the site is not located within an area that is susceptible to liquefaction due to the depth of groundwater.

3.4.3 Dry Sand Settlement

Based on our literature research (references) and our anticipated removal/recompaction recommendations, the potential for dry sand settlement is anticipated to be within foundation design tolerances.

4.0 ENGINEERING PROPERTIES AND ANALYSIS

4.1 Materials Properties

Presented herein is a general discussion of the engineering properties of the onsite materials that are anticipated to be encountered during construction of the proposed project. These conclusions are based on our literature research and experience.

4.1.1 Excavation Characteristics

The onsite materials will likely possess favorable excavation characteristics such that conventional earth moving equipment can be utilized.

4.1.2 Compressibility

The artificial fill and the uppermost portions of the alluvium are considered compressible and unsuitable to support the proposed improvements. Anticipated removal depths are presented in Section 5.1.2.

4.1.3 Hydro-Consolidation

It is anticipated that the potential for hydro-consolidation of the underlying alluvium is minimal due to the anticipated minor changes in grade. This must be verified based on laboratory testing and review of grading plans.

4.1.4 Expansion Potential

It is anticipated that the expansion potential will range from "very low" to "medium" per ASTM Test Method D:4829. This must be verified based on laboratory testing.

5.0 PRELIMINARY RECOMMENDATIONS

Based on Alta's literature research and our staff's previous experience in the area, it is Alta's opinion that the development of the project is feasible from a geotechnical perspective. Presented below are recommendations that should be considered during the due diligence process and extending through the site development process.

5.1 Remedial Grading Recommendations

All grading shall be accomplished under the observation and testing of the Project Geotechnical Consultant in accordance with the recommendations contained herein and the City of Anaheim specifications.

Due to the lack of detailed plans and a subsurface site investigation, the following recommendations are considered preliminary. The Project

Geotechnical Consultant should review development plans and grading plans throughout the process and prior to construction to determine whether the following recommendations are applicable.

5.1.1 Site Preparation

Vegetation, construction debris, and other deleterious materials are unsuitable as structural fill material and should be disposed of off-site prior to commencing grading/construction. Any septic tanks, seepage pits or wells should be abandoned as per the County of Orange Department of Health Services.

Existing concrete should be removed prior to the placement of engineered fill. The demolished concrete may be incorporated into compacted, engineered fills after it is crushed to a maximum size of six (6) inches. Prior to placement as engineered fill any protruding steel rebar should be cut from the concrete pieces and disposed of offsite.

Existing asphaltic concrete should be removed prior to the placement of engineered fill. From a geotechnical perspective, this material may be incorporated into compacted, engineered fills after it is crushed to a maximum size of six (6) inches. The crushed asphalt should not be placed under residential structures, but rather, it can be placed in approved non-residential areas, such as streets, parking areas or open space. These recommendations should be verified by the environmental consultant.

5.1.2 Unsuitable Soil Removals

Unsuitable soils including exiting artificial fills and the highly weathered portions of the underlying alluvium should be removed and recompacted prior to the placement of additional engineered fill. Removal depths are

anticipated to range from 4 to 6 feet in depth. Removal bottoms should be observed by the Project Geotechnical Consultant to make a final determination that suitable soils have been exposed.

5.2 General Earthwork Recommendations

5.2.1 Compaction Standards

All fill and processed natural ground shall be compacted to a minimum relative compaction of 90 percent, as determined by ASTM Test Method: D-1557. Fill material should be moisture conditioned to optimum moisture or above, and as generally discussed in Alta's Earthwork Specification Section presented in Appendix B. Compaction shall be achieved with the use of sheepsfoot rollers or similar kneading type equipment. Mixing and moisture conditioning will be required in order to achieve the recommended moisture conditions.

5.2.2 Groundwater/Seepage

It is anticipated at this time that groundwater will not be encountered during grading or construction. Localized perched water conditions may possibly develop depending on the time of year of grading/construction.

5.2.3 Import Soils

Import soils, if necessary, should consist of clean, low expansive, structural quality, compactable materials similar to the on-site soils and should be free of trash, debris, or other objectionable materials. The project Geotechnical Consultant should be notified not less than 72 hours in advance of the locations of any soils proposed for import. Import sources should be sampled, tested, and approved by the project Geotechnical Consultant at the source prior to the importation of the

soils to the site. The project Civil Engineer should include these requirements on plans and specifications for the project.

