GEOTECHNICAL UPDATE AND RESPONSE TO CITY OF SAN DIEGO DEVELOPMENT SERVICES DEPARTMENT (DSD - GEOLOGY) PROJECT ISSUES DATED DECEMBER 16, 2022 PROPOSED RESIDENTIAL DEVELOPMENT ("COVE HOUSE") LOTS 2 AND 17 OF BLOCK 46, LA JOLLA, SAN DIEGO COUNTY CALIFORNIA 92037, ASSESSOR'S PARCEL NUMBERS (APNS) 350-131-02-00 AND -29-00

FOR

HERITAGE BRIDGE, LLC, FALCON COVE, LLC
481 E. SUN SPRING PLACE
ORO VALLEY, ARIZONA 85755

W.O. 8358-A1-SC MAY 17, 2023

GeoSoils, Inc.

Geotechnical • Geologic • Coastal • Environmental

5741 Palmer Way • Carlsbad, California 92010 • (760) 438-3155 • FAX (760) 931-0915 • www.geosoilsinc.com

May 17, 2023

W.O. 8358-A1-SC

Heritage Bridge, LLC, Falcon Cove, LLC
481 E. Sun Spring Place
Oro Valley, Arizona 85755

Subject: Geotechnical Update and Response to City of San Diego Development Services Department (DSD - Geology) Project Issues Dated December 16, 2022, Proposed Residential Development ("Cove House"), Lots 2 and 17 of Block 46, La Jolla, San Diego County, California 92037, Assessor's Parcel Numbers (APNs) 350-131-02-00 and -29-00

Dear Sir and Madame:

In accordance with your request and authorization, (GSI) is pleased to submit this geotechnical update, including responses to project issues raised by the Geology Division of the City of San Diego Development Services Department during the discretionary review process ([City], 2022 [see Appendix A]). The scope of services GSI performed for this update and response included reviews of the referenced documents (Appendix A); geotechnical engineering analyses; and the preparation of this report and accompaniments. Unless specifically superceded herein, the conclusions and recommendations contained in GSI (2022a, 2022b) remain valid and applicable, and should be appropriately implemented during the balance of project design and during construction.

GEOTECHNICAL UPDATE

Proposed Development

Based on our reviews of the "Preliminary Site Drainage Plan" and "Post-Construction BMP Plan" prepared by Pasco, Laret, Suiter, and Associates ([PLSA], 2023) and the architectural plans prepared by Island Architects ([IA], 2023), the currently proposed site development consists of razing the existing tennis court and associated retaining walls, and preparing the site to receive a three-story single-family residence with a roof deck, a two-story casita, a swimming pool, underground utilities, new retaining walls, and vehicular and pedestrian Portland cement concrete (PCC) pavements. As shown on IA (2023), the new single-family residential structure will include a basement floor level and the casita will have a daylight basement.

According to PLSA (2023), the proposed site design will require planned cuts and fills on the order of 15½ feet and 9¼ feet, respectively. Grade differentials will generally be accommodated by the construction of retaining walls. PLSA (2023) indicates that the proposed basement and site retaining walls will have maximum retained soil heights of approximately 23½ feet and 10½ feet, respectively. An approximately 4-foot high fill slope is planned to the northwest of the proposed single-family residential structure and is part of a proposed treatment planter for permanent, post-development storm water best management practices (BMPs). The gradient of this slope will be on the order of 2:1 (horizontal:vertical [h:v]) or flatter.

PLSA (2023) shows that site storm water runoff will sheet flow toward an 8-inch wide trench drain and 6-inch diameter area drains that in turn, convey the runoff toward the aforementioned treatment planter. A new 8-inch diameter storm drain will convey storm water runoff from adjacent Lots 18 and 19, through the western side of the subject site, to a rip-rap energy dissipator near the northeast corner of the proposed project area. At its deepest point, the invert elevation of the 8-inch diameter storm drain pipe will be approximately 6 feet below the proposed grade.

GSI anticipates that the proposed residential structure and casita will be supported by shallow foundations with concrete slab-on-grade floors. We also anticipate that the proposed retaining walls will consist of concrete masonry unit (CMU) or cast-in-place concrete construction.

Conclusions

Based on our review, the subject parcels are considered suitable to receive the proposed residential development currently shown on PLSA (2023) and IA (2023). The most significant geotechnical factors affecting the proposed development are summarized below:

Retreat and Instability of the Nearby Coastal Bluff

The nearby coastal bluff is subject to retreat from subaerial and marine erosion and resultant instability. As indicated in GSI (2022b), the City's minimum 25-foot development setback from the coastal bluff edge will mitigate coastal bluff retreat and instability from adversely impacting the proposed residential structures over their 75-year design life. IA (2023) shows the proposed residential structures more than 25 feet landward of the coastal bluff edge.

