



## Planning Director Staff Report Hearing on August 20, 2025

### County of Ventura • Resource Management Agency

800 S. Victoria Avenue, Ventura, CA 93009 • (805) 654-2478 •

<https://rma.venturacounty.gov/divisions/planning/>

### VERGEL COASTAL PLANNED DEVELOPMENT PERMIT CASE NO. PL24-0085

#### A. PROJECT INFORMATION

1. **Request:** The Applicant requests approval of a Coastal Planned Development (PD) Permit for the construction of a single-family dwelling on an undeveloped lot in La Conchita (Case No. PL24-0085).
2. **Applicant/Property Owner:** Jennifer Vergel, 320 Lakeview Court, Oxnard, CA 93010
3. **Applicant's Representative:** SPH Architects c/o Mr. Penn Hsu, 1507 Callens Rd. Ventura, CA 93003
4. **Decision-Making Authority:** Pursuant to the Ventura County Coastal Zoning Ordinance (CZO) (Section 8174-5 and Section 8181-3 et seq.), the Planning Director is the decision-maker for the requested PD Permit.
5. **Project Site Size, Location, and Parcel Number:** The 3,876 square foot (sq. ft.) (0.08 acres) lot is located on a vacant lot on Santa Paula Avenue, near the intersection of Santa Paula Avenue and Surfside Street, in the community of La Conchita, in the unincorporated area of Ventura County. The Tax Assessor's parcel number for the parcel that constitutes the project site is 060-0-062-325 (Exhibit 2).
6. **Project Site Land Use and Zoning Designations (Exhibit 2):**
  - a. Countywide General Plan Land Use Map Designation: Residential Beach
  - b. Coastal Area Plan Land Use Map Designation: Residential Beach 6.1 – 36 dwelling units per acre
  - c. Zoning Designation: RB-3,000 sq. ft. (Residential Beach 3,000 sq. ft. minimum lot size)

#### 7. Adjacent Zoning and Land Uses/Development (Exhibit 2):

Location in Relation to the Project Site	Zoning	Land Uses/Development
North	RB-3,000 sq. ft.	Residential Development
East	RB-3,000 sq. ft.	Residential Development
South	RB-3,000 sq. ft.	Residential Development
West	RB-3,000 sq. ft.	Residential Development

8. **History:** The undeveloped lot is part of the La Conchita Del Mar Subdivision (Lot 9 of 12RM31), recorded in May 1924. On August 26, 2022, the Planning Division approved Zoning Clearance No. ZC22-0970 to authorize water service for agricultural purposes, without any development on site. This use has ceased operation.
9. **Project Description:** The Applicant requests a PD Permit be granted for the construction of a new 3,097 square foot (sq. ft.) single-family dwelling on an undeveloped lot in the community of La Conchita. The first floor will include living space, a garage, carport and covered porch (1,145, sq. ft.). The second floor will include living space and a deck (1,131 sq. ft.) and the third floor will include a loft and balcony (821 sq. ft.). Casitas Municipal Water District (CMWD) will provide potable water service and wastewater disposal will be provided by an onsite wastewater treatment system (OWTS) with advanced treatment. To mitigate for debris flow risk that currently exists in the La Conchita area, the proposed development has been designed so that the pad elevation for the dwelling and garage will be raised by two feet and utilize an engineered impact wall at least 2 feet in height on the slope facing the northeast side of the property. Access to the project site will be made available from a proposed driveway adjacent to Santa Paula Avenue. (Exhibit 3).

## **B. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) COMPLIANCE**

Pursuant to CEQA (Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (Title 14, California Code of Regulations, Division 6, Chapter 3, Section 15000 et seq.), the proposed project is subject to environmental review.

The State Legislature through the Secretary for Resources has found that certain classes of projects are exempt from CEQA environmental impact review because they do not have a significant effect on the environment. These projects are declared to be categorically exempt from the requirement for the preparation of environmental impact documents. The project is exempt from the CEQA Guidelines pursuant to Section 15303, Class 3 (New Construction or Conversion of Small Structures) as the Applicant is proposing to construct a 1,145 sq. ft. single-family dwelling on a 3,876 sq. ft. lot. Further, the project will not trigger any exceptions to the exemptions listed under CEQA Guidelines Section 15300.2. Therefore, no further environmental review is required.

Therefore, this project is categorically exempt pursuant to Section 15303 of the CEQA Guidelines and complies with the requirements of CEQA.

## **C. CONSISTENCY WITH THE GENERAL PLAN AND COASTAL AREA PLAN**

The proposed project has been analyzed and determined to be consistent with all applicable General Plan and Coastal Area Plan policies. An analysis which evaluates the project's consistency with the policies of the General Plan and Coastal Area Plan is

included as Exhibit 4 of this Staff Report. This analysis concludes the project complies with the General Plan and Coastal Area Plan.

#### **D. ZONING ORDINANCE COMPLIANCE**

The proposed project is subject to the requirements of the Ventura County CZO.

Pursuant to the requirements of the Ventura County Ventura County CZO (Section 8174-4), the proposed use is allowed in the RB-3,000 sq. ft. zone district with the granting of a PD Permit. Upon the granting of the PD Permit, the proposed project will comply with the requirements of the Ventura County CZO.

The proposed project includes the construction and use of structures that are subject to the development standards of the Ventura County Ventura County CZO (Section 8175-2). Table 1 lists the applicable development standards and a description of whether the proposed project complies with these standards.

**Table 1 – Development Standards Consistency Analysis**

<b>Type of Requirement</b>	<b>Zoning Ordinance Requirement</b>	<b>Complies?</b>
Minimum Lot Area (Gross)	3,000 sq. ft.	Yes. The project site is 0.08 acres or 3,876 sq. ft.
Maximum Percentage of Building Coverage	65 percent	Yes. The proposed dwelling will have a building coverage of 1,145 sq. ft., or 29 percent.
Minimum Front Setback	10 feet	Yes. The proposed dwelling will be set back 10 feet from the front property line.
Minimum Side Setback	3 feet	Yes. The proposed dwelling will be set back three feet from the south side property line and 22 feet from the north side property line.
Minimum Rear Setback	14 feet	Yes. The proposed dwelling will be set back 14 feet from the rear property line.
Maximum Building Height	28 feet	Yes. The dwelling will be 28 feet in height.

#### **E. PD PERMIT FINDINGS AND SUPPORTING EVIDENCE**

The Planning Director must make certain findings in order to determine that the proposed project is consistent with the permit approval standards of the Ventura County CZO (Section 8181-3.5 et seq.). The proposed findings and supporting evidence are as follows:

**1. The proposed development is consistent with the intent and provisions of the County's Certified Local Coastal Program [Section 8181-3.5.a].**

Based on the information and analysis presented in Section D and Exhibit 4 of this staff report, the finding that the proposed development is consistent with the intent and provisions of the County's Certified Local Coastal Program can be made.

**2. The proposed development is compatible with the character of surrounding development [Section 8181-3.5.b].**

La Conchita is developed as a beach oriented residential community with a small lot subdivision pattern. The community includes one-story beach bungalows, Spanish style villas, and modern style homes. Existing residential development consisting of one, two, and three-story single-family dwellings surround the project site. The project site is 0.089 acres in size and adjacent parcels range in size from 0.05 acres to 0.11 acres. The Pacific Ocean (approximately 441 feet), US Route 101 (approximately 298 feet), and Southern Pacific Railroad line (approximately 242 feet) are southwest of the project site. The project site will be adequately served by existing public facilities that serve the La Conchita community.

The proposed modern style single-family dwelling will not introduce physical development that is incompatible with the character of the surrounding residential development. The proposed single-family dwelling does not include a change of use that has the potential to create any land use conflicts with surrounding residential development. Additionally, staff has determined that it will not adversely impact the existing traffic on local County roads. The Applicant is required to construct driveway and drainage improvements along the parcel's frontage adjacent to Santa Paula Avenue, in accordance with County Road standard Plate E-7 (Exhibit 5, Condition No. 27). Furthermore, the implementation of a condition to limit days and times of noise-generating construction activities will ensure that the proposed project does not generate noise that is incompatible with surrounding residential, and beach uses (Exhibit 5, Condition 18). Therefore, the proposed single-family dwelling will be consistent with the character of the surrounding residential development. Based on the discussion above, this finding can be made.

**3. The proposed development, if a conditionally permitted use, is compatible with planned land uses in the general area where the development is to be located [Section 8181-3.5.c].**

The proposed development involves the construction, use and maintenance of a single-family dwelling. The proposed use is not conditionally permitted; therefore, the requirement of this finding does not apply to the proposed project. Further, the subject property is located within an existing neighborhood, so the additional dwelling will fit in with existing development. Based on the discussion above, this finding can be made.



**4. The proposed development would not be obnoxious or harmful, or impair the utility of neighboring property or uses [Section 8181-3.5.d].**

CMWD will provide potable water service to the project site and wastewater disposal services will be provided by an OWTS. The proposed single-family dwelling will comply with maximum building height, maximum building coverage, and minimum setback standards for the Residential Beach zone and will not include new physical development that may interfere with beach uses or surrounding residential uses. The proposed single-family dwelling will not result in a significant change in traffic generation or water service connections or wastewater disposal. Existing public services are adequate to serve the proposed development along with existing residential development on neighboring properties. Therefore, the proposed project will not be obnoxious, harmful, or impair the utility of neighboring properties or uses.

Based on the discussion above, this finding can be made.

**5. The proposed development would not be detrimental to the public interest, health, safety, convenience, or welfare [Section 8181-3.5.e].**

Adequate public resources and infrastructure exist to serve the single-family dwelling. CMWD will provide water service and wastewater disposal services will be provided by an OWTS for the subject property. Adequate response times exist for fire protection purposes. The project site is located approximately 7.4 miles northwest of the nearest fire station, Station No. 25, addressed at 5674 W. Pacific Coast Highway in the unincorporated area of Ventura. The Applicant will be required to verify adequate fire flow prior to the issuance of building permits and compliance with the applicable standards of the Ventura County Fire Code and Ventura County Fire Protection District Ordinances (Exhibit 5, Condition Nos. 31 and 38) related to construction. Furthermore, the proposed project will not generate significant new traffic that will alter the existing County roads. Santa Paula Avenue and the surrounding public road network are adequate to serve the single-family dwelling. The Applicant will be required to construct the driveway per County Road Standard E-7, which addresses drainage construction, and driveway surfacing and profiles (Exhibit 5, Condition No. 26). Finally, the Applicant will be required to implement construction best management practices (BMPs), such as fiber rolls and silt fences, during all ground disturbing activities to address stormwater runoff and surface water quality impacts that would result from the proposed project (Exhibit 5, Condition No. 29). Therefore, the proposed project will not be detrimental to the public interest, health, safety, convenience, or welfare. Based on the discussion above, this finding can be made.

## F. PLANNING DIRECTOR HEARING NOTICE, PUBLIC COMMENTS, AND JURISDICTIONAL COMMENTS

The Planning Division provided public notice regarding the Planning Director hearing in accordance with the Government Code (Section 65091), CZO (Section 8181-6.2 et seq.). On August 10, 2025, the Planning Division mailed notice to owners of property within 300 feet and residents within 100 feet of the property on which the project site is located and placed a legal ad in the *Ventura County Star*.

## G. RECOMMENDED ACTIONS

Based upon the analysis and information provided above, Planning Division Staff recommends that the Planning Director take the following actions:

1. **CERTIFY** that the Planning Director has reviewed and considered this staff report and all exhibits thereto and has considered all comments received during the public comment process;
2. **FIND** that this project is categorically exempt from CEQA pursuant to Section 15303 (Class 3) of the CEQA Guidelines.
3. **MAKE** the required findings to grant a PD Permit pursuant Section 8181-3.5 of the Ventura County CZO, based on the substantial evidence presented in Section E of this staff report and the entire record;
4. **GRANT** Coastal PD Permit Case No. PL24-0085 subject to the conditions of approval (Exhibit 5).
5. **SPECIFY** that the Clerk of the Planning Division is the custodian, and 800 S. Victoria Avenue, Ventura, CA 93009 is the location, of the documents and materials that constitute the record of proceedings upon which this decision is based.

The decision of the Planning Director is final unless appealed to the Planning Commission within 10 calendar days after the permit has been approved, conditionally approved, or denied (or on the following workday if the 10<sup>th</sup> day falls on a weekend or holiday). Any aggrieved person may file an appeal of the decision with the Planning Division. The Planning Division shall then set a hearing date before the Planning Commission to review the matter at the earliest convenient date.

If you have any questions concerning the information presented above, please contact Aubrie Richardson at (805) 654-5097 or [aubrie.richardson@venturacounty.gov](mailto:aubrie.richardson@venturacounty.gov).

Prepared by:



Aubrie Richardson, Assistant Planner  
Residential Permit Section  
Ventura County Planning Division

Reviewed by:



Jasmin Kim, AICP  
Residential Permit Section Manager  
Ventura County Planning Division

**EXHIBITS**

- Exhibit 2 Maps
- Exhibit 3 Plans
- Exhibit 4 General Plan Consistency Analysis
- Exhibit 5 Draft Conditions of Approval
- Exhibit 6 Noorzay Geotechnical Services Geotechnical Report, dated August 4, 2017



Ventura County, California  
Resource Management Agency  
GIS Development & Mapping Services  
Map created on 07-31-2025



County of Ventura  
Planning Director Hearing  
08/20/2025  
PL24-0085  
Exhibit 2: Maps

0 10,500 21,000 Feet

Disclaimer: This Map was created by the Ventura County Resource Management Agency, Mapping Services - GIS which is designed and operated solely for the convenience of the County and related public agencies. The County does not warrant the accuracy of this map nor does it involve a risk of economic loss or physical injury should be made in reliance thereon.