5.3 Storm Water Infiltration Systems

From a geotechnical perspective, allowing storm water to infiltrate the onsite soil in concentrated areas increases the potential for settlement, liquefaction, and water-related damage to structures/improvements, such as wet slabs or pumping subgrade, and should be avoided where possible. If infiltration systems are required on this site, care should be taken in designing systems that control the storm water as much as possible.

The onsite soils are primarily well consolidated mixtures of gravel, sand, silt and clay. These types of soils can possess moderate to low infiltration rates. Additionally, based on the anticipated unsuitable soil and compaction recommendations presented herein, the final distribution of the soils will include a compacted fill layer across the majority of the site. Compaction of the onsite soils will reduce the infiltration rates. Historic groundwater is greater than 50-feet.

Low infiltration rates are a common problem for storm water management plan requirements. It has been Alta's experience that manufactured infiltration/water cleaning systems can be successful. Controlling agencies have been accepting these systems in-lieu of onsite infiltration.

6.0 DESIGN CONSIDERATIONS

6.1 Structural Design

It is anticipated that multi-story wood-framed residential structures, a hotel structure, and a retail structure, with slab on-grade and shallow foundations will be constructed. Upon the completion of rough grading, finish grade samples

should be collected and tested in order to provide specific recommendations as they relate to the individual building pads. These test results and corresponding design recommendations should be presented in a final rough grading report. Final slab and foundation design recommendations should be made based upon specific structure sitings, loading conditions, and as-graded soil conditions.

6.2 Pavement Design

Pavement sections for the proposed streets should be designed based on laboratory testing conducted on samples taken from the soil subgrade. Preliminarily, based on an assumed R-Value of 30 and a traffic index of 5.0 and 5.5, the streets can be designed utilizing a pavement section of 3-inches of asphalt over 6-inches of aggregate base and 3-inches of asphalt over 7-inches of aggregate base, respectively. This section should be verified upon the completion of grading, based on R-Value testing.

7.0 FUTURE PLAN REVIEWS

This report represents a feasibility geotechnical review of the proposed residential development. A site-specific investigation should be undertaken and will be required by the controlling authorities. As the project progresses, geologic and geotechnical issues should be considered in the design and construction of the project. Consequently, future plan reviews will be necessary. This may include reviews of:

- Grading Plans
- Foundation Plans
- Utility Plans

These plans should be forwarded to the project Geotechnical Consultant for review.

8.0 CLOSURE

8.1 Geotechnical Review

For the purposes of this feasibility report, multiple working hypotheses were considered for the project, utilizing readily available data. Future information collected during the proposed subsurface investigation and during grading operations is intended to evaluate the hypothesis and as such, some of the assumptions summarized in this report may need to be changed. Some modifications of the grading recommendations may become necessary, should the conditions encountered in the field differ from the conditions hypothesized in this report.

Plans and sections of the project specifications should be reviewed by Alta, to evaluate conformance with the intent of the recommendations contained in this report and future reports. If the project description or final design varies from that described in herein, Alta should be consulted regarding the applicability of the recommendations contained herein and whether any changes are required. Alta accepts no liability for any use of its recommendations if the project description or final design varies and Alta is not consulted regarding the alterations.

8.2 Limitations

This report is based on the information presented in the referenced reports, maps and air photos. The conclusions reflect anticipated conditions only. No other representation, either expressed or implied, and no warranty or guarantee is included or intended.

The recommendations presented in this report are based on the assumption that an appropriate level of pre-construction/grading subsurface investigation will be undertaken and that field review during grading will be provided by a

geotechnical consultant who is familiar with the design and site geologic conditions. That field review shall be sufficient to confirm that geotechnical and geologic conditions exposed during grading are consistent with the geologic representations and corresponding recommendations presented in this report.

The conclusions and recommendations included in this report are applicable to the specific design of this project as discussed in this report. They have no applicability to any other project or to any other location and any and all subsequent users accept any and all liability resulting from any use or reuse of the data, opinions, and recommendations without the prior written consent of Alta.

Alta has no responsibility for construction means, methods, techniques, sequences, procedures, safety precautions, programs in connection with the construction, acts or omissions of the CONTRACTOR or any other person performing any of the construction, or for the failure of any of them to carry out the construction in accordance with the final design drawings and specifications.