Earthquake-Induced Ground Shaking

The subject parcels are located in a seismically active region that is subject to periodic earthquakes. The parcels are expected to undergo moderate to strong ground shaking during an earthquake occurring along any of the regional faults. The severity of ground shaking is largely dependent on earthquake magnitude and the distance between the site

and the epicenter. The design earthquake occurring on the nearby Rose Canyon fault is expected to produce the highest level of ground shaking at the site. Seismic shaking parameters were provided in GSI (2022b) to protect the life and safety of the building occupants. They are not intended to mitigate structural damage or cumulative effects. Based on our review of the 2022 California Building Code (California Building Standards Commission [CBSC], 2022), the seismic shaking parameters provided in GSI (2022b) are still considered valid and applicable.

Potentially Compressible Near-Surface Soils

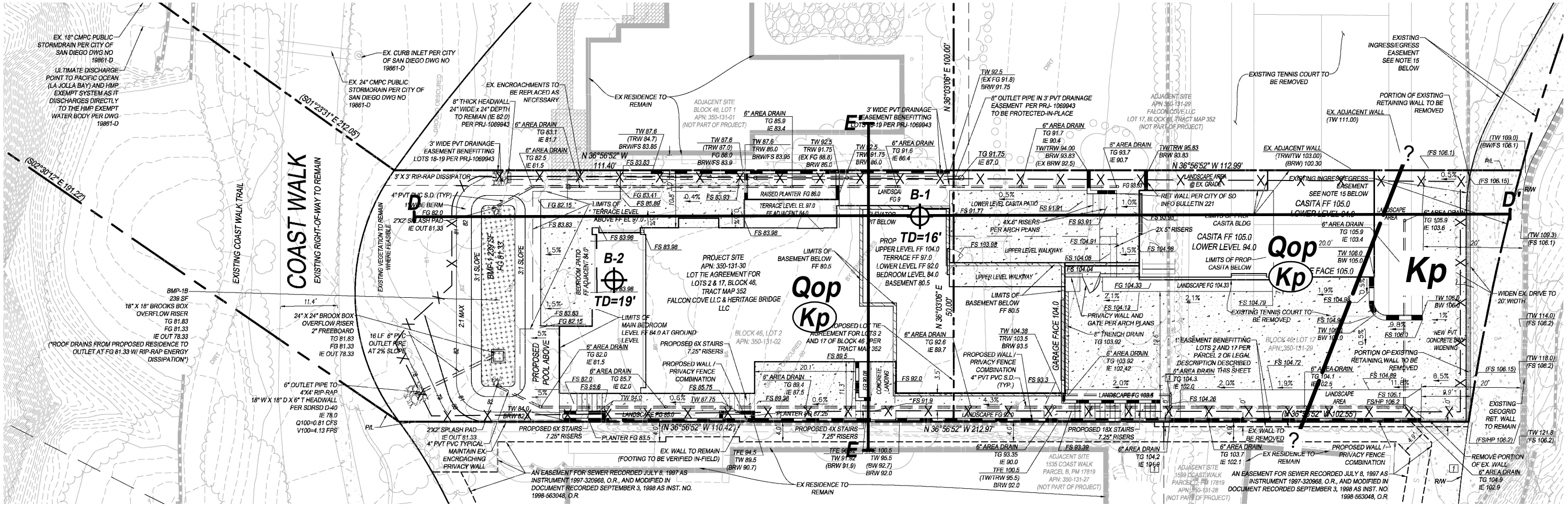
The Quaternary-age residual soil that occurs in the upper 1 foot to 2 feet of the onsite geologic profile is considered potentially compressible in its existing state. Proposed improvements constructed upon this soil may experience settlement and related distress. Remedial grading recommendations were provided in GSI (2022b) for mitigation and to manage settlement. Figures 1 and 2 show the limits of the recommended remedial grading, without the assistance of shoring or slot grading/slot excavation, in plan and profile views, respectively.

Expansive Soils

Based on our site-specific and nearby geotechnical studies, we estimate that the soils encountered during the proposed site development will be medium to high in expansion potential (expansion index [E.I.] range of 51 to 130). If not accounted for in the design and construction of the proposed site improvements, shrink/swell deformations of expansive soils have the potential to cause damage of such. GSI (2022b) provides preliminary recommendations for the mitigation of expansive soils through earthwork (i.e., selective grading), pre-soaking, and by structural design (i.e., post-tensioned slab and mat-slab foundations). GSI (2022b) also provided increased lateral earth pressures for retaining wall design where the placement of select or very low expansive backfill above a 1:1 (h:v) plane, projected up from the heel of wall footing, is constrained by property boundaries or existing improvements that need to remain in service. Based on our review of PLSA (2023), the portions of the proposed site retaining walls along the eastern and western sides of the proposed project area, that retain the adjacent properties, will need to consider increased lateral earth pressures from expansive soils in their structural design. Increased lateral earth pressures from expansive soils will also need to be incorporated into the structural designs of the northern and southern basement walls of the proposed single-family residential structure, and the eastern side of the basement wall for the proposed casita.