E









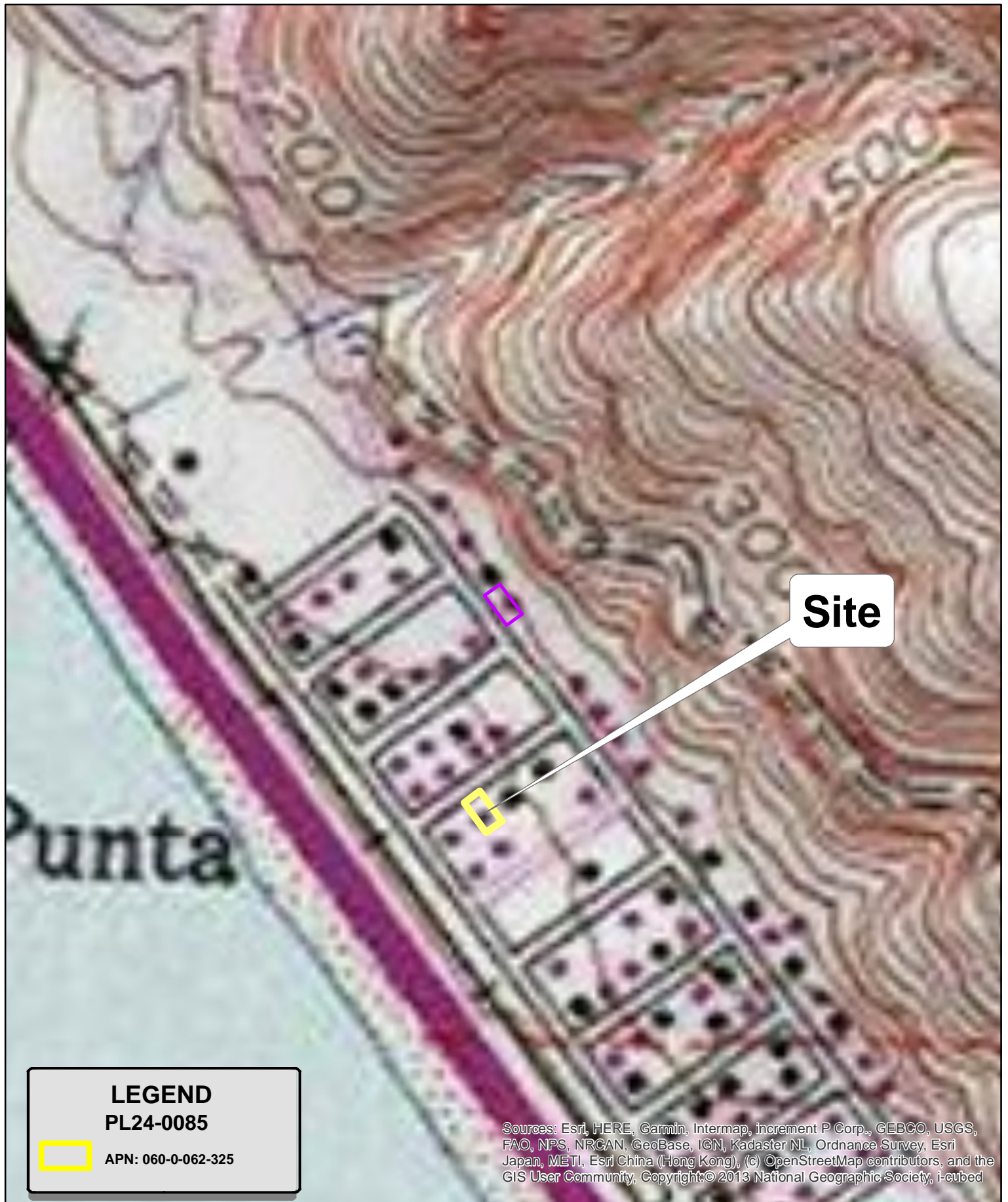
**Legend**

PL24-0085



APN: 060-0-062-325





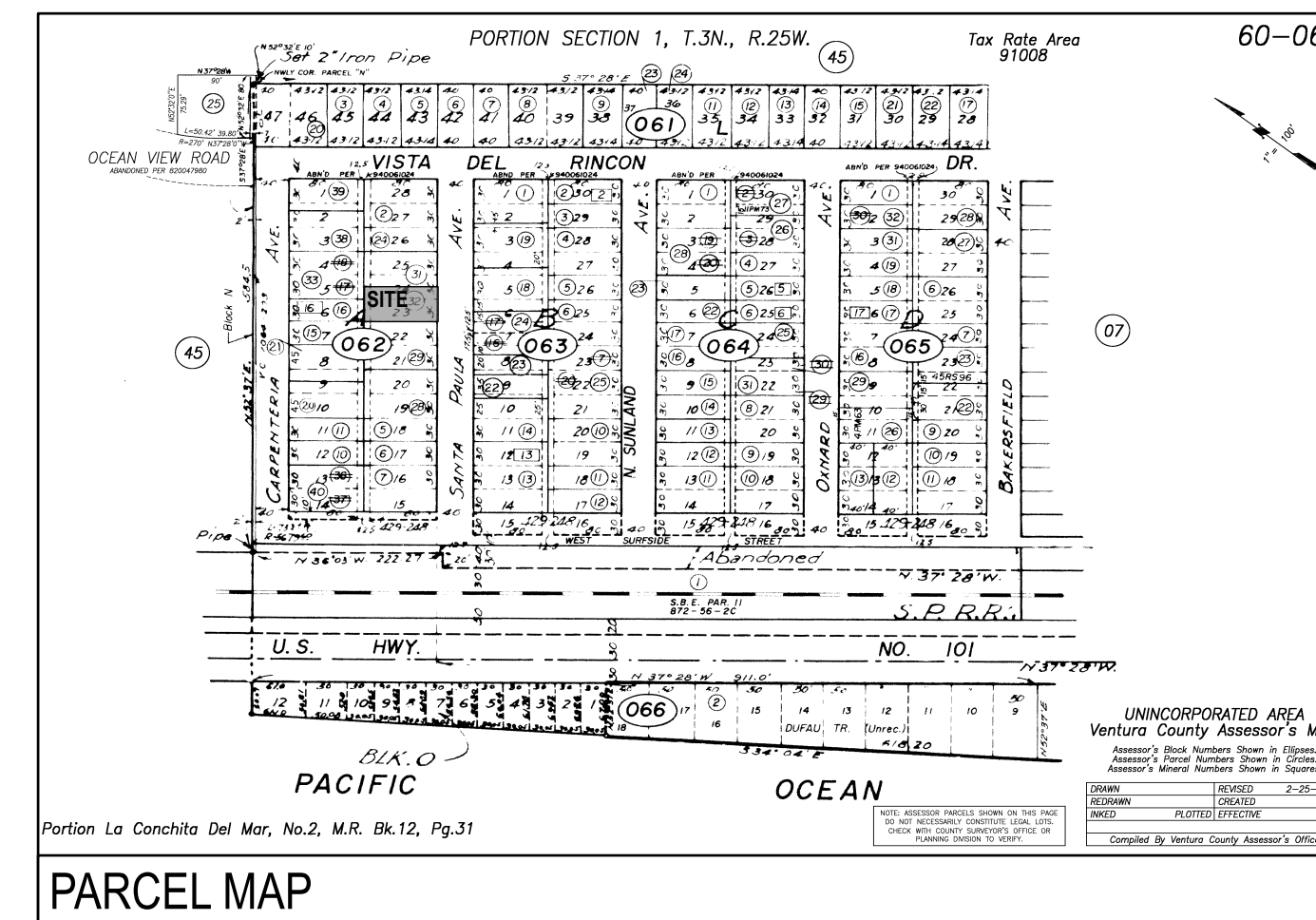
**LEGEND**  
**PL24-0085**



APN: 060-0-062-325

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, Copyright © 2013 National Geographic Society, i-cubed





## BEST MANAGEMENT PRACTICES

- |   |                                      |  |
|---|--------------------------------------|--|
| 1. STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER. THIS INCLUDES SAND FOR STUCCO, DRYWALL DEMOLITION DEBRIS, DRYWALL "MUD" PACKAGING, ETC.  | •PROJECT ADDRESS:                    | 320 LAKEVIEW COURT<br>OXNARD, CA 93036<br>LOT 32 SANTA PAULA AVE.<br>LA CONCHITA, CA 93001   |
| 2. FUELS, OILS, SOLVENTS AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.                                   | •PROJECT JURSDICTION:<br>-A.P.N.     | COUNTY OF VENTURA<br>060-0-062-325   |
| 3. NON-STORM WATER RUNOFF FROM EQUIPMENT AND VEHICLE WASHING AND ANY OTHER ACTIVITY SHALL BE CONTAINED AT THE SITE.   | •ZONE:<br>-LOT SIZE:                 | RB-3000<br>0.089 AC  |
| 4. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS MUST BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS A SOLID WASTE.   | •OCCUPANCY GROUP:<br>-BUILDING TYPE: | R-3 / U GARAGE<br>FRONT YARD - 10 FT.<br>SIDE / INTERIOR YARDS - 3FT.<br>REAR YARD - 14 FT., (OR 6 FT IF FRONT YARD IS 20 FT. OR MORE) |
| 5. TRASH AND CONSTRUCTION RELATED WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.   | •SETBACK REQUIRED:                   | FRONT YARD - 10 FT.<br>SIDE / INTERIOR YARDS - 3FT.<br>REAR YARD - 14 FT., (OR 6 FT IF FRONT YARD IS 20 FT. OR MORE)                   |
| 6. SEDIMENTS AND OTHER MATERIAL MAY NOT BE TRACED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY; ACCIDENTAL DEPOSITIONS MUST BE SWEEP UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS. | •MAX. BUILDING HEIGHT:<br>-GRADING:  | MAX. HEIGHT - 28 FT. TO TOP OF ROOF.<br>APPROX 87 CU YD  |
| 8. OTHER  | •PARKING:<br>-DEFERRED SUBMITTAL:    | 1 IN GARAGE, 1 IN CARPORT PROPOSED<br>FIRE-SPRINKLER SYSTEM  |

## WATER ESTIMATES & CONSERVATION

1. ESTIMATED WATER USAGE DURING ALL PHASES OF CONSTRUCTION, TO BE TRUCKED IN  
AVERAGE 5.20GAL / SF x TOTAL USAGE AVERAGE 27,062 GALLONS
2. ESTIMATED WATER USAGE AFTER BUILD OUT, BASED ON 4 PERSON HOUSEHOLD.  
40-50 GAL PER PERSON / DAY x AVERAGE 65,700 GALLONS ANNUALLY.  
WATER SOURCE: CASITAS MUNICIPAL WATER DISTRICT
3. OPTIONS DURING CONSTRUCTION: IMPLEMENT WATER-EFFICIENT PRACTICES SUCH AS  
USING RECYCLED WATER, USING ALTERNATIVE METHODS FOR CLEAN-UP AND  
WATER-SAVING DEVICES.
4. OPTIONS IN THE HOME: INSTALL WATER-EFFICIENT OR LOW-FLOW APPLIANCES AND  
FIXTURES. GREYWATER SYSTEM IS BEING PROPOSED.
5. OPTIONS FOR SITE DESIGN: MINIMIZE STORMWATER RUNOFF. SMART IRRIGATION OR  
DROUGHT RESISTANT LANDSCAPING AND PERMEABLE PAVING.
- 6.

**PROPOSED SQUARE FOOTAGES: (FOOTPRINT)**

NEW RESIDENCE	GROSS (SF)	NET (SF)
1ST FLOOR	582	521
2ND FLOOR	842	776
3RD FLOOR	741	672
<b>TOTAL HABITABLE</b>	<b>2,165</b>	<b>1,969</b>
1-CAR GARAGE	279	255
OPEN CARPORT	229	
1ST FLOOR ENTRYWAY	55	
2ND FLOOR DECKS	289	
3RD FLOOR BALCONY	80	

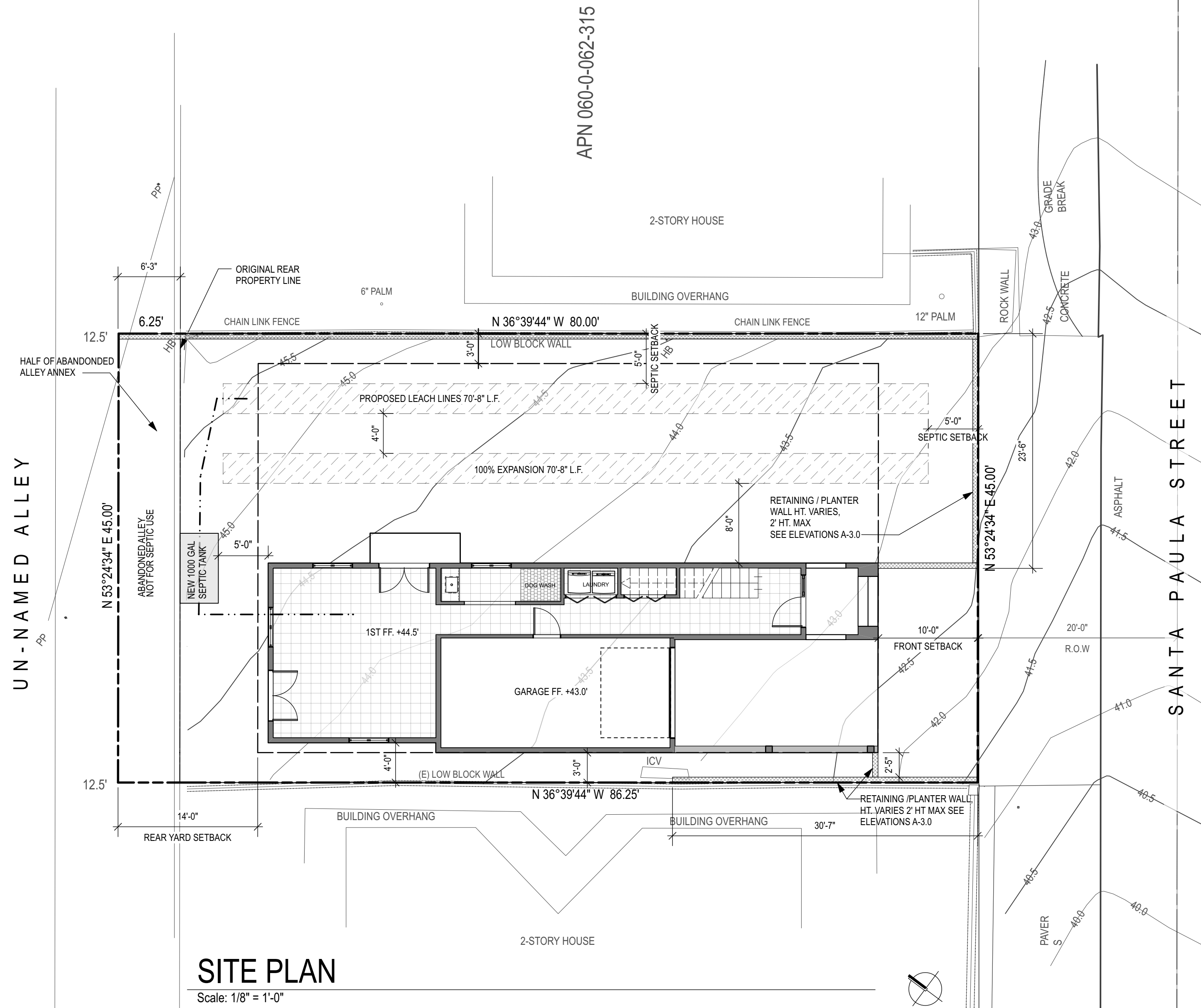
## PROJECT DESCRIPTION

PROPOSED NEW BEACH HOME OVER GARAGE + STORAGE AREA.

## SHEET INDEX

## ARCHITECTURAL

- A-0.0 GENERAL NOTES / PROJECT DATA / SITE PLAN
- A-2.0 GROUND FLOOR PLAN - GARAGE / STORAGE
- A-2.1 2ND FLOOR PLAN
- A-2.2 3RD FLOOR / LOFT PLAN
- A-2.3 ROOF PLAN
- A-3.0 ELEVATIONS



# SITE PLAN

Scale: 1/8" = 1'-0"

County of Ventura  
Planning Director Hearing  
08/20/2025  
PL24-0085  
Exhibit 3: Plans

REVISION :  $\Delta$ 

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Architect

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**VERGEL RESIDENCE**

LOT 32, SANTA PAULA AVE. LA CONCHITA, CA 93001

SHEET TITLE :

GN, COVER,  
SITE PLAN

Date: 2/13/25

SHEET:

**A-0.0**

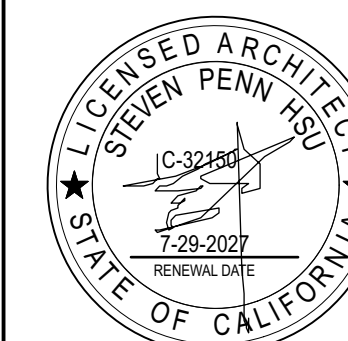




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**VERGEL RESIDENCE**

## PROPOSED NEW RESIDENCE

LOT 32, SANTA PAULA AVE. LA CONCHITA, CA 93001

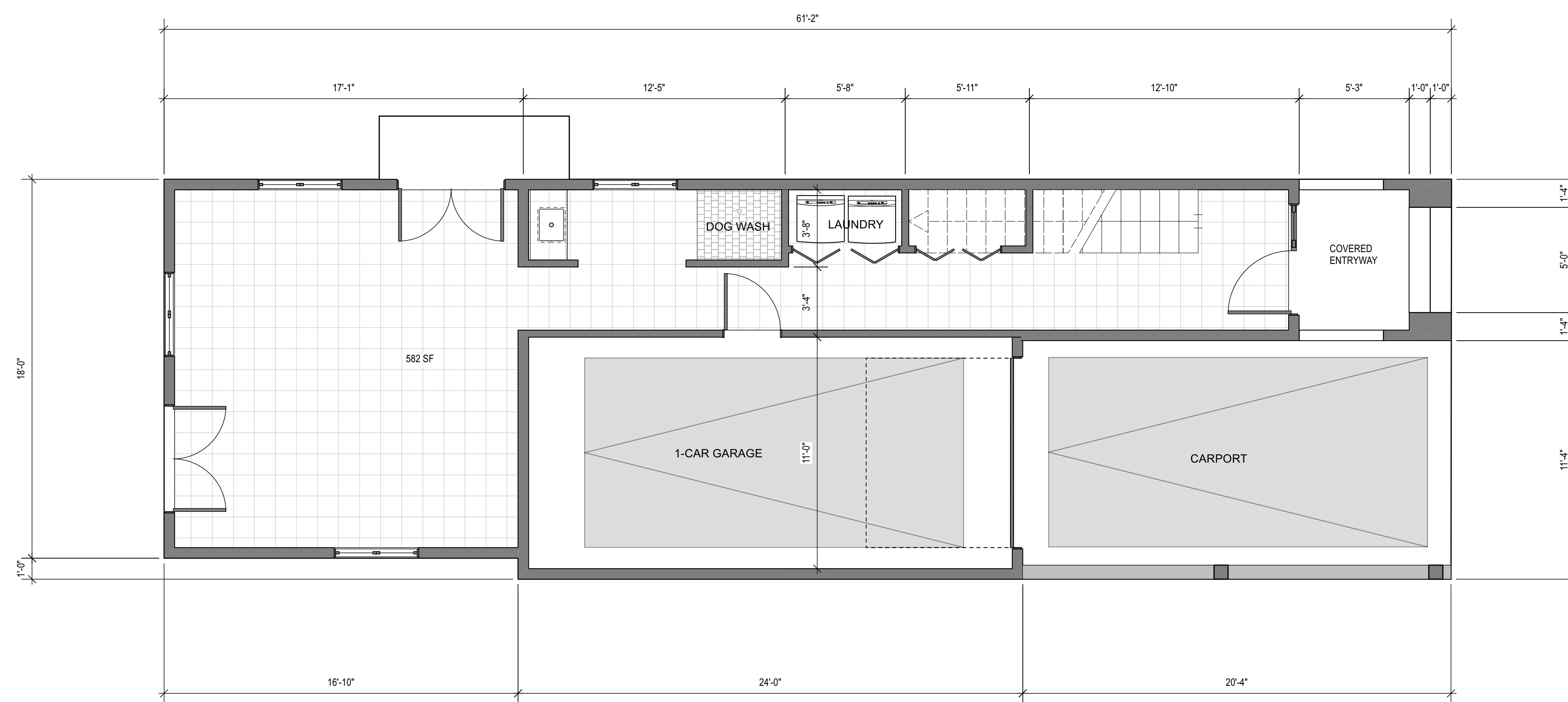
SHEET TITLE :