APPENDIX A

References

APPENDIX A

References

California Department of Water Resources, Water Data Library (WDL) Station Map: https://wdl.water.ca.gov/waterdatalibrary/

California Division of Mines and Geology, 1997, Seismic Hazard Zone Report for the Anaheim and Newport 7.5-Minute Quadrangles, Orange County, California, Report 03.

California Geological Survey, 2018, Earthquake Fault Zones, A guide for Government Agencies, Property Owners/Developers, and Geoscience Practitioners for Assessing Fault Rupture Hazards in California, Special Publication 42, revised 2018, 83 pages.

California Geologic Survey, 1998, Earthquake Zones of Required Investigation, Anaheim Quadrangle, Official Map Released: April 15, 1998, map scale 1:24,000.

Historic Aerials, 2021, www.historicaerials.com, by NETROnline, Copyright 1999-2021, online review of vintage air photos from 1953, 1963, 1972, 1980, 1994, 2003, 2004, 2005, 2009, 2010, 2012, 2014 and 2016.

Jennings, C. W., 1985, An explanatory text to accompany the 1:750,000 scale fault and geologic maps of California: California Division of Mines and Geology, Bulletin 201, 197 p.

APPENDIX B

Earthwork Specifications

ALTA CALIFORNIA GEOTECHNICAL, INC.
EARTHWORK SPECIFICATIONS

These specifications present the generally accepted standards and minimum earthwork requirements for the development of the project. These specifications shall be the project guidelines for earthwork except where specifically superseded in preliminary geology and soils reports, grading plan review reports or by the prevailing grading codes or ordinances of the controlling agency.

A. GENERAL

1. The Contractor shall be responsible for the satisfactory completion of all earthwork in accordance with the project plans and specifications.

2. The project Geotechnical Engineer and Engineering Geologist, or their representatives, shall provide observation and testing services, and Geotechnical consultation for the duration of the project.

3. All clearing, grubbing, stripping and site preparation for the project shall be accomplished by the Contractor to the satisfaction of the Geotechnical Engineer/Engineering Geologist.

4. It is the Contractor's responsibility to prepare the ground surface to receive fill to the satisfaction of the Geotechnical Engineer and to place, spread, mix, moisture condition, and compact the fill in accordance with the job specifications and as required by the Geotechnical Engineer. The Contractor shall also remove all material considered by the Geotechnical Engineer to be unsuitable for use in the construction of engineered fills.

5. The Contractor shall have suitable and sufficient equipment in operation to handle the amount of fill being placed. When necessary, equipment will be shut down temporarily in order to permit the proper preparation of fills.

B. PREPARATION OF FILL AREAS

1. Excessive vegetation and all deleterious material should be disposed of offsite as required by the Geotechnical Engineer.

   Existing fill, soil, alluvium or rock materials determined by the Geotechnical Engineer as being unsuitable for placement in compacted fills shall be removed and hauled from the site. Where applicable, the Contractor may obtain the

approval of the Soils Engineer and the controlling authorities for the project to dispose of the above described materials, or a portion thereof, in designated areas onsite.

After removal of the deleterious materials have been accomplished, earth materials deemed unsuitable in their natural, in-place condition, shall be removed as recommended by the Geotechnical Engineer/Engineering Geologist.

2. Upon achieving a suitable bottom for fill placement, the exposed removal bottom shall be disced or bladed by the Contractor to the satisfaction of the Geotechnical Engineer. The prepared ground surfaces shall then be brought to the specified moisture content mixed as required, and compacted and tested as specified. In localities where it is necessary to obtain the approval of the controlling agency prior to placing fill, it will be the Contractor's responsibility to contact the proper authorities to visit the site.

3. Any underground structure such as cesspools, cisterns, mining shafts, tunnels, septic tanks, wells, pipelines or other structures not located prior to grading are to be removed or treated in a manner prescribed by the Geotechnical Engineer and/or the controlling agency for the project.

C. ENGINEERED FILLS

1. Any material imported or excavated on the property may be utilized as fill, provided the material has been determined to be suitable by the Geotechnical Engineer. Deleterious materials shall be removed from the fill as directed by the Geotechnical Engineer.