Corrosive Soils

Laboratory testing performed in preparation of GSI (2022b) indicated that a representative sample of the onsite, near-surface soils is neutral with respect to soil acidity/alkalinity; is corrosive to exposed buried metals when moist; presents negligible sulfate exposure to concrete (Exposure Class S0 per Table 19.3.1.1 of American Concrete Institute [ACI] 318-14 [ACI, 2014]); and contains slightly elevated concentrations of soluble chlorides that



GSI LEGEND

- **Qop** — QUATERNARY OLD PARALIC DEPOSITS
- **Kp** — CRETACEOUS POINT LOMA FORMATION
- —?— — APPROXIMATE LOCATION OF GEOLOGIC CONTACT, QUERIED WHERE UNCERTAIN
- B-2 ⊕ — APPROXIMATE LOCATION OF EXPLORATORY BORING, WITH TOTAL DEPTH IN FEET
- E TD=19' E' — LOCATION OF GEOLOGIC CROSS SECTION
- —X—X— — APPROXIMATE LIMITS OF REMEDIAL EXCAVATION WITHOUT SHORING OR SLOT GRADING / SLOT EXCAVATION. ACTUAL LIMITS TO BE EVALUATED DURING GRADING.

BASE MAP FROM:

PASCO LARET SUITER & ASSOCIATES
San Diego | Encinitas | Orange County
Phone 858.259.8212 | www.plsaengineering.com

revision	date
DSD – 1ST CDP	10/11/22
DSD – 2ND CDP	4/12/23

date: 4/12/23
drawn by: G. KNUDSON
checked by: J. SUITER
job: PLSA 3743-03

Sheet **C100** 1 of 2

ALL LOCATIONS ARE APPROXIMATE

This document or efile is not a part of the Construction Documents and should not be relied upon as being an accurate depiction of design.

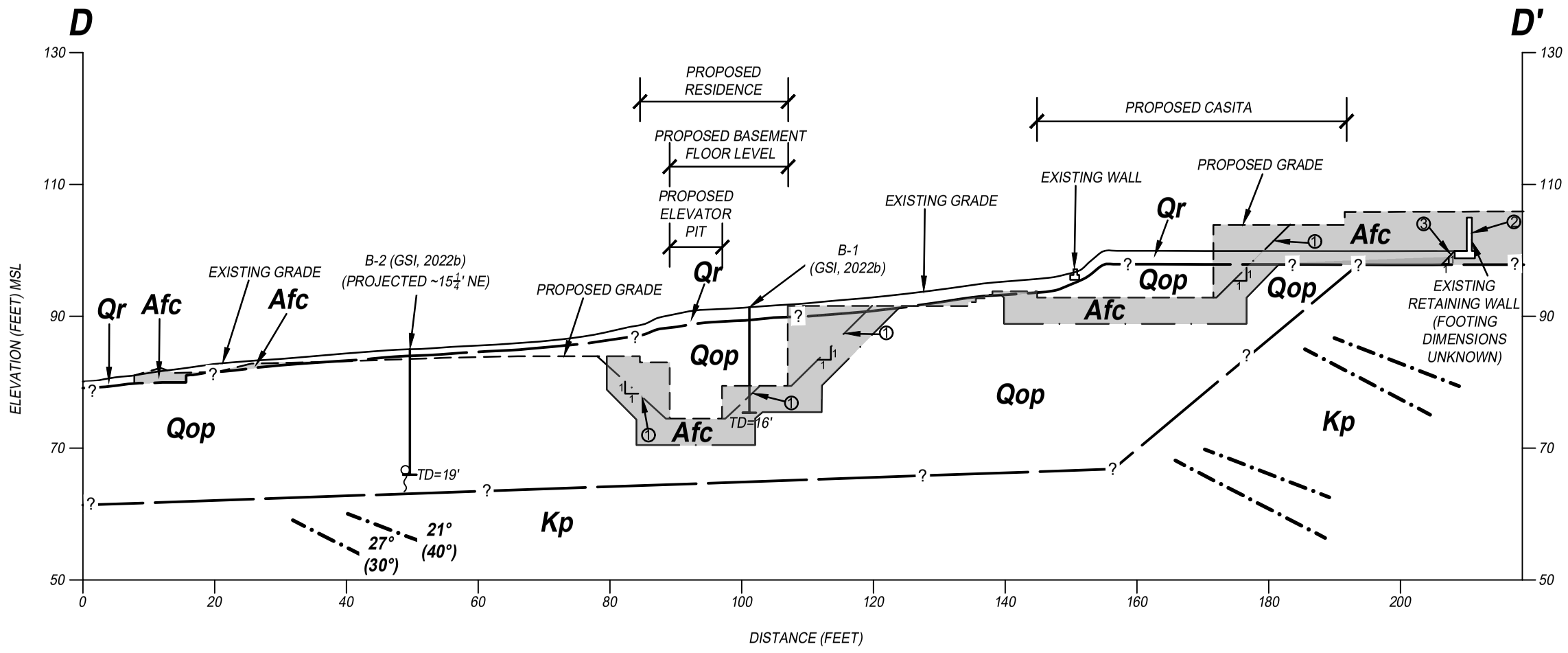
GRAPHIC SCALE
20 0 10 20 40
1" = 20'