## GARAGE FLOOR PLAN

Date: 2/13/25

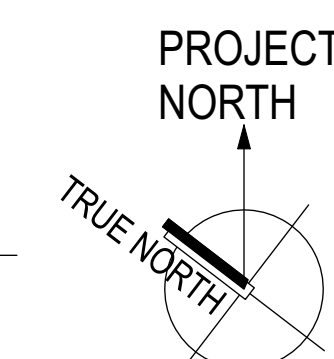
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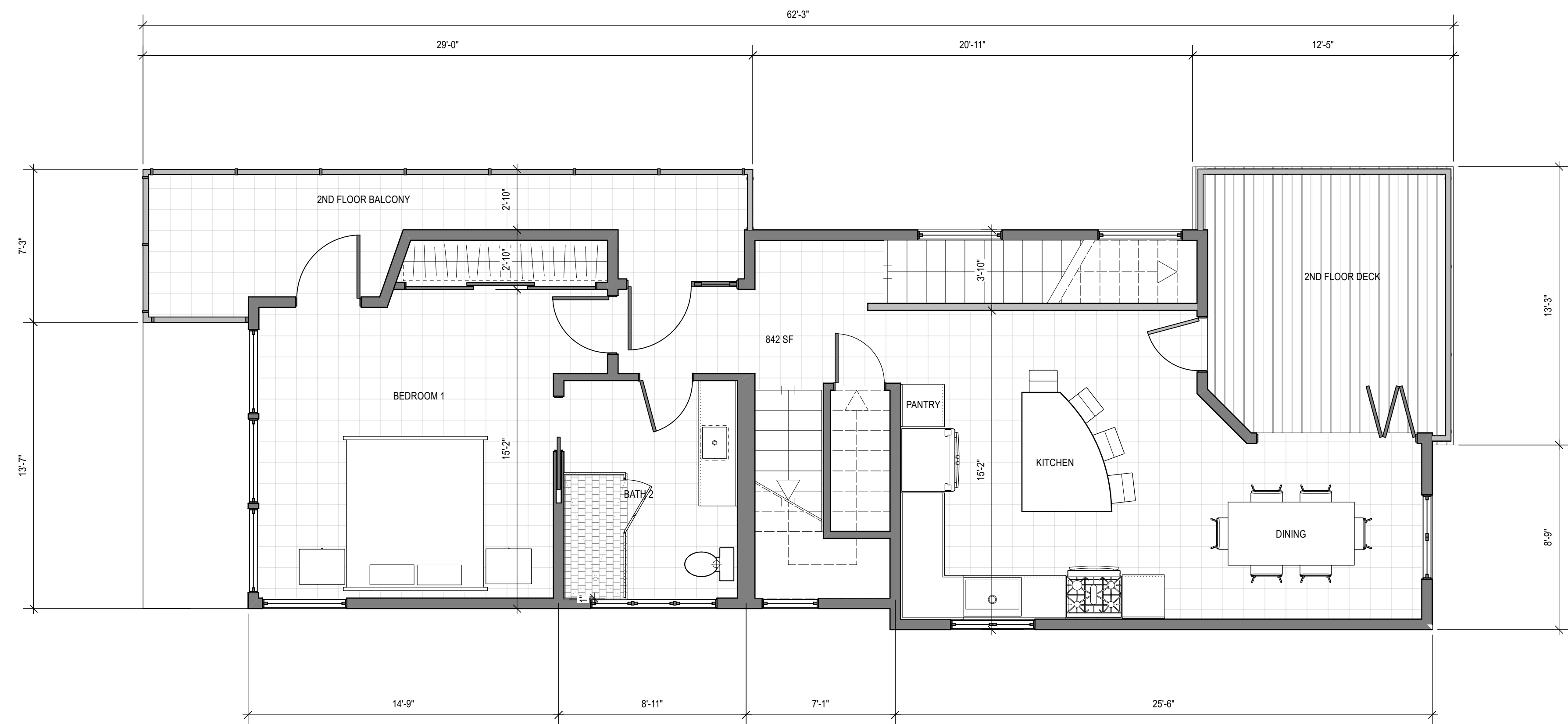
## A-2.0



## GARAGE / FIRST FLOOR PLAN

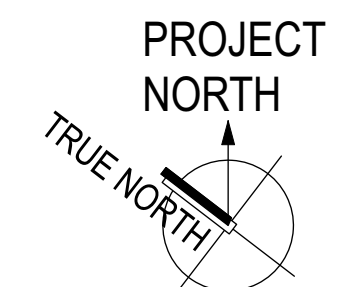
Scale: 1/4" = 1'-0"





## 2ND FLOOR PLAN

Scale: 1/4" = 1'-0"



REVISION :



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## VERGEL RESIDENCE

### PROPOSED NEW RESIDENCE

LOT 32, SANTA PAULA AVE, LA CONCHITA, CA 93001

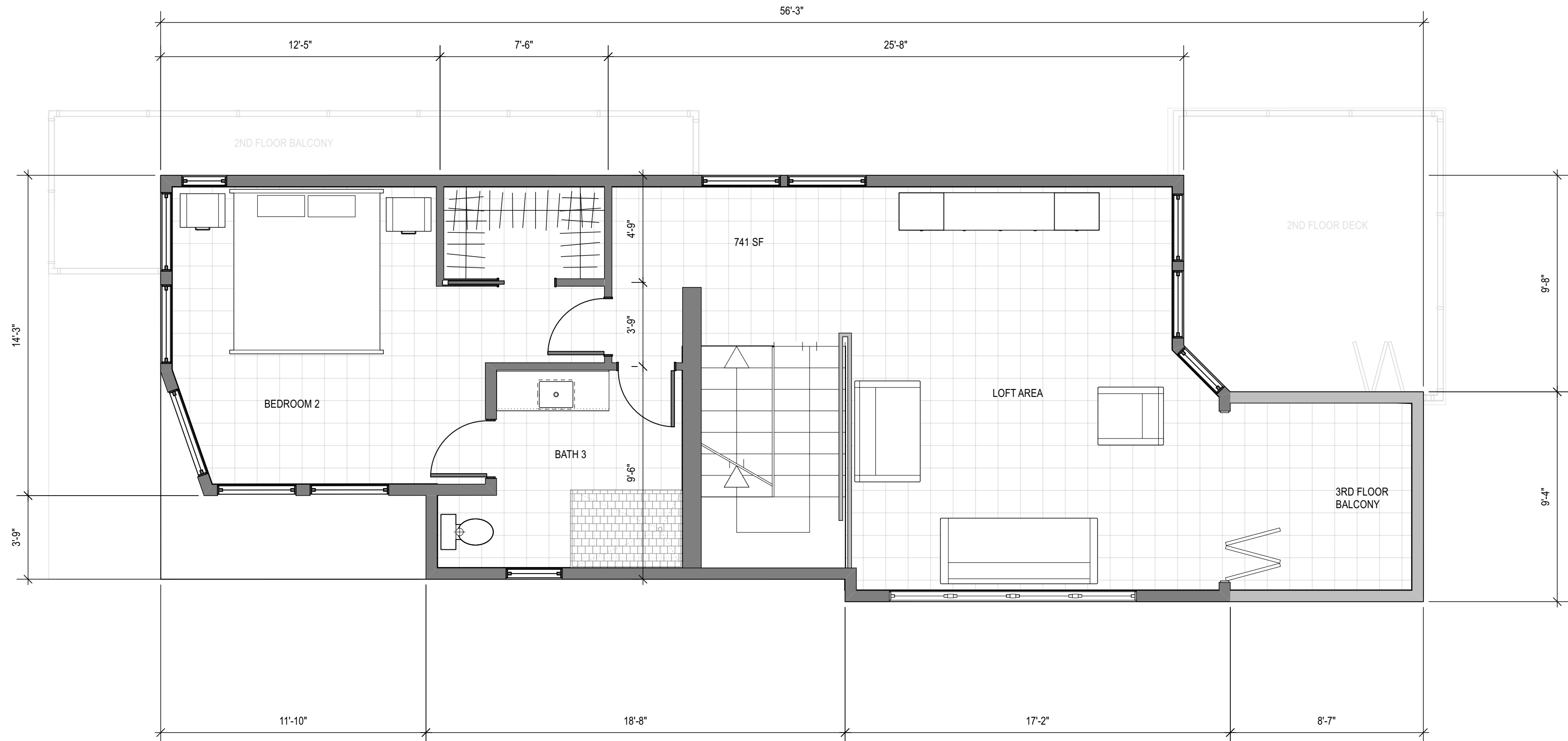
SHEET TITLE :

2ND FLOOR PLAN

Date: 2/13/25

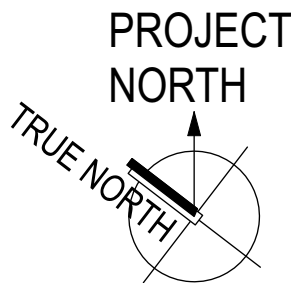
SHEET :

# A-2.1



3RD FLOOR LOFT / DECK PLAN

Scale: 1/4" = 1'-0"



REVISION : 

building design | master planning | permit processing



design | architecture

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**VERGEL RESIDENCE**

PROPOSED NEW RESIDENCE

LOT 32, SANTA PAULA AVE, LA CONCHITA, CA 93001

SHEET TITLE :

LOFT PLAN

Date: 2/13/25

SHEET :

A-2.2



REVISION :



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**VERGEL RESIDENCE**  
PROPOSED NEW RESIDENCE  
LOT 32, SANTA PAULA AVE, LA CONCHITA, CA 93001

SHEET TITLE :

ELEVATIONS

Date: 2/13/25

SHEET :

A-3.0

## EXHIBIT 4

### GENERAL PLAN AND COASTAL AREA PLAN CONSISTENCY ANALYSIS FOR COASTAL PLANNED DEVELOPMENT PERMIT CASE NO. PL24-0085

The 2040 Ventura County General Plan Goals, Policies and Programs (2020, page 1-1) states:

All area plans, specific plans subdivision, public works projects, and zoning decisions must be consistent with the direction provided in the County's General Plan.

Furthermore, the Ventura County Coastal Zoning Ordinance (CZO) (Section 8181-3.5.a) states that to be approved, a project must be found consistent with all applicable policies of the Ventura County General Plan Goals, Policies and Programs.

The proposed project includes the construction of a single-family dwelling on an undeveloped lot in the community of La Conchita.

Evaluated below is the consistency of the proposed project with the applicable policies of the General Plan Goals, Policies and Programs, as well as the Coastal Area Plan Goals and Policies and the California Coastal Act.

#### 1. Land Use and Community Character

##### **Ventura County General Plan Community Character and Quality of Life Policy**

**LU-16.1:** *The County shall encourage discretionary development to be designed to maintain the distinctive character of unincorporated communities, to ensure adequate provision of public facilities and services, and to be compatible with neighboring uses.*

**Ventura County General Plan Policy LU-16.8 (Residential Design that Complements the Natural Environment):** *The County shall encourage discretionary development that incorporates design features that provide a harmonious relationship between adjoining uses and the natural environment.*

**California Coastal Act Section 30250(a):** *New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.*

**California Coastal Act Policy Section 30251:** *The scenic and visual qualities of coastal areas shall be considered and protected as a re-source of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural landforms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.*

**California Coastal Act Policy Section 30253(e):** *New development shall do all of the following: (e) Where appropriate, protect special communities and neighborhoods that, because of their unique characteristics, are popular visitor destination points for recreational uses.*

**Coastal Area Plan, North Coast Commercial Policy 1:** *The six residential "Existing Communities" of Rincon Point, La Conchita, Mussel Shoals, Seacliff, Faria, and Solimar will be allowed to build-out according to their land use designations and prevailing base zoning. Figures 4.2-10- 4.2-15 [of the Coastal Area Plan] depict these areas.*

Staff Analysis: The project site is in the unincorporated community of La Conchita and is zoned Residential Beach (RB). The intent of the RB zone is to provide for development and preservation of small lot, beach-oriented residential communities. The character of this residential beach community will not be altered with the proposed construction of the single-family dwelling. La Conchita is developed as a beach oriented residential community with a small lot subdivision pattern. Adjacent parcels are developed and range in size from 0.05 acres to 0.11 acres. The community includes a one-story beach bungalows, Spanish style villas, and up to three-story modern style homes. The proposed project would construct a new modern style home located on a 0.08-acre (3,876 square feet (sq. ft.)) lot and include three stories with a garage and carport. As discussed in Section D of the staff report, proposed building coverage, height and setbacks will not exceed Ventura County CZO development standards.

The Pacific Ocean and US Route 101 are considered scenic resources per the Ventura County General Plan and are approximately 441 feet and 298 feet west of the project site, respectively. Existing one- and two-story single-family dwellings block public views of the project site from these scenic resources. Based on the distance from US Route 101, the proposed dwelling would not contribute to the alteration of the coastline or public views to and from US Route 101. Further, the proposed residence would not degrade or significantly alter the existing scenic visual qualities of the La Conchita community as it will be similar in visual character (e.g., size, scale, and style) to other residential dwellings in the surrounding area.

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Based on the above discussion, the proposed project is consistent with General Plan Policies LU-16.1, LU- 16.8, Coastal Act Sections 30250(a), 30251, and 30253(e), and Coastal Area Plan, North Coast Commercial Policy 1.

## **2. Circulation, Transportation, and Mobility**

**Ventura County General Plan Vehicle Miles Traveled (VMT) Standards and CEQA Evaluation Policy CTM-1.1:** *The County shall require evaluation of County General Plan land use designation changes, zone changes, and discretionary development for their individual (i.e., project-specific) and cumulative transportation impacts based on Vehicle Miles Traveled (VMT) under the California Environmental Quality Act (CEQA) pursuant to the methodology and thresholds of significance criteria set forth in the County Initial Study Assessment Guidelines.*

**Ventura County General Plan County Level of Service (LOS) Standards Policy CTM-1.3:** *The County shall maintain LOS standards for use as part of the County's transportation planning including the traffic impact mitigation fee program, and the County's review and consideration of proposed land use legislation and discretionary development. For purposes of County transportation planning and review and consideration of proposed land use legislation and discretionary development, the County shall use the following minimum acceptable Level of Service (LOS) for road segment and intersection design standards within the Regional Road Network and all other County-maintained roadways: a. LOS-'C' for all Federal functional classification of Minor Collector (MNC) and Local roadways (L); and b. LOS-'D' for all Federal functional classifications except MNC and L, and Federal and State highways in the unincorporated area, except as otherwise provided in subparagraph (c and d; c. LOS-'E' for State Route 33 between the northerly end of the Ojai Freeway and the city of Ojai, Santa Rosa Road, Moorpark Road north of Santa Rosa Road, State Route 34 north of the city of Camarillo, and State Route 118 between Santa Clara Avenue and the city of Moorpark; d. LOS 'F' for Wendy Drive between Borchard Drive to Lois Avenue; and e. The LOS prescribed by the applicable city for all federal highways, state highways, city thoroughfares and city-maintained local roads located within that city, if the city has formally adopted and is implementing a General Plan policy, ordinance, or a reciprocal agreement with the County regarding development in the city that is intended to improve the LOS of County-maintained local roads and federal and state highways located within the unincorporated area of the county. f. At any intersection between two or more roads, each of which has a prescribed minimum acceptable LOS, the lower LOS of the roads shall be the minimum acceptable LOS for that intersection.*

**Ventura County General Plan County Road Access Policy CTM-2.3:** *The County shall require discretionary development with access onto a County road to have the access point(s) designed and built to County standards.*

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Staff Analysis: Using the Ventura County Transportation Commission (VCTC) Ventura County Traffic Model (VCTM), the baseline average trip length of all home-based model trip types is 9.66 miles. Applying the 15 percent reduction yields a vehicle miles traveled (VMT) threshold of 8.21 miles which is the threshold of significance for residential land use projects. The proposed single-family dwelling is approximately 298 feet to the northeast of US Route 101. The proposed home-based dwelling trips will likely average one per day given the distance to employment centers and public services. Based on the above 8.21-mile VCTM baseline and the location of the dwelling in relation to US Route 101, the VMT that would be generated from the dwelling development would not exceed the threshold.

Santa Paula Avenue is a County maintained local road. The proposed single-family dwelling will generate additional traffic on the Regional Road Network and local public roads, but approval of the project will not result in the degradation of LOS for any identified roadway segments or intersections within the project area.

The proposed driveway does not meet current driveway access standards. The Applicant will be required to construct driveway and drainage improvements in accordance with County Road Standard Plate E-7 (Exhibit 5, Condition No. 27).