2. Rock or rock fragments less than twelve inches in the largest dimension may be utilized in the fill, provided they are not placed in concentrated pockets and the distribution of the rocks is approved by the Geotechnical Engineer.

3. Rocks greater than twelve inches in the largest dimension shall be taken offsite, or placed in accordance with the recommendations of the Geotechnical Engineer in areas designated as suitable for rock disposal.

4. All materials to be used as fill, shall be tested in the laboratory by the Geotechnical Engineer. Proposed import materials shall be approved by the Geotechnical Engineer 48 hours prior to importation.

5. The fill materials shall be placed by the Contractor in lifts, that when compacted, shall not exceed six inches. Each lift shall be spread evenly and shall be

thoroughly mixed to achieve a near uniform moisture condition and a uniform blend of materials.

All compaction shall be achieved at or above the optimum moisture content, as determined by the applicable laboratory standard. The Contractor will be notified if the fill materials are too wet or too dry to achieve the required compaction standard.

6. When the moisture content of the fill material is below the limit specified by the Geotechnical Engineer, water shall be added and the materials shall be blended until a uniform moisture content, within specified limits, is achieved. When the moisture content of the fill material is above the limits specified by the Geotechnical Engineer, the fill materials shall be aerated by discing, blading, mixed with dryer fill materials, or other satisfactory methods until the moisture content is within the specified limits.

7. Each fill lift shall be compacted to the minimum project standards, in compliance with the testing methods specified by the controlling governmental agency, and in accordance with recommendations of the Geotechnical Engineer.

   In the absence of specific recommendations by the Geotechnical Engineer to the contrary, the compaction standard shall be the most recent version of ASTM:D 1557.

8. Where a slope receiving fill exceeds a ratio of five-horizontal to one-vertical, the fill shall be keyed and benched through all unsuitable materials into sound bedrock or firm material, in accordance with the recommendations and approval of the Geotechnical Engineer.

9. Side hill fills shall have a minimum key width of 15 feet into bedrock or firm materials, unless otherwise specified in the soil report and approved by the Geotechnical Engineer in the field.

10. Drainage terraces and subdrainage devices shall be constructed in compliance with the ordinances of the controlling governmental agency and/or with the recommendations of the Geotechnical Engineer and Engineering Geologist.

11. The Contractor shall be required to maintain the specified minimum relative compaction out to the finish slope face of fill slopes, buttresses, and stabilization fills as directed by the Geotechnical Engineer and/or the governing agency for the project. This may be achieved by either overbuilding the slope and cutting

back to the compacted core; by direct compaction of the slope face with suitable equipment; or by any other procedure which produces the required result.

12. The fill portion of fill-over-cut slopes shall be properly keyed into rock or firm material; and the fill area shall be stripped of all soil or unsuitable materials prior to placing fill.

    The design cut portion of the slope should be made first and evaluated for suitability by the Engineering Geologist prior to placement of fill in the keyway above the cut slope.

13. Pad areas in cut or natural ground shall be approved by the Geotechnical Engineer. Finished surfaces of these pads may require scarification and recompaction, or over excavation as determined by the Geotechnical Engineer.

D. CUT SLOPES

1. The Engineering Geologist shall observe all cut slopes and shall be notified by the Contractor when cut slopes are to be started.

2. If, during the course of grading, unforeseen adverse or potentially adverse geologic conditions are encountered, the Engineering Geologist and Soil Engineer shall investigate, analyze and make recommendations to remediate these problems.

3. Non-erodible interceptor swales shall be placed at the top of cut slopes that face the same direction as the superjacent, prevailing drainage.

4. Unless otherwise specified in specific geotechnical reports, no cut slopes shall be excavated higher or steeper than that allowed by the ordinances of controlling governmental agencies.

5. Drainage terraces shall be constructed in compliance with the ordinances of the controlling governmental agencies, and/or in accordance with the recommendations of the Geotechnical Engineer or Engineering Geologist.

E. GRADING CONTROL

1. Fill placement shall be observed and tested by the Geotechnical Engineer and/or his representative during grading.

   Field density tests shall be made by the Geotechnical Engineer and/or his representative to evaluate the compaction and moisture compliance of each fill lift. Density tests shall be conducted at intervals not to exceed two feet of fill

height. Where sheepsfoot rollers are used, the fill may be disturbed to a depth of several inches. Density determinations shall be taken in the compacted material below the disturbed surface at a depth determined by the Geotechnical Engineer or his representative.