GeoSoils, Inc.

GEOTECHNICAL MAP

Figure 1

W.O. 8358-A1-SC | DATE: 05/23 | SCALE: 1" = 20'



KEY NOTES:

① PLACE AND COMPACT SELECT OR VERY LOW EXPANSIVE BACKFILL ABOVE 1:1 (HORIZONTAL: VERTICAL) PLANE PROJECTED UP FROM THE HEEL OF RETAINING WALL FOOTINGS. OTHERWISE, RETAINING WALLS SHOULD BE DESIGNED FOR INCREASED LATERAL EARTH PRESSURES CREATED BY EXPANSIVE SOILS. SEE GSI (2022b) FOR RECOMMENDED LATERAL EARTH PRESSURES TO BE USED IN RETAINING WALL DESIGN.

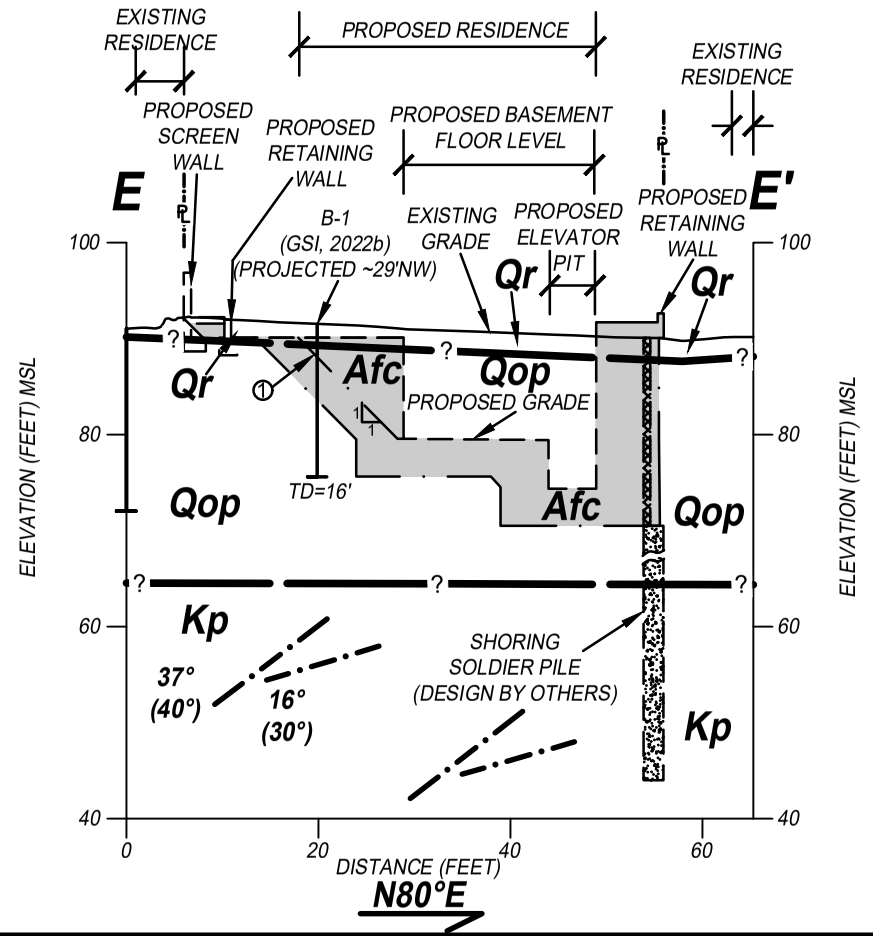
② EXISTING RETAINING WALL MAY REMAIN IN PLACE AS AN ALTERNATIVE TO SHORING OR SLOT GRADING FOR PROTECTION OF EXISTING COMMUNAL DRIVEWAY. THE TOP OF THE EXISTING RETAINING WALL MAY THEN BE REMOVED IN SLOT EXCAVATIONS TO FACILITATE THE INSTALLATION OF PROPOSED UNDERGROUND UTILITIES AND PAVEMENTS.