Based on the discussion above, the proposed project is consistent with Ventura County General Plan Policies CTM-1.1, CTM-1.3, CTM-1.7 and CTM-2.3.

**California Coastal Act Section 30212(a):** *Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or, (3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.*

Staff Analysis: The proposed project will not obstruct or adversely impact access to a public recreation source (e.g., the beach). The nearest beach access is approximately 520 feet north of the project site. Based on this distance, the proposed single-family dwelling would not extend beyond the boundaries of the property in a way that impedes horizontal public access routes. In addition, public parking along Surfside Street would not be affected by the project. Therefore, the proposed development will not interfere with the public's right of access to the sea and will not require development of new dedicated accessways to the public beach.

Based on the above discussion, the proposed project is consistent with Coastal Act Section 30212(a).



### 3. Public Facilities, Services, and Infrastructure

**Ventura County General Plan Public Facilities, Services, and Infrastructure Availability Policy PFS-1.7:** *The County shall only approve discretionary development in locations where adequate public facilities, services, and infrastructure are available and functional, under physical construction, or will be available prior to occupancy.*

**Ventura County General Plan Adequate Water for Discretionary Development Policy WR-1.11:** *The County shall require all discretionary development to demonstrate an adequate long-term supply of water.*

**Ventura County General Plan Water Use Efficiency for Discretionary Development Policy WR-3.2:** *The County shall require the use of water conservation techniques for discretionary development, as appropriate. Such techniques include low-flow plumbing fixtures in new construction that meet or exceed the California Plumbing Code, use of graywater or reclaimed water for landscaping, retention of stormwater runoff for direct use and/or groundwater recharge, and landscape water efficiency standards that meet or exceed the standards in the California Model Water Efficiency Landscape Ordinance.*

Staff Analysis: Casitas Municipal Water District (CMWD) will provide potable water service (Letter dated June 14, 2024) and wastewater disposal will be provided by an onsite wastewater treatment system (OWTS) that includes a Biomicrobics Microfast 0.5 Advanced Treatment Unit inside the OWTS. The proposed project will be required to meet the standards of the California Plumbing Code and California Building Code. These standards include requirements for water conservation, low flow plumbing fixtures, and efficient appliances.

Direct access to the project site would be provided by an onsite driveway adjacent to Santa Paula Avenue, which the Ventura County Fire Protection District (VCFPD) determined meets current VCFPD standards for access. US Route 101 is approximately 298 feet southwest of the project site and will not be adversely impacted by the proposed project. The project site is located approximately 2.5 miles northwest of the nearest fire station, Station No. 25. The area in which the project site is located is currently served with electrical, gas, and communications facilities. The proposed construction of a single-family dwelling will require an extension of utilities, however, there are no utilities that would be disrupted or rerouted to accommodate future development.

Carpinteria Branch Library located at 5141 Carpinteria Ave, Carpinteria, CA 93013 is about 5.3 miles northwest of the project site. Based on this distance, the construction and use of the single-family dwelling does not have the potential to interfere with the use of the library.

The nearest school, Aliso Elementary School, located at 4545 Carpinteria Avenue, Carpinteria, CA 93013, is approximately 10.9 miles northeast of the project site. Cate

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School, located at 1960 Cate Mesa Road in the city of Carpinteria, is approximately 12.5 miles north of the project site. Based on these distances, the construction and use of the single-family dwelling does not have the potential to interfere with the use or population of these schools.

Based upon the above discussion, the proposed project is consistent with Ventura County General Plan Policies PFS-1.7, WR-1.11 and WR-3.2.

**Ventura County General Plan Wastewater Connections Requirement Policy PFS-4.1:** *The County shall require development to connect to an existing wastewater collection and treatment facility if such facilities are available to serve the development. An onsite wastewater treatment system shall only be approved in areas where connection to a wastewater collection and treatment facility is deemed unavailable.*

**Ventura County General Plan Onsite Wastewater Treatment Systems Policy PFS-4.2:** *The County may allow the use of onsite wastewater treatment systems that meet the state Water Resources Control Board Onsite Wastewater Treatment System Policy, Ventura County Sewer Policy, Ventura County Building Code, and other applicable County standards and requirements.*

Staff Analysis: The Applicant has proposed to install an OWTS in compliance with state and local regulations. To determine septic design and feasibility, the Applicant will be required to submit for review and approval a soil / geotechnical report to the Environmental Health Division prior to building permit issuance (Exhibit 5, Condition No. 21). The Noorzay preliminary percolation testing report (Exhibit 6) concluded that with design of the system that includes the installation of seepage pits at a depth of 15 feet, OWTS feasibility would be achieved and would not encroach within the minimum required 10-foot vertical setback from the historic groundwater table.

Based on the discussion above, the proposed project is consistent with Ventura County General Plan Policies PFS-4.1 and PFS-4.2.

**Ventura County General Plan Waste Reduction Practices for Discretionary Development Policy PFS-5.9:** *The County shall encourage Applicants for discretionary development to employ practices that reduce the quantities of wastes generated and engage in recycling activities to further reduce the volume of waste disposed of in landfills.*

Staff Analysis: Ventura County Ordinance No. 4421 requires all discretionary permit Applicants whose proposed project includes construction and/or demolition activities to reuse, salvage, recycle, or compost a minimum of 65 percent of the solid waste generated by their project. The Integrated Waste Management Division's (IWMD) waste diversion program ensures this 65 percent diversion goal is met prior to Building and Safety Division's issuance certificate of occupancy, consistent with the Ventura County General

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Plan. The Applicant will be required to address recycling and demolition debris removal during the construction phase of the project (Exhibit 5, Condition Nos. 23 and 24).

Based on the above discussion, the proposed project is consistent with Ventura County General Plan Policy PFS-5.9.

**Ventura County General Plan Flood Control and Drainage Facilities Required for Discretionary Development Policy PFS-6.1:** *The County shall require discretionary development to provide flood control and drainage facilities, as deemed necessary by the County Public Works Agency and Watershed Protection District. The County shall also require discretionary development to fund improvements to existing flood control facilities necessitated by or required by the development.*

**Ventura County General Plan Stormwater Drainage Facilities Policy PFS-6.5:** *The County shall require that stormwater drainage facilities are properly designed, sited, constructed, and maintained to efficiently capture and convey runoff for flood protection and groundwater recharge.*

**Ventura County General Plan Water Quality Protection for Discretionary Development Policy WR-2.2:** *The County shall evaluate the potential for discretionary development to cause deposition and discharge of sediment, debris, waste, and other contaminants into surface runoff, drainage systems, surface water bodies, and groundwater. In addition, the County shall evaluate the potential for discretionary development to limit or otherwise impair later reuse or reclamation of wastewater or stormwater. The County shall require discretionary development to minimize potential deposition and discharge through point source controls, storm water treatment, runoff reduction measures, best management practices, and low impact development.*

**Ventura County General Plan Soil Erosion and Pollution Prevention Policy HAZ-4.5:** *The County shall require discretionary development be designed to prevent soil erosion and downstream sedimentation and pollution.*

**Ventura County General Plan Water Quality Protection for Discretionary Development Policy WR-1.12:** *The County shall evaluate the potential for discretionary development to cause deposition and discharge of sediment, debris, waste and other pollutants into surface runoff, drainage systems, surface water bodies, and groundwater. The County shall require discretionary development to minimize potential deposition and discharge through point source controls, storm water treatment, runoff reduction measures, best management practices, and low impact development.*

**Coastal Area Plan Policy 4.2.4-2:** *New development shall be sited and designed to minimize risks to life and property in areas of high geologic, flood, and fire hazards.*

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**Coastal Area Plan Policy 4.2.4-3:** *All new development will be evaluated for its impacts to, and from, geologic hazards (including seismics safety, landslides, expansive soils, subsidence, etc.), flood hazards, and fire hazards. Feasible mitigation measures shall be required where necessary.*

**California Coastal Act Policy Section 30253:** *New development shall do all of the following: (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard. (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

Staff Analysis: The proposed OWTS will be setback more than 400 feet northeast from the coastline and 800 feet northwest from the closest groundwater well (State Well Number (SWN) 03N25W12A01S). With the installation of the Advanced Treatment Unit with seepage pits at a depth of 15 feet and adherence to the minimum required 10-foot setback from the historic groundwater table, the proposed system design would meet the necessary absorption criteria (Exhibit 6). As a result, the proposed project will not cause the quality of groundwater to fail to meet the groundwater quality objectives set by the Basin Plan.

The proposed single-family dwelling will create new impervious surfacing and alter drainage patterns. New impervious area will be less than one acre. As part of the required Ventura Countywide Municipal Stormwater National Pollutant Discharge Elimination System (NPDES) Permit, the Applicant must include Best Management Practices (BMPs) designed to ensure compliance and implementation of an effective combination of erosion and sediment control measures (Exhibit 5, Condition No. 26). The Applicant will be required to divert runoff from the site to Santa Paula Avenue that does not exceed the undeveloped flow rate and in a way that will not cause an adverse impact downstream in peak velocity or duration.

The proposed project will be required to meet the standards of the California Plumbing Code and California Building Code. These standards include requirements for water conservation, low flow plumbing fixtures, and efficient appliances.

The site is in an area of potential, seismically induced, liquefaction susceptibility, however the liquefaction risk of the site is low (Exhibit 6). The site is located within a Geologic Hazard Area for landslides and mudslides (RMA GIS, 2024). The site has been evaluated as part of a State of California funded study<sup>1</sup> pertaining to the La Conchita Landslide area and adjoining community. The results of these studies indicate the site is outside of the 1995/2005 landslide areas and within potential or prehistoric debris flow areas.

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<sup>1</sup> William Lettis and Associates, dated August 28, 2009, and Alan Kropp and Associates, dated September 4, 2009

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Furthermore, the August 2024 Geotechnical Report prepared for the proposed project indicates the site is not within a prehistoric or historic debris flow area, but the site may be subject to up to 2 feet of outwash debris from a design level event. To mitigate for debris flow risk that currently exists in the La Conchita area, the proposed development has been designed so that the pad elevation for the dwelling, garage and carport will be raised by two feet and utilize an engineered impact wall at least 2 feet in height on the slope facing the northeast side of the property (Exhibit 6).

Based on the discussion above, the proposed project is consistent with Ventura County General Plan Policies PFS-6.1, PFS-6.5, WR-2.2, WR-1.12, HAZ-4.5, Coastal Area Plan Policies 4.2.4.2, 4.2.4.3, and Coastal Act Policy 30253.

#### **4. Conservation and Open Space**

**Ventura County General Plan Protection of Sensitive Biological Resources Policy**

**COS-1.1:** *The County shall ensure that discretionary development that could potentially impact sensitive biological resources be evaluated by a qualified biologist to assess impacts and, if necessary, develop mitigation measures that fully account for the impacted resource. When feasible, mitigation measures should adhere to the following priority: avoid impacts, minimize impacts, and compensate for impacts. If the impacts cannot be reduced to a less than significant level, findings of overriding considerations must be made by the decision-making body.*

**Ventura County General Plan Agency Consultation Regarding Biological Resources Policy COS-1.9:**

*The County shall consult with the California Department of Fish and Wildlife, the LARWQCB, the U.S. Fish and Wildlife Service, National Audubon Society, California Native Plant Society, National Park Service for development in the Santa Monica Mountains or Oak Park Area, and other resource management agencies, as applicable during the review of discretionary development applications to ensure that impacts to biological resources, including rare, threatened, or endangered species, are avoided or minimized.*

**Coastal Area Plan Policy 1.4.10(2):** *All projects on land either in a stream or creek corridor or within 100 feet of such corridor, shall be sited and designed to prevent impacts which would significantly degrade riparian habitats, and shall be compatible with the continuance of such habitats.*

**California Coastal Act Policy Section 30231:** *"The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference of ground water flow,*

*encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams."*

**California Coastal Act Policy Section 30240:**

- a) *Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.*
- b) *Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas and shall be compatible with the continuance of such habitat areas.*

Staff Analysis: The proposed construction of the single-family dwelling will occur in an area that is residentially developed, densely populated and highly disturbed area. Vegetation onsite includes non-native grass and weeds and barren dirt areas. The community of La Conchita includes *Salvia mellifera-Salvia leucophylla* Vegetation Alliance, which is considered Environmentally Sensitive Habitat Areas (ESHA) (RMA GIS, 2024), However historical aerial photos show that the previous vegetation alliance was cleared as early as 1945 with the construction of the residential lots. The vegetation map was not corrected to omit existing development at the time of its creation.

No impacts to sensitive plants or animal species are expected. The proposed development will not construct or create barriers that impede fish and/or wildlife movement, foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction. This is because the nearest mapped wildlife corridor is more than 7.0 miles northeast of the project site along the western side of State Route 33 between Ojai and Ventura (RMA GIS, 2024). Landscaping is proposed by the Applicant, but according to the site plans (Exhibit 3) it would include less than 500 sq. ft. and not subject to the State of California Water Efficient Landscape Ordinance (WELO) guidelines, based on the size of the project site in relation to the proposed development. The Applicant will be required to provide a conceptual landscape plan that includes drought tolerant native plant species prior to the issuance of the Zoning Clearance for construction (Exhibit 5, Condition No. 17).

Based on the discussion above, the proposed project is consistent with Ventura County General Plan Resources Policies COS-1.1, COS-1.9, Coastal Area Plan Policies 1.4.10(2), Coastal Act Policy Sections 30231 and 30240.

## **5. Cultural Resources**

**Ventura County General Plan Cooperation for Cultural, Historical, Paleontological, and Archaeological Resource Preservation Policy COS 4.2(a):** *The County shall cooperate with cities, special districts, appropriate organizations and private landowners*

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*to identify known cultural, archaeological, historical, and paleontological resources to preserve identified resources within the county.*

**Ventura County General Plan Cooperation for Tribal Cultural Resource Preservation Policy COS-4.2(b):** *For discretionary projects, the County shall request local tribes contact information from Native American Heritage Commission, to identify known tribal cultural resources. If requested by one or more of the identified local tribes, the County shall engage in consultation with each local tribe to preserve, and determine appropriate handling of, identified resources within the county.*

**Ventura County General Plan Discretionary Development and Tribal, Cultural, Historical, Paleontological, and Archaeological Resource Preservation Policy COS-4.4:** *The County shall require that all discretionary development projects be assessed for potential tribal, cultural, historical, paleontological, and archaeological resources by a qualified professional and shall be designed to protect existing resources. Whenever possible, significant impacts shall be reduced to a less-than significant level through the application of mitigation and/or extraction of maximum recoverable data. Priority shall be given to measures that avoid resources.*

**Coastal Area Plan Archaeology Policy 4.1.1(1):** *Discretionary development shall be reviewed to identify potential locations for sensitive archaeological resources.*

**Coastal Area Plan Archaeology Policy 4.1.1(2):** *New development shall be sited and designed to avoid adverse impacts to archaeological resources to the maximum extent feasible. If there is no feasible alternative that can eliminate all impacts to archaeological resources, then the alternative that would result in the fewest or least significant impacts to resources shall be selected. Impacts to archaeological resources that cannot be avoided through siting and design alternatives shall be mitigated. When impacts to archaeological resources cannot be avoided, mitigation shall be required and shall be Last Certified 7-1-2017 Goals. Policies and Programs - 4-3 designed in accordance with established federal, state and/or County standards and shall be consistent with the policies and provisions of the LCP.*

**Coastal Area Plan Archaeology Policy 4.1.1(6):** *Protect and preserve archaeological resources from destruction and avoid impacts to such resources where feasible.*

**Coastal Act Policy Section 30244:** *Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.*

Staff Analysis: The project site is underlain by paralic deposits of the Pico Formation (Exhibit 6), which is considered to have a moderate likelihood of containing paleontological resources. (Ventura County Initial Study Assessment Guidelines, 2011). It is unlikely that the proposed construction of the single-family dwelling will encounter

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and have an adverse impact to paleontological resources. However should paleontological resources be discovered onsite during ground disturbance, the Applicant will be required to: (1) stop all work that has the potential to adversely affect paleontological resources; (2) retain a paleontologist or geologist to assess the significance of the find and provide recommendations on the disposition of the resources; and (3) implement any and all measures to protect and curate the resources, subject to the Planning Division's approval (Exhibit 5, Condition No. 20).

The archeological sensitivity of the project site is unknown (RMA GIS, 2024). On February 20, 2025, The Planning Division contacted the South-Central Coastal Information Center (SCCIC), which is the local repository for the California Historical Resources Information System (CHRIS), and conducted an archeological resources review of the project site. Staff did not receive any comments from SCCIC. Although the proposed project is not likely to result in impacts to cultural resources, a standard condition of approval will be included with the project conditions that will require the Applicant to: (1) stop all work that has the potential to adversely affect cultural resources; (2) retain an archeologist to assess the significance of the find and provide recommendations on the disposition of the resources; and (3) implement any and all measures to protect and curate the resources, subject to the Planning Division's approval (Exhibit 5, Condition No. 20).