2. Where tests indicate that the density of any layer of fill, or portion thereof, is below the required relative compaction, or improper moisture content is in evidence, that particular layer or portion thereof shall be reworked until the required density and/or moisture content has been attained. Additional fills shall not be placed over an area until the previous lift of fill has been tested and found to meet the density and moisture requirements for the project and the previous lift is approved by the Geotechnical Engineer.

3. When grading activities are interrupted by heavy rains, fill operations shall not be resumed until field observations and tests by the Geotechnical Engineer indicate the moisture content and density of the fill are within the specified limits.

4. During construction, the Contractor shall properly grade all surfaces to maintain good drainage and prevent the ponding of water. The Contractor shall take remedial action to control surface water and to prevent erosion of graded areas until such time as a permanent drainage and erosion devices have been installed.

5. Observation and testing by the Geotechnical Engineer and/or his representative shall be conducted during filling and compacting operations in order that he will be able to state in his opinion that all cut and filled areas are graded in accordance with the approved specifications.

6. Upon the completion of grading activities and after the Geotechnical Engineer and Engineering Geologist have finished their observations of the work, final reports shall be submitted. No further excavation or fill placement shall be undertaken without prior notification of the Geotechnical Engineer and/or Engineering Geologist.

F. FINISHED SLOPES

All finished cut and fill slopes shall be planted and irrigated and/or protected from erosion in accordance with the project specifications, governing agencies, and/or as recommended by a landscape architect.

FIGURE 1

	COUNT	%	PKNG REQD PER UNIT WITH DENSITY BONUS (PER SECTION 18.52.100)	PRIVATE GARAGE SPACES PROVIDED PER UNIT	TOTAL PARKING REQD (UNITS x SPACES REQD PER UNIT)
TINY TOWNS - 1 BR	29	18.2%	1	1	29
TINY TOWNS - 2 BR	24	15.1%	2	2	48
TINY TOWNS - 3 BR	28	17.6%	2	2	56
FLATS - 2 BR	18	11.3%	2	2	36
FLATS - 3 BR	12	7.5%	2	2	24
METRO TOWNS - 1 BR	14	8.8%	1	2	14
METRO TOWNS - 2 BR	20	12.6%	2	2	40
METRO TOWNS - 3 BR	14	8.8%	2	2	28
FOR SALE TOTAL	159		FOR SALE PARKING REQD		275.0
FOR SALE AREA (AC)	6				
FOR SALE DENSITY (DU/AC)	26.5				
			FOR SALE PARKING REQUIRED		275.0
			FOR SALE GARAGE SPACES PROVIDED		289.0
			SURFACE PARKING PROVIDED		67.0
			TOTAL FOR SALE PARKING PROVIDED		356.0
			EXCESS FOR SALE PARKING PROVIDED		*81.0*

PROVIDED HOTEL AND RETAIL SHARED PARKING	212 SPACES

REQUIRED RETAIL SPACES (4/1000 SQ. FT. FOR GENERAL RETAIL PER 18.42.040)	24 SPACES
REQUIRED HOTEL GUEST ROOM SPACES (0.8/1 GUEST ROOM PER 18.42.040)	144 SPACES
ADDITIONAL HOTEL SPACES PROVIDED FOR BANQUET/MEETING ROOM(S) AND RETAIL SPACE/EMPLOYEES	44 SPACES

SITE DATA

RESIDENTIAL
6 ACRES
48 METRO TOWNS
81 TINY TOWNS
30 FLATS
159 UNITS
26.5 UNITS/ACRE

HOTEL
4.22 ACRES
180 ROOMS/KEYS

RETAIL
0.26 ACRES
6,000 SQ. FT.

SURFACE PARKING (159 SPACES)

ATN FACILITY

ON-WALL ART ELEMENT

POTENTIAL CONNECTION TO FUTURE DEVELOPMENT

FUTURE THROUGH PRIVATE STREET

RETAIL

HOTEL

SERVICE

SURFACE PARKING (53 SPACES)

ANAHEIM BLVD

8' R/W DEDICATION

7' R/W DEDICATION

28' R/W DEDICATION

02.10.21

0' 40' 80'
SCALE: 1" = 40'

BALL SITE | TOFFOLI INVESTMENTS

ANAHEIM, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

TOFF-1903

woodley architectural group,inc
colorado // 731 southpark dr. suite B
littleton, co 80120 / 303 683.7231
california // 2943 pullman st. suite A
santa ana, ca 92705 / 949 553.8919

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GEOTECHNICAL INC.