③ SLOT GRADING IS RECOMMENDED WHEN CONDUCTING REMEDIAL EARTHWORK BELOW 1:1 (HORIZONTAL:VERTICAL) PLANE PROJECTED DOWN FROM THE TOP EDGE OF THE EXISTING RETAINING WALL FOOTINGS. SEE GSI(2022b) FOR SLOT GRADING RECOMMENDATIONS

NOTE: PROPOSED GRADES WITHIN THE FOOTPRINTS OF THE PROPOSED RESIDENTIAL STRUCTURE AND CASITA ASSUMED TO BE APPROXIMATELY 1 FOOT BELOW FINISH FLOOR ELEVATIONS. THE PROPOSED GRADE BELOW THE BOTTOM OF THE PROPOSED ELEVATOR PIT IS ASSUMED TO BE APPROXIMATELY 5 FEET BELOW THE PROPOSED PAD GRADE FOR THE BASEMENT FLOOR LEVEL. THESE PROPOSED GRADES ARE SUBJECT TO CHANGE.

GSI LEGEND

- **Afc** — ARTIFICIAL FILL - COMPACTED (TO BE PLACED DURING THE PLANNED AND REMEDIAL GRADING)
- **Qr** — QUATERNARY RESIDUAL SOIL
- **Qop** — QUATERNARY OLD PARALIC DEPOSITS
- **Kp** — CRETACEOUS POINT LOMA FORMATION
- **?** — APPROXIMATE LOCATION OF GEOLOGIC CONTACT, QUERIED WHERE UNCERTAIN
- **26° (30°)** — APPARENT DIP OF REGIONAL BEDDING (IN DEGREES), WITH TRUE DIP IN PARENTHESES (KENNEDY & TAN, 2008)
- **18° (40°)** — APPARENT DIP OF REGIONAL BEDDING (IN DEGREES), WITH TRUE DIP IN PARENTHESES, (KENNEDY, 1975)
- APPROXIMATE LOCATION OF PERCHED GROUNDWATER SEEPAGE IN BORING B-2
- APPROXIMATE LOCATION OF COMPACTED PLANNED AND REMEDIAL FILLS.



ALL LOCATIONS ARE APPROXIMATE

This document or efile is not a part of the Construction Documents and should not be relied upon as being an accurate depiction of design.

GRAPHIC SCALE

20 0 10 20 40

1" = 20'

GeoSoils, Inc.

GEOLOGIC CROSS SECTION D-D' & E-E'

Figure 2

W.O. 8358-A1-SC	DATE: 05/23	SCALE: 1" = 20'

are below action levels. Since GSI does not consult in the field of corrosion engineering, we indicated in GSI (2022b) that additional comments and recommendations may be obtained by a qualified corrosion engineer, based on the level of corrosion protection required for the project, as determined by other members of the design team. We also advised that structural concrete may be exposed to sea spray from the nearby Pacific Ocean. Thus, we recommended that the mix design of structural concrete conform to the guidelines in Table 19.3.2.1 of ACI 318-14 for Exposure Class C2 conditions, if determined to be warranted by the project architect.

Feasibility of Storm Water Infiltration into the Onsite Soils

In GSI (2022a), we concluded that infiltrating storm water into the onsite soils to meet permanent, post-construction storm water BMP objectives had a high potential to result in the accumulation of the infiltrated water along sand and clay beds within the old paralic deposits and along the geologic contact between the old paralic deposits and the Point Loma Formation (i.e., perched groundwater). We further discussed that the perched groundwater would migrate laterally and enter the adjacent properties, and seep from the nearby coastal bluff, owing to the seaward-dipping contact between the old paralic deposits and Point Loma Formation. Lateral migration of perched groundwater could induce swelling of expansive soils and fill settlement within the subject property and the adjacent parcels. It could also increase the potential for moisture transmission through the proposed retaining walls and basement walls. Perched groundwater exiting the bluff face would also contribute to spring sapping and reduced bluff stability. Therefore, we recommended against the infiltration of storm water into the onsite soils. Rather, we suggested that the proposed permanent, post-construction storm water BMPs consist of fully contained systems or that storm water filtration or detention basins include an impermeable liner and an under-drain system. Geotechnical recommendations for the design of storm water basins were included in GSI (2022b).

Section A1 ("Typical Section: Biofiltration Planter Cross Section [BF-1]") on Sheet C200 of PLSA (2023) shows a biofiltration basin with an impermeable membrane ("waterproofing"). A note in the section refers the reviewer to "waterproofing notes" for waterproofing specifications. However, GSI could not locate these notes.