Based on the discussion above, the proposed project is consistent with Ventura County General Plan Policies COS-4.2(a), COS-4.2(b), COS-4.4, Coastal Area Plan Policies 4.1.1(1), 4.1.1(2), and 4.1.1(6), and Coastal Act Policy 30244.

## 6. Hazards and Safety

### **Ventura County General Plan Projects in Earthquake Fault Zones Policy HAZ- 4.1:**

*The County shall prohibit new structures for human occupancy and subdivisions that contemplate the eventual construction of structures for human occupancy in Earthquake Fault Zones unless a geologic investigation is performed to delineate any hazard of surface fault rupture and appropriate and sufficient safeguards, based on this investigation, are incorporated into the project design.*

**Ventura County General Plan Structural Design Policy HAZ-4.3:** *The County shall require that all structures designed for human occupancy incorporate engineering measures to reduce the risk of and mitigate against collapse from ground shaking.*

**Ventura County General Plan Alteration of Land in Landslide/Debris Flow Hazard Areas Policy HAZ-4.11:** *The County shall not allow alteration of land in landslide/debris flow hazard areas, including concentration of water through drainage, irrigation or septic systems, removal of vegetative cover, and undercutting of the bases of slopes or other grading activity unless demonstrated by geologic, geotechnical, and civil engineering analysis that the project will not increase the landslide/debris flow hazard.*



**California Coastal Act Section 30253(a) and (b):** *New development shall do all of the following: (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard. (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

**Coastal Area Plan, North Coast Hazards Policy 2:** *New development shall be sited and designed to minimize risks to life and property in areas of high geologic, flood, and fire hazards.*

**Coastal Area Plan, North Coast Hazards Policy 3:** *All new development will be evaluated for its impacts to, and from, geologic hazards (including seismic safety, landslides, expansive soils, subsidence, etc.), flood hazards, and fire hazards. Feasible mitigation measures shall be required where necessary.*

Staff Analysis: The nearest fault is approximately 444 feet north of the project site and not located within 50 feet of the Alquist-Priolo Special Fault Hazard Area. The site will be subject to strong ground shaking caused by regionally active faults (RMA GIS, 2024). The construction of a new single-family dwelling would neither create nor contribute significantly to geological instability or destruction of the site or surrounding areas. In addition the applicant prepared a geotechnical report indicating the building pad will be raised by two feet and a four-foot-tall debris and impact wall will be constructed on the northeast side of the property to protect the subject [property and surrounding properties in the event a debris flow occurs. Further, the proposed project has been designed in compliance with the 2022 California Building Code, which ensures stability and structural integrity. Compliance with the Building Code will also ensure that risks from seismic events or liquefaction are minimized.

Based on the above discussion, the proposed project is consistent with *Ventura County General Plan* Hazards and Safety Policies HAZ-4.1 and HAZ-4.3, Coastal Act Sections 30253(a) and (b), and Coastal Area Plan, North Coast Hazards Policies 2 and 3.

**Ventura County General Plan Emergency Vehicles Access Policy PFS-11.4:** *The County shall require all discretionary development to provide, and existing development to maintain, adequate access for emergency vehicles, including two points of access for subdivisions and multifamily developments.*

**Ventura County General Plan Adequate Water Supply, Access, and Response Times for Firefighting Purposes Policy PFS-12.3:** *The County shall prohibit discretionary development in areas that lack and cannot provide adequate water supplies, access, and response times for firefighting purposes*

**Ventura County General Plan Consistent Fire Protection Standards for New Development Policy PFS-12.4:** *The County, in coordination with local water agencies and the Fire Protection District, shall require new discretionary development to comply with applicable standards for fire flows and fire protection.*

**Ventura County General Plan Fire Prevention Design and Practices Policy HAZ-1.1:** *The County shall continue to require development to incorporate design measures that enhance fire protection in areas of high fire risk. This shall include but is not limited to incorporation of fire-resistant structural design, use of fire-resistant landscaping, and fuel modification around the perimeter of structures.*

**Ventura County General Plan Development in High Fire Hazard Severity Zones and Hazardous Fire Areas Policy HAZ-1.4:** *The County shall require the recordation of a Notice of Fire Hazard with the County Recorder for all new discretionary entitlements (including subdivisions and land use permits) within areas designated as Hazardous Fire Areas by the Ventura County Fire Department or High Fire Hazard Severity Zones by the California Department of Forestry and Fire Protection.*

Staff Analysis: The project site is located within a very high fire hazard area and is under the jurisdiction of the California Department of Forestry and Fire Protection (CalFire). The Applicant will be required to record the project conditions of approval with the Ventura County Recorder, which will provide notice to the public that the project site is located within a very high fire hazard area (Exhibit 5, Condition No. 10). To ensure that fire hazard impacts are maintained at a less than significant level, the Applicant will be subject to standard conditions of approval which will ensure that all structures are constructed to meet hazardous fire area building code requirements for fire prevention. These include:

- Verification from CMWD that a minimum fire flow of 1,000 gallons per minute at 20 pounds per square inch (psi) for a 2-hour duration is available at the project site, (Exhibit 5, Condition No. 32).
- Installation of sprinklers in the proposed single-family dwelling and hydrants within 500 feet of the project site (Exhibit 5, Condition No. 34).
- Annual fire hazard abatement within 100 feet of the single-family dwelling and 10 feet on each side of the driveway (Exhibit 5, Condition No. 36).

VCFPD evaluated the proposed project and determined that access to the project site from Santa Paula Avenue is adequate. The response time for firefighting personnel is also adequate as the project site is located about 2.5 miles northwest of Fire Station No. 25.

Based on the discussion above, the proposed project is consistent with Ventura County General Plan Policies PFS-11.4, PFS-12.3, PFS-12.4, HAZ-1.1 and HAZ-1.4.

**General Plan and Coastal Area Plan Consistency for  
PD PL24-0085**

**Date of Public Hearing: August 20, 2025**

**Date of Approval:**

**Permittee:** Jennifer Vergel

**Location:** APN 060-0-062-325,  
Santa Paula Avenue, La Conchita

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## EXHIBIT 5

### DRAFT CONDITIONS OF APPROVAL FOR COASTAL PLANNED DEVELOPMENT PERMIT CASE NO. PL24-0085

#### RESOURCE MANAGEMENT AGENCY (RMA)

##### Planning Division Conditions

###### 1. Project Description

This Planned Development (PD) Permit is based on and limited to compliance with the project description stated in this condition below, Exhibit 3 of the Planning Director hearing on May 22, 2025, and conditions of approval set forth below. Together, these conditions and documents describe the "Project." Any deviations from the Project must first be reviewed and approved by the County to determine if the Project deviations conform to the Project as approved. Project deviations may require Planning Director approval for changes to the permit or further California Environmental Quality Act (CEQA) environmental review, or both. Any Project deviation that is implemented without requisite County review and approval(s) may constitute a violation of the conditions of this permit and applicable law.

The Project description is as follows:

A Planned Development (PD) Permit for the construction of a new 3,097 square foot (sq. ft.) single-family dwelling on an undeveloped lot in the community of La Conchita. The first floor will include living space, a garage, carport and covered porch (1,145, sq. ft.). The second floor will include living space and a deck (1,131 sq. ft.) and the third floor will include a loft and balcony (821 sq. ft.). Casitas Municipal Water District (CMWD) will provide potable water service and wastewater disposal will be provided by an onsite wastewater treatment system (OWTS) with advanced treatment. To mitigate for debris flow risk that currently exists in the La Conchita area, the proposed development has been designed so that the pad elevation for the dwelling and garage will be raised by two feet and utilize an engineered impact wall at least 2 feet in height on the slope facing the northeast side of the property. Access to the project site will be made available from a proposed driveway adjacent to Santa Paula Avenue. (Exhibit 3).

The grading, development, use, and maintenance of the property, the size, shape, arrangement, and location of structures, parking areas and landscape areas, shall conform to the project description above and all approved County land use hearing exhibits in support of the Project and conditions of approval below.

###### 2. Required Improvements for PD

**Purpose:** To ensure the project site conforms to the plans approved at the Planning Director hearing in support of the project.

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**Requirement:** The Permittee shall ensure that all required off-site and on-site improvements for the Project, including structures, paving, parking, and landscaping are completed in conformance with the approved plans stamped as hearing exhibit 3. The Permittee shall prepare and submit all final building and site plans for the County's review and approval in accordance with the approved plans.

**Documentation:** The Permittee shall obtain Planning Division staff's stamped approval on the project plans and submit them to the County for inclusion in the Project file. The Permittee shall submit additional plans to the Planning Division for review and stamped approval (e.g., tree protection and landscape plans) for inclusion in the Project file, as necessary.

**Timing:** Prior to the issuance of a Zoning Clearance for construction, the Permittee shall submit all final development plans to the Planning Division for review and approval. Unless the Planning Director and/or Public Works Agency Director allow the Permittee to provide financial security and a final executed agreement, approved as to form by the County Counsel, that ensures completion of such improvements, the Permittee shall complete all required improvements prior to occupancy. The Permittee shall maintain the required improvements for the life of the Project.

**Monitoring and Reporting:** The County Building Inspector, Public Works Agency Grading Inspector, Fire Marshall, and/or Planning Division staff has the authority to conduct periodic site inspections to ensure the Permittee's ongoing compliance with this condition consistent with the requirements of Section 8183-5 of the Ventura County Coastal Zoning Ordinance.

### 3. Site Maintenance

**Purpose:** To ensure that the Project site is maintained in a neat and orderly manner so as not to create any hazardous conditions or unsightly conditions which are visible from outside of the Project site.

**Requirement:** The Permittee shall maintain the Project site in a neat and orderly manner, and in compliance with the Project description set forth in Condition No. 1. Only equipment and/or materials which the Planning Director determines to substantially comply with the Project description shall be stored within the Project site during the life of the Project.

**Documentation:** The Permittee shall maintain the Project site in compliance with Condition No. 1 and the approved plans for the Project.

**Timing:** The Permittee shall maintain the Project site in a neat and orderly manner and in compliance with Condition No. 1 throughout the life of the Project.

**Monitoring and Reporting:** The County Building Inspector, Public Works Agency Grading Inspector, Fire Marshall, and/or Planning Division staff has the authority to

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conduct periodic site inspections to ensure the Permittee's ongoing compliance with this condition consistent with the requirements of Section 8183-5 of the Ventura County Coastal Zoning Ordinance.

**4. PD Modification**

Prior to undertaking any operational or construction-related activity which is not expressly described in these conditions, the Permittee shall first contact the Planning Director to determine if the proposed activity requires a modification of this PD. The Planning Director may, at the Planning Director's sole discretion, require the Permittee to file a written and/or mapped description of the proposed activity in order to determine if a PD modification is required. If a PD modification is required, the modification shall be subject to:

- a. The modification approval standards of the Ventura County Ordinance Code in effect at the time the modification application is acted on by the Planning Director; and
- b. Environmental review, as required pursuant to the California Environmental Quality Act (CEQA; California Public Resources Code, Sections 21000-21178) and the State CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, Sections 15000-15387), as amended from time to time.

**5. Construction Activities**

Prior to any construction, the Permittee shall obtain a Zoning Clearance for construction from the Planning Division, and a Building Permit from the Building and Safety Division. Prior to any grading, the Permittee shall obtain a Grading Permit from the Public Works Agency.

**6. Acceptance of Conditions and Schedule of Enforcement Responses**

The Permittee's acceptance of this PD Permit and/or commencement of construction and/or operations under this PD Permit shall constitute the Permittee's formal agreement to comply with all conditions of this PD Permit. Failure to abide by and comply with any condition of this PD Permit shall constitute grounds for enforcement action provided in the Ventura County Coastal Zoning Ordinance (Article 13), which shall include, but is not limited to, the following:

- a. Public reporting of violations to the Planning Commission and/or Board of Supervisors;
- b. Suspension of the permitted land uses (Condition No. 1);
- c. Modification of the PD Permit conditions listed herein;
- d. Recordation of a "Notice of Noncompliance" on the deed to the subject property;
- e. The imposition of civil administrative penalties; and/or
- f. Revocation of this PD Permit.

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The Permittee is responsible for being aware of and complying with the PD Permit conditions and all applicable federal, state, and local laws and regulations.

7. Time Limits

a. Zoning Clearance for Construction:

- (1) The approval decision for this PD Permit becomes effective upon the expiration of the 10-day appeal period following the approval decision, or when any appeals of the decision are finally resolved. Once the approval decision becomes effective, the Permittee must obtain a Zoning Clearance for construction to initiate the land uses set forth in Condition No. 1.
- (2) This PD Permit shall expire and become null and void if the Permittee fails to obtain a Zoning Clearance for construction within one year from the date the approval decision of this PD becomes effective (see Ventura County Coastal Zoning Ordinance Section 8181-7.7). The Planning Director may grant a one-year extension of time to the Permittee in order to obtain the Zoning Clearance for construction if the Permittee can demonstrate to the satisfaction of the Planning Director that the Permittee has made a diligent effort to implement the Project, and the Permittee has requested the time extension in writing at least 30 days prior to the one year expiration date.
- (3) Prior to the issuance of the Zoning Clearance for construction, all fees and charges billed to that date by any County agency, as well as any fines, penalties, and sureties, must be paid in full. After issuance of the Zoning Clearance for construction, any final billed processing fees must be paid within 30 days of the billing date, or the County may revoke this PD Permit.

8. Documentation Verifying Compliance with Other Agencies' Requirements Related to this PD Permit

**Purpose:** To ensure compliance with, and notification of, federal, state, and/or local government regulatory agencies that have requirements that pertain to the Project (Condition No. 1, above) that is the subject of this PD Permit.

**Requirement:** Upon the request of the Planning Director, the Permittee shall provide the Planning Division with documentation (e.g., copies of permits or agreements from other agencies, which are required pursuant to a condition of this PD Permit) to verify that the Permittee has obtained or satisfied all applicable federal, state, and local entitlements and conditions that pertain to the Project.

**Documentation:** The Permittee shall provide this documentation to Planning Division staff in the form that is acceptable to the agency issuing the entitlement or clearance, to be included in the Planning Division Project file.

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**Timing:** The documentation shall be submitted to the Planning Division prior to the issuance of the Zoning Clearance for construction.

**Monitoring and Reporting:** The Planning Division maintains the documentation provided by the Permittee in the respective Project file. In the event that the federal, state, or local government regulatory agency prepares new documentation due to changes in the Project or the other agency's requirements, the Permittee shall submit the new documentation within 30 days of receipt of the documentation from the other agency.

9. Notice of PD Permit Requirements and Retention of PD Permit Conditions On Site

**Purpose:** To ensure full and proper notice of these PD Permit conditions affecting the use of the subject property.

**Requirement:** Unless otherwise required by the Planning Director, the Permittee shall notify, in writing, the Property Owner(s) of record, contractors, and all other parties and vendors who regularly conduct activities associated with the Project, of the pertinent conditions of this PD Permit.

**Documentation:** The Permittee shall present to the Planning Division staff copies of the conditions, upon Planning Division staff's request.

**Timing:** Prior to issuance of a Zoning Clearance for construction and throughout the life of the Project.

**Monitoring and Reporting:** The Planning Division has the authority to conduct periodic site inspections to ensure ongoing compliance with this condition consistent with the requirements of Section 8183-5 of the Ventura County Coastal Zoning Ordinance.

10. Recorded Notice of Land Use Entitlement

**Purpose:** The Permittee shall record a "Notice of Land Use Entitlement" form and the conditions of this PD Permit with the deed for the subject property that notifies the current and future Property Owner(s) of the conditions of this PD Permit.

**Requirement:** The Permittee shall sign, have notarized, and record with the Office of the County Recorder, a wet signed "Notice of Land Use Entitlement" form furnished by the Planning Division and the conditions of this PD Permit, with the deed of the property that is subject to this PD Permit.

**Documentation:** Recorded "Notice of Land Use Entitlement" form and conditions of this PD Permit.

**Timing:** The Permittee shall record the "Notice of Land use Entitlement" form and conditions of this PD Permit prior to issuance of a Zoning Clearance for construction.



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**Monitoring and Reporting:** The Permittee shall return a copy of the recorded "Notice of Land Use Entitlement" form and conditions of this PD Permit to Planning Division staff to be included in the Project file.

**11. Financial Responsibility for Compliance Monitoring and Enforcement**

- a. **Cost Responsibilities:** The Permittee shall bear the full costs of all County staff time, materials, and County-retained consultants associated with condition compliance review and monitoring, CEQA mitigation monitoring, other permit monitoring programs, and enforcement activities, actions, and processes conducted pursuant to the Ventura County Coastal Zoning Ordinance (Section 8183-5) related to this PD Permit. Such condition compliance review, monitoring and enforcement activities may include (but are not limited to): periodic site inspections; preparation, review, and approval of studies and reports; review of permit conditions and related records; enforcement hearings and processes; drafting and implementing compliance agreements; and attending to the modification, suspension, or revocation of permits. Costs will be billed at the rates set forth in the Planning Division or other applicable County Fee Schedule, and at the contract rates of County-retained consultants, in effect at the time the costs are incurred.
- b. **Billing Process:** The Permittee shall pay all Planning Division invoices within 30 days of receipt thereof. Failure to timely pay an invoice shall subject the Permittee to late fees and charges set forth in the Planning Division Fee Schedule, and shall be grounds for suspension, modification, or revocation of this PD Permit. The Permittee shall have the right to challenge any charge or penalty prior to payment.