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www.altageotechnical.com

GREENLAW DEVELOPMENT
18301 Von Karmen Ave., Ste 250
Irvine, California 92612

April 19, 2022
Project No. 1-0394

Attention: Mr. Alan Toffoli

Subject: **RESPONSE TO ORANGE COUNTY PLAN CHECK COMMENTS**
1200 S. Anaheim Boulevard
City of Anaheim, California

Reference: Alta California Geotechnical, Inc., 2021, Geotechnical Feasibility Report, Ball Road and Anaheim Boulevard, City of Anaheim, California, dated June 7, 2021 (Project Number 1-0394).

Dear Mr. Toffoli:

Presented herein is Alta California Geotechnical, Inc's (Alta) response to the City of Anaheim's plan check comments for the proposed development located at 1200 S. Anaheim Boulevard, in the City of Anaheim, California. The city's plan check comments are presented prior to this firm's responses. The county review sheets are attached.

City Comment 1:

Section 4.1.3: Hydro-consolidation occurs when soils become saturated. Explain how hydro-consolidation is minimal due to anticipated minor changes in grade.

Alta Response:

When hydro-collapse prone soils are wetted and loaded by new fills or foundation loads, the soil structure and apparent strength are altered resulting in almost immediate settlement. Given the relatively flat nature of the site, new fill loads are anticipated to be minimal, while foundation loads will be encompassed within engineered fill based on the removal and recompaction recommendations. The minimal fill loads combined with the removal and recompaction recommendations presented in the referenced report should reduce the potential for hydro-collapse to within foundation tolerances. As noted in the referenced

report, this must be verified based on laboratory testing (consolidation tests) and review of grading plans.

City Comment 2:

Section 8.1: Provide recommendations for the future subsurface investigation and laboratory testing program.

Alta Response:

We recommend performing a subsurface investigation with a drill rig to excavate, log and sample the underlying soils. Laboratory testing should include the following tests: laboratory maximum dry density and optimum moisture content, moisture/density, expansion index, consolidation, grain size analysis, and chemical (corrosion) testing.

Alta appreciates the opportunity to provide you with geotechnical consulting services. If you have any questions or should you require any additional information, please contact the undersigned at (951) 509-7090.

Sincerely,
Alta California Geotechnical, Inc.

SCOTT A. GRAY/RGE 2857
Reg. Exp.: 12-31-22
Registered Geotechnical Engineer
President

Distribution: (1) Addressee

FR: SAG: 1-0394, April 19, 2022 (Response to OC Review Comments, 1200 S. Anaheim Blvd)

City of Anaheim
DEPARTMENT OF PUBLIC WORKS

October 6, 2021

To: Scott A. Gray
Alta California Geotechnical, Inc.
170 N. Maple Street – Suite 108
Corona, CA 92880
Tel: (951) 509-7090

RE: Preliminary Soils Report
OTH2021-01374
1200 S. Anaheim Boulevard
First Review

Dear Mr. Gray,

We have completed our review of this project and a re-submittal is required.

Begin by visiting the following website: https://www.anaheim.net/229/Public-Works. Follow the on screen instruction and upload your submittal. If there are any questions contact pwepc@anaheim.net. Our team will respond to your submittal within two business days with additional direction on the requirements for submittal and payment options.

The following will be required for the next plan submittal:

1. Revised Soils Report/Response to Comments

Comments:

1. Section 4.1.3: Hydro-consolidation occurs when soils become saturated. Explain how hydro-consolidation is minimal due to anticipated minor changes in grade.
2. Section 8.1: Provide recommendations for the future subsurface investigation and laboratory-testing program.
3. See and address all other redline comments on report.

If you have any questions regarding this review, please contact me at cmorales2@anaheim.net or at (714) 765-5286

Sincerely,

Cesar Morales, PE
Associate Engineer

cc; Mike Eskander, Development Services Manager

200 S. Anaheim Blvd., Suite 276
Anaheim, CA 92805

TEL (714) 765-5176
FAX (714) 765-5225

www.anaheim.net

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