GSI recommends that the "waterproofing notes" be added to this sheet and specify the impermeable membrane product. EPI's 30-mil polyvinyl chloride (PVC) flexible geomembrane liner meets the material properties recommended in GSI (2022b). If the impermeable geomembrane liner will be exposed to ultraviolet light, EPI's 30-mil "SunTech" PVC geomembrane may be better suited for the proposed application. GSI also recommends that Section A1shows the impermeable membrane extending a few inches above the 100-year (Q_{100}) water level in the basin and be secured in place. Section A1 should also specify that the liner installation be conducted in accordance with the manufacturer's recommendations.

Perimeter Conditions

In GSI (2022b), we indicated that perimeter conditions have the potential to constrain the lateral extent of the recommended remedial grading, given the urban infill nature of the proposed development. Thus, we advised that the proposed improvements located near the property boundaries may require deepened foundations, additional reinforcement, etc., or will retain some potential for settlement and associated distress. Based on the available subsurface data, we concluded that proposed improvements located within a horizontal distance of about 1 foot to 2 feet from the property boundaries would be affected by perimeter conditions. Based on our review of PLSA (2023) and the available subsurface data, the proposed site retaining walls along the eastern and western property boundaries would be affected by perimeter conditions, since the property lines would prevent remedial grading below a 1:1 (h:v) plane projected down and away from the bottom, outside edges of the wall footings. Mitigation includes deepening the retaining wall footings into suitable, unweathered old paralic deposits. Alternatively, these walls may be supported by cast-in-drilled-hole (CIDH) piles that extend into suitable, unweathered old paralic deposits.

Since the existing driveway that adjoins the southern margin of the project area provides access to other properties, it is unlikely that remedial grading can be performed to the southern limits of the ingress/egress easement shown on PLSA (2023) without restricting vehicular travel. Thus, portions of the existing driveway may be underlain by potentially compressible earth materials following the proposed development and may require increased maintenance and repairs over the life of the project. This should be disclosed to all interested/affected parties.

Excavation Stability

In GSI (2022b), we recommended that unsupported temporary slopes for excavations 20 feet or less in depth be constructed in accordance with CAL-OSHA guidelines for Type "B" soils (i.e., 1:1 [h:v] gradient), provided that saturated soils, groundwater seepage, running sands, or other adverse conditions are absent. As with any earthwork activity, should hazardous conditions be exposed during onsite excavations, the temporary slopes may need to be altered to flatter gradients or shored. Shoring or slot grading will likely be necessary where existing improvements and property boundaries do not allow for construction of the recommended temporary slope gradients.

Based on our review of PLSA (2023), shoring appears necessary along the eastern and western sides of the basement floor level of the proposed single-family residence to complete the planned excavations and recommended overexcavation. It also appears necessary to retain adjacent property during the planned excavation and construction of the proposed retaining wall along the eastern property boundary. Moreover, it seems that shoring or underpinning the foundation of the existing, offsite retaining wall, along the western property boundary, will be required to facilitate the planned excavation and construction of the new retaining wall in this area. Lastly, if the proposed development on

Lots 18 through 20 is completed prior to beginning earthwork construction within Lots 2 and 17, shoring would likely be necessary along the eastern property boundary of Lot 17 to retain completed offsite improvements to the east. Preliminary geotechnical recommendations for temporary shoring design and construction were included in GSI (2022b). Upon request by the project architect or owner/developer, GSI can provide preliminary geotechnical recommendations for the design and construction of permanent shoring.

As an alternative to installing shoring along the southern side of the proposed project area to retain the existing communal driveway during the planned removal of the existing retaining wall in this area, consideration may be given to using slot grading to remove the upper 3 feet of the existing wall or the portions of the existing wall that may be in conflict with new underground utilities. This would allow the recommended remedial grading for the proposed widened portion of the driveway to the northern side of the existing retaining wall without affecting access to the adjacent western property. Preliminary geotechnical recommendations for slot grading were provided in GSI (2022b), and remain applicable.

Loading of Existing, Offsite Walls by Planned Fills and Improvements

The planned fill for the construction of the biofiltration treatment planter will create a small slope with an approximate 3:1 (h:v) gradient. This slope may load the existing privacy wall located along the western property boundary, northwest of the proposed residential structure. In addition, the planned fill for the southernmost exterior staircase, along the western property boundary, may also contribute to the loading of the southern approximately 7 feet of the adjacent, existing wall, located along the eastern boundary of the adjoining western property. Additional loads imparted to these wall areas may result in distress. Thus, GSI recommends that the ability of these walls to accommodate additional loads be evaluated by the project structural engineer or wall designer.