**12. Defense and Indemnification**

- a. The Permittee shall defend, at the Permittee's sole expense with legal counsel acceptable to the County, against any and all claims, actions, or proceedings against the County, any other public agency with a governing body consisting of the members of the County Board of Supervisors, or any of their respective board members, officials, employees and agents (collectively, "Indemnified Parties") arising out of or in any way related to the County's issuance, administration, or enforcement of this PD Permit. The County shall promptly notify the Permittee of any such claim, action or proceeding and shall cooperate fully in the defense.
- b. The Permittee shall also indemnify and hold harmless the Indemnified Parties from and against any and all losses, damages, awards, fines, expenses, penalties, judgments, settlements, or liabilities of whatever nature, including but not limited to court costs and attorney fees (collectively, "Liabilities"), arising out of or in any way related to any claim, action or proceeding subject to subpart (a)

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above, regardless of how a court apportions any such Liabilities as between the Permittee, the County, and/or third parties.

- c. Except with respect to claims, actions, proceedings, and Liabilities resulting from an Indemnified Party's sole active negligence or intentional misconduct, the Permittee shall also indemnify, defend (at Permittee's sole expense with legal counsel acceptable to County), and hold harmless the Indemnified Parties from and against any and all claims, actions, proceedings, and Liabilities arising out of, or in any way related to, the construction, maintenance, land use, or operations conducted pursuant to this PD Permit, regardless of how a court apportions any such Liabilities as between the Permittee, the County, and/or third parties. The County shall promptly notify the Permittee of any such claim, action, or proceeding and shall cooperate fully in the defense.
- d. Neither the issuance of this PD Permit, nor compliance with the conditions hereof, shall relieve the Permittee from any responsibility otherwise imposed by law for damage to persons or property; nor shall the issuance of this PD Permit serve to impose any liability upon the Indemnified Parties for injury or damage to persons or property.

**13. Invalidation of Condition(s)**

If any of the conditions or limitations of this PD Permit are held to be invalid in whole or in part by a court of competent jurisdiction, that holding shall not invalidate any of the remaining PD Permit conditions or limitations. In the event that any condition imposing a fee, exaction, dedication, or other mitigation measure is challenged by the Permittee in an action filed in a court of competent jurisdiction, or threatened to be filed therein, the Permittee shall be required to fully comply with this PD Permit, including without limitation, by remitting the fee, exaction, dedication, and/or by otherwise performing all mitigation measures being challenged. This PD Permit shall continue in full force unless, until, and only to the extent invalidated by a final, binding judgment issued in such action.

If a court of competent jurisdiction invalidates any condition in whole or in part, and the invalidation would change the findings and/or the mitigation measures associated with the approval of this PD Permit, at the discretion of the Planning Director, the Planning Director may review the project and impose substitute feasible conditions/mitigation measures to adequately address the subject matter of the invalidated condition. The Planning Director shall make the determination of adequacy. If the Planning Director, cannot identify substitute feasible conditions/mitigation measures to replace the invalidated condition, and cannot identify overriding considerations for the significant impacts that are not mitigated to a level of insignificance as a result of the invalidation of the condition, then this PD Permit may be revoked.

**14. Consultant Review of Information and Consultant Work**

The County and all other County permitting agencies for the Project have the option of referring any and all special studies that these conditions require to an independent and

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qualified consultant for review and evaluation of issues beyond the expertise or resources of County staff.

Prior to the County engaging any independent consultants or contractors pursuant to the conditions of this PD Permit, the County shall confer in writing with the Permittee regarding the necessary work to be contracted, as well as the estimated costs of such work. Whenever feasible, the County will use the lowest responsible bidder or proposer. Any decisions made by County staff in reliance on consultant or contractor work may be appealed pursuant to the appeal procedures contained in the Ventura County Zoning Ordinance Code then in effect.

The Permittee may hire private consultants to conduct work required by the County, but only if the consultant and the consultant's proposed scope-of-work are first reviewed and approved by the County. The County retains the right to hire its own consultants to evaluate any work that the Permittee or a contractor of the Permittee undertakes. In accordance with Condition No. 11 above, if the County hires a consultant to review any work undertaken by the Permittee or hires a consultant to review the work undertaken by a contractor of the Permittee, the hiring of the consultant will be at the Permittee's expense.

**15. Relationship of PD Permit Conditions, Laws, and Other Entitlements**

The Permittee shall implement the Project in compliance with all applicable requirements and enactments of federal, state, and local authorities. In the event of conflict between various requirements, the more restrictive requirements shall apply. In the event the Planning Director determines that any PD Permit condition contained herein conflicts with any other PD Permit condition contained herein, when principles of law do not provide to the contrary, the PD Permit condition most protective of public health and safety and environmental resources shall prevail to the extent feasible.

No condition of this PD Permit for uses allowed by the Ventura County Ordinance Code shall be interpreted as permitting or requiring any violation of law, lawful rules, or regulations, or orders of an authorized governmental agency. Neither the approval of this PD Permit, nor compliance with the conditions of this PD Permit, shall relieve the Permittee from any responsibility otherwise imposed by law for damage to persons or property.

**16. Contact Person**

**Purpose:** To designate a person responsible for responding to complaints.

**Requirement:** The Permittee shall designate a contact person(s) to respond to complaints from citizens and the County which are related to the permitted uses of this Coastal PD.

**Documentation:** The Permittee shall provide the Planning Director with the contact information (e.g., name and/or position title, address, business and cell phone numbers,

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and email addresses) of the Permittee's field agent who receives all orders, notices, and communications regarding matters of condition and code compliance at the Project site.

**Timing:** Prior to the issuance of a Zoning Clearance for construction the Permittee shall provide the Planning Division the contact information of the Permittee's field agent(s) for the Project file. If the address or phone number of the Permittee's field agent(s) should change, or the responsibility is assigned to another person, the Permittee shall provide Planning Division staff with the new information in writing within three calendar days of the change in the Permittee's field agent.

**Monitoring and Reporting:** The Planning Division maintains the contact information provided by the Permittee in the Project file. The Planning Division has the authority to periodically confirm the contact information consistent with the requirements of Section 8183-5 of the CZO.

17. Landscaping and Screening

**Purpose:** To comply with the County's landscaping requirements.

**Requirement:** The Permittee shall retain a landscape architect to prepare a landscape plan that complies with the requirements of this condition and the California Department of Water Resources Model Water Efficient Landscape Ordinance (MWELO).

Landscaping Objectives: The Permittee must install and maintain landscaping that serves the following functions:

- a. Ensures compatibility with community character. The Permittee must install landscaping that visually integrates the development with the character of the surrounding community.
- b. Retains and treats stormwater. The Permittee must install landscaping that retains and treats stormwater as required pursuant to Condition No. 27 of this PD Permit.

Landscaping Design: The Permittee shall design all landscaping such that the landscaping requires minimal amounts of water and uses required water efficiently, in accordance with the water efficiency requirements of the Landscape Design Criteria and must achieve the following design objectives:

- a. Use Available Non-Potable Sources of Water. The landscaping must involve the harvesting and/or use of alternative, non-potable sources of water, including stormwater, reclaimed water, and gray water, if available to the Project site.
- b. Species Diversity. The landscape plan must integrate a variety of plant species, heights, colors, and textures, as appropriate given the size of the landscape.

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- c. Fire Resistance. Plant material installed in the fuel modification zone must be fire resistant.
- d. Use Native Plant Species.

**Documentation:** The Permittee shall submit three sets of a draft landscape plan to the Planning Division for review and approval. A California registered landscape architect (or other qualified individual as approved by the Planning Director) shall prepare the landscape plan, demonstrating compliance with the requirements set forth in this condition (above). The landscape architect responsible for the work shall stamp the plan. After landscape installation, the Permittee shall submit to Planning Division staff a statement from the project landscape architect that the Permittee installed all landscaping as shown on the approved landscape plan. Prior to installation of the landscaping, the Permittee must obtain the Planning Director's approval of any changes to the landscape plans that affect the character or quantity of the plant material or irrigation system design.

**Timing:** The Permittee shall submit the landscape plan to the Planning Division for review and approval prior to issuance of a Zoning Clearance for construction. Landscaping installation shall occur prior to the issuance of a Certificate of Occupancy, and maintenance activities shall occur according to the timing requirements set forth in Sections 8178-8.9.3 of the Coastal Zoning Ordinance.

**Monitoring and Reporting:** Landscaping shall be maintained for the life of the permit. Landscaping approval/installation and verification shall occur after the Permittee submits the Certificate of Completion for the landscape installation. County staff shall then conduct an onsite inspection to verify that the landscaping was installed as required by the approved landscape plan as set forth Section 8178-8.9.2(a)(2) or the Coastal Zoning Ordinance. Monitoring activities and enforcement activities shall occur according to the procedures set forth in Section 8178-8.9.3 or the Coastal Zoning Ordinance. The Planning Division maintains the landscape plans and statement by the landscape architect in the Project file.

**18. Construction Noise**

**Purpose:** In order for this project to comply with the Ventura County General Policy HAZ-9.2, Noise Compatibility Standards, and the County of Ventura Construction Noise Threshold Criteria and Control Plan (Amended 2010).

**Requirement:** The Permittee shall limit construction activity for site preparation and development to the hours between 7:00 a.m. and 7:00 p.m., Monday through Friday, and from 9:00 a.m. to 7:00 p.m. Saturday, Sunday, and State holidays. Construction equipment maintenance shall be limited to the same hours. Non-noise generating construction activities such as interior painting are not subject to these restrictions.

**Documentation:** The Permittee shall post a sign stating these restrictions in a conspicuous location on the Project site, in order so that the sign is visible to the general

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public. The Permittee shall provide photo documentation showing posting of the required signage to the Planning Division, prior to the commencement of grading and construction activities. The sign must provide a telephone number of the site foreman, or other person who controls activities on the jobsite, for use for complaints from the public. The Permittee shall maintain a "Complaint Log," noting the date, time, complainant's name, complaint, and any corrective action taken, if the Permittee receives noise complaints. The Permittee must submit the "Complaint Log" to the Planning Division upon the Planning Director's request.

**Timing:** The Permittee shall install the sign prior to the issuance of a building permit and throughout all grading and construction activities. The Permittee shall maintain the signage on-site until all grading and construction activities are complete. If the Planning Director requests the Permittee to submit the "Complaint Log" to the Planning Division, the Permittee shall submit the "Complaint Log" within one day of receiving the Planning Director's request.

**Monitoring and Reporting:** The Planning Division reviews, and maintains in the Project file, the photo documentation of the sign and the "Complaint Log." The Planning Division has the authority to conduct site inspections and take enforcement actions to ensure that the Permittee conducts grading and construction activities in compliance with this condition, consistent with the requirements of Section 8183-5 of the Ventura County Coastal Zoning Ordinance.

**19. Paleontological Resources Discovered During Grading**

**Purpose:** In order to mitigate potential impacts to paleontological resources that may be encountered during ground disturbance or construction activities.

**Requirement:** If any paleontological remains are uncovered during ground disturbance or construction activities, the Permittee shall:

- i. Cease operations and assure the preservation of the area in which the discovery was made;
- ii. Notify the Planning Director in writing, within three days of the discovery;
- iii. Obtain the services of a paleontological consultant or professional geologist who shall assess the find and provide a report that assesses the resources and sets forth recommendations on the proper disposition of the site;
- iv. Obtain the Planning Director's written concurrence with the recommended disposition of the site before resuming development; and
- v. Implement the agreed upon recommendations.

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**Documentation:** The Permittee shall submit the paleontologist's or geologist's reports. Additional documentation may be required to demonstrate that the Permittee has implemented the recommendations set forth in the paleontological report.

**Timing:** If any paleontological remains are uncovered during ground disturbance or construction activities, the Permittee shall provide the written notification to the Planning Director within three days of the discovery. The Permittee shall submit the paleontological report to the Planning Division immediately upon completion of the report.

**Monitoring and Reporting:** The Permittee shall provide the paleontological report to the Planning Division to be made part of the Project file. The Permittee shall implement any recommendations made in the paleontological report to the satisfaction of the Planning Director. The paleontologist shall monitor all ground disturbance activities within the area in which the discovery was made, to ensure the successful implementation of the recommendations made in the paleontological report. The Planning Division has the authority to conduct site inspections to ensure that the Permittee implements the recommendations set forth in the paleontological report, consistent with the requirements of Section 8183-5 of the Ventura County Coastal Zoning Ordinance.

20. Archaeological Resources Discovered During Grading

**Purpose:** In order to mitigate potential impacts to archaeological resources discovered during ground disturbance.

**Requirement:** The Permittee shall implement the following procedures:

- i. If any archaeological or historical artifacts are uncovered during ground disturbance or construction activities, the Permittee shall:
  1. Cease operations and assure the preservation of the area in which the discovery was made;
  2. Notify the Planning Director in writing, within three days of the discovery;
  3. Obtain the services of a County-approved archaeologist who shall assess the find and provide recommendations on the proper disposition of the site in a written report format;
  4. Obtain the Planning Director's written concurrence of the recommended disposition of the site before resuming development; and
  5. Implement the agreed upon recommendations.
- ii. If any human burial remains are encountered during ground disturbance or construction activities, the Permittee shall:

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1. Cease operations and assure the preservation of the area in which the discovery was made;
2. Immediately notify the County Coroner and the Planning Director;
3. Obtain the services of a County-approved archaeologist and, if necessary, Native American Monitor(s), who shall assess the find and provide recommendations on the proper disposition of the site in a written report format;
4. Obtain the Planning Director's written concurrence of the recommended disposition of the site before resuming development on-site; and
5. Implement the agreed upon recommendations.

**Documentation:** If archaeological remains are encountered, the Permittee shall submit a report prepared by a County-approved archaeologist including recommendations for the proper disposition of the site. Additional documentation may be required to demonstrate that the Permittee has implemented any recommendations made by the archaeologist's report.

**Timing:** If any archaeological remains are uncovered during ground disturbance or construction activities, the Permittee shall provide the written notification to the Planning Director within three days of the discovery. The Permittee shall submit the archaeological report to the Planning Division immediately upon completion of the report.

**Monitoring and Reporting:** The Permittee shall provide the archaeological report to the Planning Division to be made part of the Project file. The Permittee shall implement any recommendations made in the archaeological report to the satisfaction of the Planning Director. The archaeologist shall monitor all ground disturbance activities within the area in which the discovery was made, to ensure the successful implementation of the recommendations made in the archaeological report. The Planning Division has the authority to conduct site inspections to ensure that the Permittee implements the recommendations set forth in the archaeological report, consistent with the requirements of Section 8183-5 of the Ventura County Coastal Zoning Ordinance.

**Environmental Health Division Conditions**

21. New OWTS Installation

**Purpose:** To demonstrate the feasibility for the installation of an onsite wastewater treatment system (OWTS), also known as a septic system or individual sewage disposal system. To demonstrate compliance with state and local regulations related to the design and installation of an OWTS. Only domestic waste as defined in the Ventura County General Plan and the Ventura County Building Code Ordinance is allowed to be discharged into the on-site sewage disposal system.



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**Requirement:** Permittee shall submit a soils/geotechnical report and OWTS system design satisfactory to the Ventura County Environmental Health Division, Liquid Waste Program (EHD) staff. Permittee shall also obtain the approval of EHD staff to install an OWTS on the property. During the ministerial permitting process, the proposed OWTS will be required to meet all current building code, system design, and system installation/construction standards at the time of submittal.

**Documentation:** Submit soils/geotechnical report, OWTS design, and OWTS application to the EHD for review and approval. Submit all applicable documentation, including permit application, site plan, system design, bedroom and fixture unit equivalent worksheet, etc., to EHD for review and approval.

**Timing:** Prior to the issuance of a building permit pertaining to the project, OWTS design approval and permit to construct the OWTS shall be obtained from EHD.

**Monitoring and Reporting:** To ensure compliance with this condition, EHD staff shall review and verify all relevant documentation, including but not limited to: geotechnical report, system design calculations, building codes, and historic geological data for the area. Once the OWTS design has been evaluated to the satisfaction of EHD staff, the OWTS plans will be approved and EHD staff shall issue a permit to construct, conduct site inspections, and give final approval of the OWTS.

**Ongoing Maintenance:** Once the OWTS has been installed and finalized by EHD, it is the owner's responsibility to properly maintain the system to prevent OWTS failure or an unauthorized sewage release, and from creating a public nuisance, health concern, or impact the environment. The septic tank shall be serviced, as needed, by a septic pumper truck registered and permitted by EHD, and all pumping activities shall be reported to EHD. All septage wastes must be disposed of in an approved manner. EHD staff will also receive and respond to any complaints related to OWTS and/or unauthorized sewage releases.

## **PUBLIC WORKS AGENCY (PWA)**

### **Development and Inspection Services Conditions**

#### **22. Grading Permit**

**Purpose:** In order to ensure the Permittee performs all grading in compliance with Appendix J of the Ventura County Building Code.

**Requirement:** The Permittee shall submit a grading plan showing existing and proposed elevations to the Public Works Agency's Land Development Services Division for review and approval. If a grading permit is required, a civil engineer registered in the State of California must prepare and submit the grading plans, geotechnical and hydrology reports as necessary, to Land Development Services Division for review and approval. The Permittee must post sufficient surety in order to ensure proper completion of the

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proposed grading.

**Documentation:** If a grading permit is required, all deposits, fees, and materials detailed on Public Works Agency Grading Permit Submittal Checklist, must be submitted to Land Development Services Division for review and approval.

**Timing:** All applicable documentation, as specified above, must be submitted for review prior to issuance of a Zoning Clearance for development.

**Monitoring and Reporting:** Public Works Agency staff will review grading plans and reports for compliance with Ventura County codes, ordinances and standards, as well as state and federal laws. Public Works Agency inspectors will monitor the proposed grading to verify that the work is done in compliance with the approved plans and reports.

### **Integrated Waste Management Division (IWMD) Conditions**

#### **23. Construction & Demolition Debris Recycling Plan**

**Purpose:** To ensure the project complies with Division 4, Chapter 7, Article 3 of the Ventura County Ordinance Code (VCOC). Section 4773 aligns with the California Green Building Standards Code which requires the Permittee to divert recyclable construction and demolition (C&D) materials generated by their project (e.g., wood, metal, green waste, soil, concrete, asphalt, paper, cardboard, etc.) from local landfills through recycling, reuse, or salvage.

**Requirement:** The Permittee must submit a comprehensive recycling plan to Ventura County Public Works Agency, Water & Sanitation Department, Integrated Waste Management Division (Water & Sanitation) for any Covered Project as defined in Division 4, Chapter 7, Article 3, Section 4741-24 of the VCOC, meaning all proposed construction and/or demolition projects that require a building permit, except certain exempted projects as defined in Section 4773-4.

**Documentation:** A Recycling Plan must be submitted online at Ventura County Citizen Access. For more information and instructions on how to complete the Recycling Plan, please visit <https://www.vcpublicworks.org/wsd/iwmd/construction-2-2/>.

**Timing:** Upon Building and Safety Division's issuance of a building permit for the project, the Permittee must submit a Recycling Plan online through Ventura County Citizen Access for approval.

**Monitoring & Reporting:** The Permittee is required to keep a copy of their approved Recycling Plan until Building and Safety Division's issuance of final permit.

#### **24. Construction & Demolition Debris Reporting**

**Purpose:** Division 4, Chapter 7, Article 3 of the Ventura County Ordinance Code, Section

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4773 aligns with the California Green Building Standards Code which requires the Permittee to divert recyclable construction and demolition (C&D) materials generated by their project (e.g., wood, metal, green waste, soil, concrete, asphalt, paper, cardboard, etc.) from local landfills through recycling, reuse, or salvage.

**Requirement:** The Permittee must upload recycling receipts to their Recycling Plan to Ventura County Citizen Access. Applicants will receive a Final Approval email once the receipts are reviewed and approved. For more information and instructions on how to complete submit recycling receipts, please visit [vcpublishworks.org/cdrecycling](http://vcpublishworks.org/cdrecycling).

**Documentation:** Recycling receipts and/or documentation of reuse to verify minimum landfill diversion requirements are met.

**Timing:** Required recycling receipts and/or documentation of reuse, must be submitted to Ventura County Citizen Access at the time of Building and Safety Division's issuance of final permit.

**Monitoring & Reporting:** The Permittee is required to keep a copy of their approved Recycling Plan and recycling receipts and/or documentation of reuse until Building and Safety Division's issuance of final permit.

**Transportation Department Conditions**

25. Right of Way dedication

**Purpose:** Right-of-way shall be required when the existing right-of-way adjacent to and along the project/development parcel is less than the right-of-way required by the applicable and current County Road Standard Plate.

**Requirement:** Santa Paula Avenue has an existing right-of-way width of 40 feet. The minimum required right-of-way width is 49 feet per Road Standard Plate B-5 [B]. Right-of-way is required in accordance with the County Road Standards, General Plan 4.2.2; Ordinance 1607 dated November 10, 1964; the "Paveout Policy" dated January 16, 1968; and Code of Ordinances Division 8, Chapter 4 – Urban Area Development.

A. Dedicate an irrevocable 4.5 feet of right-of-way (half of minimum right-of-way required) along the parcel's frontage on Santa Paula Avenue in accordance with Road Standard Plate B-5 [B] The County will accept the right-of-way when right-of-way is needed to make the necessary road improvements.

B. Submit to PWA – Roads and Transportation Department a legal description describing the public right-of-way being dedicated as Exhibit "A" and a right-of-way dedication map as Exhibit "B" prepared by a Registered Licensed Surveyor or a Registered Civil Engineer authorized to practice land surveying.

C. Submit to PWA – Roads and Transportation Department a processing fee for the

**Date of Approval:**

costs incurred in processing the dedication.

**Documentation:** See “A”, “B” and “C” above.

**Timing:** This condition shall be met prior to the issuance of the Building Permit.

**Monitoring and Reporting:** The PWA – Roads and Transportation Department will review the documentation for conformance with the project conditions. The PWA – Real Estate Services will prepare the dedication and file the document with the County Recorder. The PWA – Roads and Transportation Department will notify RMA when the document has been filed.

### **Watershed Protection District (WPD) Conditions**

#### **26. Road Improvements**

**PURPOSE:** Road improvements shall be required when the existing road does not meet the current applicable County Road Standard Plate.

**Requirement:** Road improvements are required in accordance with the County Road Standards, 2040 General Plan CMT-2.18; Ordinance 1607 dated November 10, 1964; the “Paveout Policy” dated January 16, 1968; and Code of Ordinances Division 8, Chapter 4 – Urban Area Development. Santa Paula Avenue has an existing roadway width of 20 feet and 10 feet dirt shoulders.

A. The applicant shall submit road improvement plans for improvements along the parcel’s frontage for 8 feet of roadway widening (half of minimum pavement width required) and 5 feet wide sidewalks in accordance with Road Standard Plate B-5 [B], or as modified by the VCPWA-RT Permit Engineer. Road Improvement plans shall be prepared by a Registered Civil Engineer and submitted to the VCPWA-RT Permits Section for review and approval.

Construct and complete roadway widening and sidewalks along the parcel's frontage in accordance with the approved improvements plans and Road Standard Plate B-5 [B], or as modified by the VCPWA-RT Permit Engineer.

B. In lieu of condition above, the road improvements on Santa Paula Avenue may be postponed for up to 15 years or the length of the Planned Development Permit, whichever is less, or at such time as the County improves the road. The applicant/permittee or property owner shall pay a pro-rata share of the road improvements along the property frontage if the County decides to improve the road within the time specified above.

**Timing:** Prior to the issuance of a Certificate of Occupancy, the applicant or property owner shall provide a notarized acknowledgement of this condition addressed to the RMA Planning Director specifically providing the conditions required in the conditions of

**Date of Approval:**

approval. A copy of a written acknowledgement shall be submitted to the VCPWA-RT Department as proof of compliance.

**Documentation:** The Permittee shall submit a completed and signed SW-1 form (Best Management Practices for Construction Less Than One Acre) to the Public Works Agency - County Stormwater Program (CSP) for review and approval, a template for which can be found at <https://www.onestoppermits.vcrma.org/departments/stormwater-program>.

**Timing:** The above listed item shall be submitted to the CSP for review and approval prior to issuance of a Zoning Clearance for construction.

**Monitoring and Reporting:** The CSP will review the submitted materials for consistency with the Permit. Building permit inspectors will conduct inspections during construction to ensure effective installation of the required BMPs.

**27. Driveway Access**

**Purpose:** Driveway access shall be in accordance with the County Road Standards, the Driveways and Curb Cuts Brochure, and the County's Access Policies.

**Requirement:** The driveway shall be constructed per County Road Standard Plate E-7. The Permittee shall obtain an Encroachment Permit (EP) from the Public Works Agency – Transportation Department. Contact the Transportation Department Permits Division at 654 2055 for the requirements of the EP. The EP form is available on the internet. Improvement plans and supporting documentation may be required by the Encroachments Division.

Refer to the following websites for additional information:

[http://pwaportal.ventura.org/TD/Residents/Streets\\_and\\_Transportation/Reports and Programs/AP\\_RoadStds.pdf](http://pwaportal.ventura.org/TD/Residents/Streets_and_Transportation/Reports_and_Programs/AP_RoadStds.pdf)

[http://pwaportal.ventura.org/TD/Residents/Streets\\_and\\_Transportation/FAQs and Citizen Brochures/Brochure EncroachmentPermits.pdf](http://pwaportal.ventura.org/TD/Residents/Streets_and_Transportation/FAQs_and_Citizen_Brochures/Brochure_EncroachmentPermits.pdf)

**Documentation:** The Public Works Agency – Transportation Department will review the improvement plans and supporting documentation.

**Timing:** This condition shall be met prior to the issuance of the Zoning Clearance for construction.

**Monitoring and Reporting:** The Public Works Agency – Transportation Department Inspectors will monitor construction and verify that the work is performed in accordance with the Encroachment Permit.

**28. Encroachment Permit**

**Date of Approval:**

**Purpose:** The current right-of-way width on Santa Paula Avenue is 40 feet wide along the front of this parcel. An Encroachment Permit is required for any work conducted within the County Road right-of-way, for example but not limited to, driveways, road improvements, utility installation, planter walls, and landscaping and any construction related storage in the County Road right-of-way.

**Requirement:** The applicant/permittee shall contact the Permits Division at (805) 654-2055 for requirements of the permit.

An Encroachment Permit (EP) is required for any work and construction related storage conducted within the County right-of-way. Contact the VCPWA-RT Permits Section, by phone at (805) 654-2055 or by e-mail at [pwa.transpermits@ventura.org](mailto:pwa.transpermits@ventura.org), for the requirements of the EP. The application shall be submitted to the VCPWA-RT.

**Documentation:** The application shall be submitted to the VCPWA-RT. When applying for the permit, the applicant/permittee shall provide sufficient documentation, including, but not limited to, a (1) Resource Management Agency (RMA) Project Number (for discretionary projects), (2) a copy of the Transportation Department Conditions of Approval, (3) a sketch or map showing the work to be accomplished, project, project parcel, Assessor Parcel Number (APN), address and street name. Permit applications without sufficient documentation for processing may not be accepted for processing.

**Timing:** This condition shall be met prior to the issuance of the Building Permit.

**Monitoring and Reporting:** The VCPWA-RT will review the application and supporting documentation. The VCPWA-RT Inspectors will monitor construction and verify that the work is performed, and completed, in accordance with the Encroachment Permit.

#### County Stormwater Program Section

##### 29. Stormwater Development Construction Program

**Purpose:** To ensure compliance with the Los Angeles Regional Water Quality Control Board NPDES Municipal Stormwater Permit, No. CAS004002 (Permit), the proposed project will be subject to the construction requirements for surface water quality and storm water runoff, in accordance with Part 4.F., "Development Construction Program", of the Permit.

**Requirement:** The construction of the proposed project shall meet requirements contained in Part 4.F., "Development Construction Program", of the Permit through the inclusion of an effective combination of construction best management practices (BMPs) during all ground disturbing activities.

**Documentation:** The Permittee shall submit a completed and signed SW-1 form (Best Management Practices for Construction Less Than One Acre) to the Public Works Agency - County Stormwater Program (CSP) for review and approval, a template for

**Date of Approval:**

which can be found at <https://www.onestoppermits.vcrma.org/departments/stormwater-program>.

**Timing:** The above listed item shall be submitted to the CSP for review and approval prior to issuance of a zoning clearance for construction.

**Monitoring and Reporting:** The CSP will review the submitted materials for consistency with the Permit. Building permit inspectors will conduct inspections during construction to ensure effective installation of the required BMPs

### **OTHER VENTURA COUNTY AGENCIES**

#### **Ventura County Air Pollution Control District (APCD) Conditions**

##### **30. Fugitive Dust During Construction**

**Purpose:** To ensure that fugitive dust and particulate matter that may result from site preparation and construction activities are minimized to the greatest extent feasible.

**Requirement:** The Permittee shall comply with the provisions of applicable VCAPCD Rules and Regulations, which include but are not limited to, Rule 50 (Opacity), Rule 51 (Nuisance), and Rule 55 (Fugitive).

**Documentation:** The project applicant shall ensure compliance with the following provisions:

- I. The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive amounts of dust;
- II. Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water should penetrate sufficiently to minimize fugitive dust during grading activities;
- III. All trucks shall cover their loads as required by California Vehicle Code Section 23114.
- IV. Fugitive dust throughout the construction site shall be controlled by the use of a watering truck or equivalent means (except during and immediately after rainfall). Water shall be applied to all unpaved roads, unpaved parking areas or staging areas, and active portions of the construction site. Environmentally-safe dust control agents may be used in lieu of watering.
- V. Graded and/or excavated inactive areas of the construction site shall be monitored at least weekly for dust stabilization.
- VI. Signs shall be posted onsite limiting traffic to 15 miles per hour or less.

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- VII. All clearing, grading, earth moving, or excavation activities shall cease during periods of high winds (i.e., wind speed sufficient to cause fugitive dust to be a nuisance or hazard to adjacent properties). During periods of high winds, all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by onsite activities and operations from being a nuisance or hazard, either offsite or onsite.

**Timing:** Throughout the construction phases of the project.

**Reporting and Monitoring:** Dust control is a standard condition on all Grading Permits issued by Public Works Agency and grading inspector shall perform periodic site inspections throughout the grading period. Monitoring and Enforcement of APCD Rule 55 is also conducted by APCD staff on a complaint-driven basis.

**Ventura County Fire Protection District (VCFPD) Conditions**

**NOTICE IS HEREBY PROVIDED THAT THE SUBJECT PROPERTY (APN 060-0-065-295) IS WITHIN A MODERATE, HIGH, OR VERY HIGH FIRE HAZARD SEVERITY ZONE, AS DESIGNATED BY THE CALIFORNIA STATE FIRE MARSHALL, OR A LOCAL HAZARDOUS FIRE AREA, AS DESIGNATED BY THE VENTURA COUNTY FIRE PROTECTION DISTRICT.**

**31. Address Numbers (Single-Family Homes)**

**Purpose:** To ensure proper premise identification to expedite emergency response.

**Requirement:** The Permittee shall install a minimum of 4 inch (4") address numbers that are a contrasting color to the background and readily visible at night. Brass or gold plated numbers shall not be used. Where structures are setback more than 150 feet (150') from the street, larger numbers will be required so that they are distinguishable from the street. In the event the structure(s) is not visible from the street, the address number(s) shall be posted adjacent to the driveway entrance on an elevated post.

**Documentation:** A stamped copy of an approved addressing plan or a signed copy of the VCFPD Form #610B "Requirements for Construction".

**Timing:** The Permittee shall install approved address numbers before final occupancy.

**Monitoring and Reporting:** A copy of the approved addressing plan and/or signed copy of the VCFPD Form #610B "Requirements for Construction" shall be kept on file with the VCFPD. The VCFPD shall conduct a final inspection to ensure that all structures are addressed according to the approved plans/form.

**32. Fire Flow**

**Purpose:** To ensure that adequate water supply is available to the project for firefighting purposes.



**Date of Approval:**

**Requirement:** The Permittee shall verify that the water purveyor can provide the required volume and duration at the project. The minimum required fire flow shall be determined as specified by the current adopted edition of the Ventura County Fire Code and the applicable Water Manual for the jurisdiction (whichever is more restrictive). Given the present plans and information, the required fire flow is approximately 1,000 gallons per minute at 20 pounds per square inch (psi) for a minimum 2 hour duration.

**Documentation:** A signed copy of the water purveyor's fire flow certification.

**Timing:** Prior to building permit issuance, the Permittee shall provide to the Fire District, verification from the water purveyor that the purveyor can provide the required fire flow. If there is no map recordation, the Permittee shall submit a signed copy of the water purveyor's certification to the VCFPD for approval before the issuance of building permits.

**Monitoring and Reporting:** A copy of the fire flow certification shall be kept on file with the Fire Prevention Bureau.

### 33. Fire Hydrant(s)

**Purpose:** To provide fire hydrants capable of meeting the required fire flow and duration. **Requirement:** The Permittee shall provide fire hydrant(s) per the current adopted edition of the Ventura County Fire Code, Appendix C. Design and installation shall conform to the minimum standard of the Water Works Manual.