Backfill for the Proposed City of San Diego Information Bulletin 221 Retaining Wall

PLSA (2023) shows the construction of a City of San Diego Information Bulletin 221 (City, 2020) retaining wall between the proposed casita and the eastern property boundary. According to City (2020), these retaining walls require the use of a 12-inch wide column of gravel backfill from the top of the wall footing to 12 inches from finish grade and non-expansive backfill conforming to Unified Soil Classification System (USCS) symbols GW, GP, SW, or SP.

GSI recommends that the required backfill materials be placed above a 1:1 (h:v) plane projected up from the heel of the wall footing. In addition, gravel backfill should be moisturized, placed in lifts, and densified using vibratory equipment. The gravel backfill should be entirely wrapped in filter fabric (Mirafi 140N or approved equivalent).

RESPONSE TO CITY (2022)

The project issues raised by the Geology Division of the City of San Diego Development Services Department in City (2022) that require our response are repeated below in *italics*, followed by GSI's response.

Comment No. 00002

Submit a geotechnical addendum or update letter that specifically addresses the proposed development for the purposes of environmental review and the following:

GSI's Response

Please see the preceding geotechnical update.

Comment No. 00003

If remedial grading is recommended, show the limits of the recommended remedial grading on an updated geologic/geotechnical map and cross section. Note, the geotechnical consultant should determine if the limits of grading may impact environmental resources on the site.

GSI's Response

See Figures 1 and 2. The determination of environmental resources is the responsibility of others and not GSI. Thus, the project consultant responsible for the identification of environmental resources should evaluate potential conflicts between such resources and the limits of grading, which could extend to the property boundaries using shoring or slot grading / slot excavation.

Comment No. 00004

The project's geotechnical consultant should provide a conclusion regarding if the proposed development will destabilize or result in settlement of adjacent property or the Right-of-Way.

GSI's Response

Provided that the geotechnical recommendations provided in GSI (2022b) and this update, and those communicated in the field during site earthwork construction are properly implemented, GSI concludes that the proposed development will not destabilize or result in settlement of adjacent property or the City of San Diego Right-of-Way.

Comment No. 00006

The project's geotechnical consultant should clarify the methods used to determine the location of the coastal bluff edge for the site.

GSI's Response

GSI located the coastal bluff edge in accordance with methods outlined in the City's "Coastal Bluffs and Beaches Guidelines (City, 1997).

Comment No. 00007

The project's geotechnical consultant should clarify how historical coastal bluff recession rates were calculated on page 28 of the Geotechnical Report. Provide copies of the aerial photographs or historic maps used to determine current coastal bluff recession rates. Clearly show where distances were measured on the aerial photographs or historic maps.

GSI's Response

The historical erosion rate presented in GSI (2022b) was primarily estimated by comparing the locations of the coastal bluff edge and Coast Walk trail and roadway visible on stereoscopic aerial photographs taken in 1953 (Park Aerial Surveys, Inc., 1953). Oblique aerial photographs for the years 1972, 1979, 1989, 2002, 2004, 2006, 2008, 2010, and 2013, taken by Kenneth and Gabrielle Adelman and catalogued on the "California Coastal Records Project" website (www.californiacoastline.org), were also reviewed to identify changes to Coast Walk trail and roadway since 1972. However, given the oblique orientation of these photographs, they were not used for measuring distances. A copy of one of the 1953 stereoscopic photographs (Park Aerial Surveys, Inc., 1953) with the approximate property boundaries and approximate distances between the 1953 and 2022 coastal bluff edge positions and Coast Walk trail are included on Figure 3.

Comment No. 00008

The design professional must show the limits of grading on the grading plan. The limits of grading must encompass the limits of recommended remedial grading provided by the project's geotechnical consultant.

GSI's Response

GSI understands that this comment will be addressed by the project civil engineer.

GSI LEGEND

— APPROXIMATE LOCATION OF BLUFF EDGE IN 1953, QUERIED WHERE UNCERTAIN

— APPROXIMATE LOCATION OF BLUFF EDGE IN 2022 (GSI, 2022B) QUERIED WHERE UNCERTAIN

REFERENCE: STEREOSCOPIC AERIAL PHOTOGRAPH, FLIGHT: AXN–1953, FRAME NO: 8M–90, 1:20,000–SCALE, DATED APRIL 11, 1953, BY PARK AERIAL SURVEYS, INC.

GRAPHIC SCALE

50 0 25 50 100

1" = 50'

ALL LOCATIONS ARE APPROXIMATE

This document or efile is not a part of the Construction Documents and should not be relied upon as being an accurate depiction of design.

GeoSoils, Inc.

1953 & 2022 BLUFF EDGE POSITIONS

Figure 3

W.O. 8358-A1-SC	DATE: 05/23	SCALE: 1" = 50'

Comment No. 00009

The design professional must show the coastal bluff edge in conformance with the mapped coastal bluff edge in the Geotechnical Evaluation (Geotechnical Evaluation, Proposed Residential Development ("Cove House"), Lots 2 and 17 of Block 46, La Jolla, San Diego, California, prepared by GeoSoils, Inc., dated August 23, 2022 (their project no. 8358-A-SC).

GSI's Response

GSI understands that this comment will be addressed by the project civil engineer.

Comment No. 00010

Storm Water Requirements for the proposed conceptual development will be evaluated by DSD - Engineering review. Priority Development Projects (PDPs) may require an investigation of storm water infiltration feasibility in accordance with the Storm Water Standards (including Appendix C and D). Check with your DSD - Engineering reviewer on requirements. DSD - Engineering may determine that a Geology review of a storm water infiltration evaluation is required.

GSI's Response

GSI has prepared an "Infiltration Feasibility Condition Letter" (GSI, 2022a) that we understand was included in the development package submitted for discretionary review.

LIMITATIONS

Inasmuch as this study is based upon our review and engineering analyses, the conclusions and recommendations are professional opinions. These opinions have been derived in accordance with current standards of practice, and no warranty is express or implied. Standards of practice are subject to change with time. GSI assumes no responsibility or liability for work or testing performed by others, or their inaction; or work performed when GSI is not requested to be onsite, to evaluate if our recommendations have been properly implemented. Use of this report constitutes an agreement and consent by the user to all the limitations outlined above, notwithstanding any other agreements that may be in place. In addition, this report may be subject to review by the controlling authorities. Thus, this report brings to completion our scope of services for this portion of the project.

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

Respectfully submitted,

GeoSoils, Inc.

John P. Franklin
Engineering Geologist, CEG 1340

Stephen J. Coover
Geotechnical Engineer, 2057

RBB/JPF/SJC/sh

Attachment: Appendix - References

Distribution: (1) Island Architects, Attention: Mr. Tony Sanshey (PDF via email)
(1) Pasco, Laret, Suiter, and Associates, Attention: Mr. Guido Knudson (PDF via email)

APPENDIX

REFERENCES

American Concrete Institute, 2014, Building code requirements for structural concrete (ACI 318-14), and commentary (ACI 318R-14): reported by ACI Committee 318, dated September.

American Society of Civil Engineers, 2017, Minimum design loads and associated criteria for buildings and other structures, provisions, ASCE Standard ASCE/SEI 7-16.

California Building Standards Commission, 2022, California Building Code, California Code of Regulations, Title 24, Part 2, Volumes 1 and 2, based on the 2021 International Building Code, effective January 1, 2023.

City of San Diego Development Services Department, 2022, Project issues report, project type: discretionary project, project no.: PRJ-1074172, pp. 8-9, dated December 16.

_____, 2020, City of San Diego standard cantilevered masonry retaining walls, information bulletin 221, dated October.

_____, 1997, San Diego Municipal Code, Land Development Code, Coastal bluffs and beaches guidelines, latest amendment June 6, 2000.

GeoSoils, Inc., 2022a, Infiltration feasibility condition letter, proposed residential development ("Cove House"), Lots 2 and 17 of Block 46, La Jolla, San Diego County, California 92037, Assessor's Parcel Numbers (APNs) 350-131-02-00 and -29-00, W.O. 8358-A-SC, dated August 24 (revision).

_____, 2022b, Geotechnical evaluation, proposed residential development ("Cove House"), Lots 2 and 17 of Block 46, La Jolla, San Diego County, California 92037, Assessor's Parcel Numbers (APNs) 350-131-02-00 and -29-00, W.O. 8358-A-SC, dated August 23 (revision).

_____, 2016, Response no. 2 to City review dated December 8, 2015, 1590 Coast Walk, APN 350-141-15-00, La Jolla, San Diego County, California 92037, W.O. 6918-A3-SC, dated January 20.

_____, 2015, Limited Supplemental Geotechnical Investigation for Foundation Design, 1590 Coast Walk, APN 350-141-15-00, La Jolla, San Diego County, California, W.O. 6918-A-SC, dated July 21.

Island Architects, 2023, Architectural plans for: Coast Walk, Lots 2 & 17, CDP/SDP set, Coast Walk, La Jolla, CA 92037, 12 sheets, various scales, job no.: 1100, dated April 20.

Park Aerial Surveys, Inc., 1953, Stereoscopic aerial photographs, flight: AXN-1953, frame nos. 8M-88, 8M-89, and 8M-90, 1:20,000-scale, dated April 11.

Pasco, Laret, Suiter, and Associates, 2023, Preliminary site drainage plan and post-construction BMP plan, Cove House, sheets C100 and C200, 10-scale, job no.: PLSA 3743-03, dated April 12.