**Documentation:** A stamped copy of the approved fire hydrant location plan.

**Timing:** The Permittee shall submit a site plan to the VCFPD for fire hydrant placement and approval before the issuance of building permits. The plans shall indicate all existing fire hydrants located within 500 feet of the project site, the type of hydrant (i.e. wet or dry barrel) and the number and size of outlets. All required fire hydrants shall be installed per the approved plans and in-service before the start of construction.

**Monitoring and Reporting:** A copy of the approved fire hydrant plans shall be kept on file with the VCFPD. The VCFPD shall conduct on-site inspections to ensure that the fire hydrants are installed according to the approved plans. Unless a modification is approved by the VCFPD, the Permittee, and their successors in interest, shall maintain the fire hydrants for the life of the development.

### 34. Fire Sprinklers

**Purpose:** To comply with current California Codes and Ventura County Fire Protection District Ordinance.

**Requirement:** The Permittee shall be responsible to have an automatic fire sprinkler system installed in all structures as required by the VCFPD. The fire sprinkler system

**Date of Approval:**

shall be designed and installed by a properly licensed contractor under California State Law.

**Documentation:** A stamped copy of the approved fire sprinkler plans.

**Timing:** The Permittee shall submit fire sprinkler plans to the VCFPD for approval before the installation of the fire sprinkler system.

**Monitoring and Reporting:** A copy of the approved fire sprinkler plans shall be kept on file with the VCFPD. The VCFPD shall conduct on-site inspections to ensure that the fire sprinkler system is installed according to the approved plans. Unless a modification is approved by the VCFPD, the Permittee, and their successors in interest, shall maintain the fire sprinkler system for the life of the development.

35. Hazardous Fire Area

**Purpose:** To advise the Permittee that the project is located within a Hazardous Fire Area and ensure compliance with California Building and Fire Codes.

**Requirement:** The Permittee shall construct all structures to meet hazardous fire area building code requirements.

**Documentation:** A stamped copy of the approved building plans to be retained by the Building Department.

**Timing:** The Permittee shall submit building plans to the Building Department for approval before the issuance of building permits.

**Monitoring and Reporting:** The VCFPD shall conduct a final inspection to ensure that the structure is constructed according to the approved hazardous fire area building code requirements. Unless a modification is approved by the VCFPD, the Permittee, and their successors in interest, shall maintain the approved construction for the life of the structure.

36. Hazard Abatement

**Purpose:** To ensure compliance with Ventura County Fire Protection District Ordinance.

**Requirement:** The Permittee shall have all grass or brush adjacent to structure's footprint cleared for a distance of 100 feet or to the property line if less than 100 feet. All grass and brush shall be removed a distance of 10 feet on each side of all access road(s)/driveway(s) within the project. The Fire District may require the entire parcel to be cleared. Note: A Notice to Abate Fire Hazard may be recorded against the parcel.

**Documentation:** The Permittee shall obtain VCFD Form #610B "Requirements for Construction" Construction" or the "Notice to Abate" issued under the Fire District's Fire Hazard Reduction Program.

**Date of Approval:**

**Timing:** The Permittee shall remove all grass and brush as outlined by the Ventura County Fire Protection District's Fire Hazard Reduction Program guidelines before the start of construction on any structure.

**Monitoring and Reporting:** The VCFPD shall conduct on-site inspections to ensure compliance with this condition.

37. Fuel Modification Plans

**Purpose:** To reduce hazardous fuel loads surrounding a project or developments to provide wildfire protection.

**Requirement:** The Permittee shall prepare a Fuel Modification Plan (FMP).

**Documentation:** A stamped copy of the approved Fuel Modification Plan (FMP).

**Timing:** The Permittee shall submit a Fuel Modification Plan (FMP) to the VCFPD for approval before the start of construction.

**Monitoring and Reporting:** A copy of the approved Fuel Modification Plan shall be kept on file with the VCFPD. The VCFPD shall conduct a final inspection to ensure the Fuel Modification Zones are installed according to the approved FMP. The VCFPD shall conduct annual inspections through its Fire Hazard Reduction Program to ensure the Fuel Modification Zones are maintained according to the FMP. Unless a modification is approved by the VCFPD, the Permittee, and their successors in interest, shall maintain the approved Fuel Modification Zones for the life of the development.

38. Fire Department Clearance

**Purpose:** To provide the Permittee a list of all applicable fire department requirements for their project.

**Requirement:** The Permittee shall obtain VCFD Form #610B "Requirements for Construction" for any new structures or additions to existing structures before issuance of building permits.

**Documentation:** A signed copy of the Ventura County Fire Protection District's Form #610B "Requirements for Construction."

**Timing:** The Permittee shall submit VCFPD Form #610B Application to the VCFPD for approval before issuance of building permits.

**Monitoring and Reporting:** A copy of the completed VCFPD Form #610B shall be kept on file with the VCFPD. The VCFPD will conduct a final on-site inspection of the project to ensure compliance with all conditions and applicable codes / ordinances.

# NoorzayGeo

August 4, 2023

Ms. Jennifer Vergel  
320 Lakeview Court  
Oxnard, California 93036

Project No. 23028

Subject: Response to Ventura County Public Works Review  
SR23-0044  
Vergel (Santa Paula Avenue, APN 060-0-062-325)  
Dated June 21, 2023

Reference: Preliminary Geotechnical Investigation  
And Septic Percolation Testing  
Proposed Single Family Residence  
APN No. 060-0-062-325  
Santa Paula Avenue, La Conchita  
Ventura County, California  
NGS Project No. 23028  
Dated May 19, 2023

Dear Ms. Vergel:

This letter provides our response to Ventura County Public Works Review, SR23-0044, for the Vergel Residence to be located at APN 060-0-062-325, dated June 21, 2023. The proposed development includes a new single-family residence.

The review comments are provided below followed by our response.

County of Ventura  
Planning Director Hearing  
Date of Hearing  
PL24-0085  
Exhibit 6: Noorzay Geotechnical  
Services Geotechnical Report;  
Dated August 4, 2017

1) A Grading Permit is required unless sufficient information is submitted to Public Works Agency showing the project is exempt under Section J103.2 of the Ventura County Building Code. Increasing the pad height will require a regular or engineered grading permit. Information is available on the following website: <https://www.vcpublicworks.org/es/lds-grading/>

**Response:**

The development of the grading plan and obtaining a grading permit is left to the project civil engineer and does not fall under the purview of the project soils engineer or geologist.

2) The County General Plan, Hazards and Safety Element, HAZ-4.1 (paraphrased) - prohibits new structures for human occupancy in Earthquake Fault Zones unless a geologic investigation is performed to delineate any hazards and provide safeguard measures. Please address.

**Response:**

A new Site Plan, (Enclosure A-2) has been drawn which shows a recently measured fault zone location, comparing the best measurement from the 1991 Earthquake Fault Zone map and the Ventura County Assessor map of the neighborhood surrounding the subject site. The house footprint clearly lies outside the study zone.

In addition, while the original house footprint was placed unchanged onto the property allowing minimum setbacks to the property lines, it was noted that these were not proper setbacks for the County of Ventura. This has been corrected by establishing a house footprint that will lie completely within allowable setbacks

3) Please provide a Zoning Clearance for the project.

**Response:**

A Zoning Clearance does not fall under the purview of the project soils engineer or geologist. This is left for the project manager/ architect to obtain.

4) The report indicates the pad grade should be raised two feet and that a 4-foot tall debris/impact wall be designed and constructed on the northeast side of the property. Please describe what the impact wall effects will be on neighboring properties should the wall be hit with debris flow material.

**Response:**

The impact wall is a replacement of an existing block wall located along the northeast (uphill) side of the site. The intent is to raise the subject property pad grade and design and construct a wall that can reduce the damage to the subject property should a debris flow event occur. It appears this a common practice within the La Conchita area. The debris flow potential for the subject site is expected to be less than 2 feet in thickness (WLA, 2009). It is our opinion that the property upslope of the subject property will have minimal increased damage due to the development of the impact wall as the debris flow would originate uphill from the subject property regardless. It is our opinion that the property downslope of the subject property will remain unaffected. Potential debris flows should be directed to Santa Paula Avenue to the southeast and the alley to the northwest.

Additional analysis, including a quantitative assessment of debris flow volumes, grading plans, and drainage plans are referred to the project civil engineer.

5) How confident is the identification of the bedrock unit at depth as Sisquoc Formation. Concern is that other studies (included in the William Lettis Report, dated August 28, 2009) encountered Pico Formation beneath the community. The William Lettis report, page 21, indicates the Sisquoc Formation is bounded by strands of the Red Mountain Fault.

**Response:**

The bedrock identification of Sisquoc formation is low confidence. Based on reevaluation of the material descriptions it is likely to be Pico formation rather than Sisquoc.

6) Is there a potential for secondary effects (such as lateral spreading) as a result of liquefaction? Please address.

**Response:**

Three Cone Penetration Tests (CPTs) were performed in order to more accurately analyze the site liquefaction and lateral spread potential of the site.

The most recent development for quantitative descriptions of liquefaction-induced surface damage, called "liquefaction vulnerability", was made by Tonlin & Taylor (2013) after the Christchurch earthquakes occurred between 2010 and 2011 and was based on field observations and analyses of approximately 7,500 CPT investigations. A new index, the liquefaction severity number (LSN), was proposed and defined as:

$$LSN = \int \frac{\varepsilon_v}{z} dz$$

where  $\varepsilon_v$  is the calculated volumetric densification strain in the subject layer from Zhang et al. (2002) and  $z$  is the depth to the layer of interest in meters below the ground surface. The typical behaviors of sites with a given LSN are summarized in following table.

LSN Ranges and Observed Land Effects	
LSN Range	Predominant Performance
0-10	Little to no expression of liquefaction, minor effects
10-20	Minor expression of liquefaction, some sand boils
20-30	Moderate expression of liquefaction, with sand boils and some structural damage
30-40	Moderate to severe expression of liquefaction, settlement can cause structural damage

LSN Ranges and Observed Land Effects	
LSN Range	Predominant Performance
40-50	Major expression of liquefaction, undulations, and damage to ground surface, severe total and differential settlement of structures
>50	Severe damage, extensive evidence of liquefaction at surface, severe total and differential settlements affecting structures, damage to services

The LSN index was calculated for the three CPT soil profiles using the program GeoSuite version 2.4.2 by GeoAdvanced. The results indicate that the site will exhibit little to no expression of liquefaction per the LSN index (LSN less than 10). Little to no expression of liquefaction means that minor effects of liquefaction will be observed per Tonlin & Taylor (2013). The calculations are performed internally using the formula presented above in GeoSuite version 2.4.2 and are provided in the output pages in Appendix B.

The Idriss and Boulanger (2010-16) and Pradel (1998) methods were used to evaluate liquefaction-induced and dry sand settlements. As input into our calculations a deaggregated modal moment magnitude of 6.98 and an acceleration of 1.137g were utilized in our analysis. A historic groundwater table of 22 feet below the existing ground surface was used.

The results indicate that a maximum seismic settlement of approximately 2.4 inches can be anticipated. Based on the relative uniformity of soil materials encountered, differential seismic settlement is anticipated to be approximately one-half of the total seismic settlement over 40 feet. The settlement calculated is accumulated from soil layers to a maximum depth of 50 feet below the existing ground surface and the results of our analyses are provided in Appendix B.

Based on the results of our analyses using CPTs, we anticipate a maximum total settlement (static and seismic) of approximately 2.9 inches. Differential settlement between similarly loaded adjacent footings is expected to be approximately half the total settlement over 40 feet. Static settlement is expected to occur during construction or shortly after.



Lateral spread is the most pervasive type of liquefaction-induced ground failure. Lateral spreads can occur on gently sloping ground or where nearby drainage or stream channels can lead to static shear stress biases on essentially horizontal ground. During lateral spread, blocks of mostly intact, surficial earth material displace downslope or towards a free face along a shear zone that has formed within the liquefied sediment. The resulting ground deformation typically has extensional fissures or a graben at the head of the failure, shear deformations along the side margins, and compression or buckling of the earth material at the toe. The amount of lateral displacement typically ranges from a few centimeters to several meters and can cause considerable damage to engineered structures and lifelines.

Past earthquakes indicated that significant damage to structures occurred even with less than one foot of lateral spread. Consequently, the determination of lateral spread potential, an assessment of its likely magnitude, and the development of appropriate mitigation, need to be addressed as part of the hazard assessment process.

The lateral spread potential of the subject site was evaluated in general accordance with procedures proposed by Zhang et al. (2004). A slope of 5 percent was used for the existing gentle sloping conditions.

The results of our lateral spread evaluation indicate that the estimated lateral ground displacement for the subject site is approximately 11 to 15 inches (see Appendix B) which is less than the upper limit for shallow foundations as indicated on Table 12.13-2 of the ASCE 7-16. The building may be supported on shallow foundations.

Due to the liquefaction potential of the subject site and the potential for differential settlement of as much as 1.5 inches, foundations for the proposed structure should be stiffened and designed to consider the liquefaction potential and prevent catastrophic collapse due to the loss of foundation support that might result due to liquefaction of the site during the design earthquake event. At a minimum, the stiffening of the foundation system, which may include grade beams, should be based

upon criteria limited to fulfilling life safety concepts. Additionally, using the above criteria, the foundations should be designed by the Structural Engineer in accordance with the current codes at the time of construction.

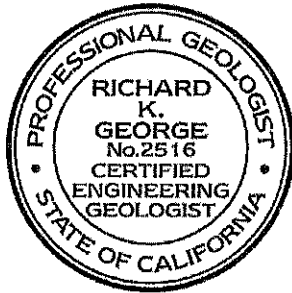
7) Please provide the calculation and results for the LPI and LSN analysis.

**Response:**

The formulas used to calculate the LPI and LSN are provided in the referenced report. They are calculated internally in GeoSuite version 2.4.2. The results are provided in the Liquefaction Potential analyses provided in Appendix D of the referenced report and Appendix B of this response letter. The LPI is not calculated when using CPTs.

**CLOSURE**

We appreciate this opportunity to be of service and trust this report provides the information desired at this time. Should questions arise, please do not hesitate to contact this office.



Respectfully submitted,  
Noorzay Geotechnical Services, Inc.

A handwritten signature in black ink, appearing to read "Richard George".

Richard George, C.E.G. 2516, Exp. 09/30/2023  
Consulting Geologist



A handwritten signature in black ink, appearing to read "Maihan Noorzay".

Maihan Noorzay, G.E. 3085, Exp. 06/30/2025  
Principal Engineer

Enclosures: Ventura County Public Works Review, SR23-0044, Vergel (Santa Paula Avenue,  
APN 060-0-062-325), Dated June 21, 2023  
Appendix A – Maps  
Appendix B – Geotechnical Calculations

Central Services  
Joan Araujo, Director

Engineering Services  
Brian D'Anna, Acting Director

Roads & Transportation  
Anitha Balan, Director

Water & Sanitation  
Joseph Pope, Director

Watershed Protection  
Glenn Shephard, Director

June 21, 2023

NoorzayGeo  
16531 Orangehaven Lane  
Riverside, CA 92503

Subject: Review of Soil Report Submittal.

Reference: **SR23-0044**  
**Vergel** [Santa Paula Avenue, APN 060-0-062-325]

1. NoorzayGeo, May 19, 2023, Preliminary Geotechnical Investigation and Septic Percolation testing, Proposed Single Family Residence, APN NO. 060-0-062-325, Santa Paula Avenue, La Conchita, Ventura County, California. Prepared for Jennifer Vergel, NGS Project No. 23028.

A review of the referenced reports has been completed and additional information is necessary to approve the project. The following comments are provided:

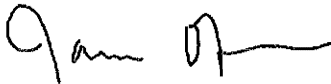
1. A Grading Permit is required unless sufficient information is submitted to Public Works Agency showing the project is exempt under Section J103.2 of the Ventura County Building Code. Increasing the pad height will require a regular or engineered grading permit. Information is available on the following website:  
<https://www.vcpublicworks.org/es/lds-grading/>
2. The County General Plan, Hazards and Safety Element, HAZ-4.1 (*paraphrased*) - prohibits new structures for human occupancy in Earthquake Fault Zones unless a geologic investigation is performed to delineate any hazards and provide safeguard measures. Please address.
3. Please provide a Zoning Clearance for the project.
4. The report indicates the pad grade should be raised two feet and that a 4-foot tall debris/impact wall be designed and constructed on the northeast side of the property. Please describe what the impact wall effects will be on neighboring properties should the wall be hit with debris flow material.



5. How confident is the identification of the bedrock unit at depth as Sisquoc Formation. Concern is that other studies (included in the William Lettis Report, dated August 28, 2009) encountered Pico Formation beneath the community. The William Lettis report, page 21, indicates the Sisquoc Formation is bounded by strands of the Red Mountain Fault.
6. Is there a potential for secondary effects (such as lateral spreading) as a result of liquefaction? Please address.
7. Please provide the calculation and results for the LPI and LSN analysis.

If you have any questions relating to the subject matter, please contact Jim O'Tousa at (805) 654 - 2034.

Sincerely,



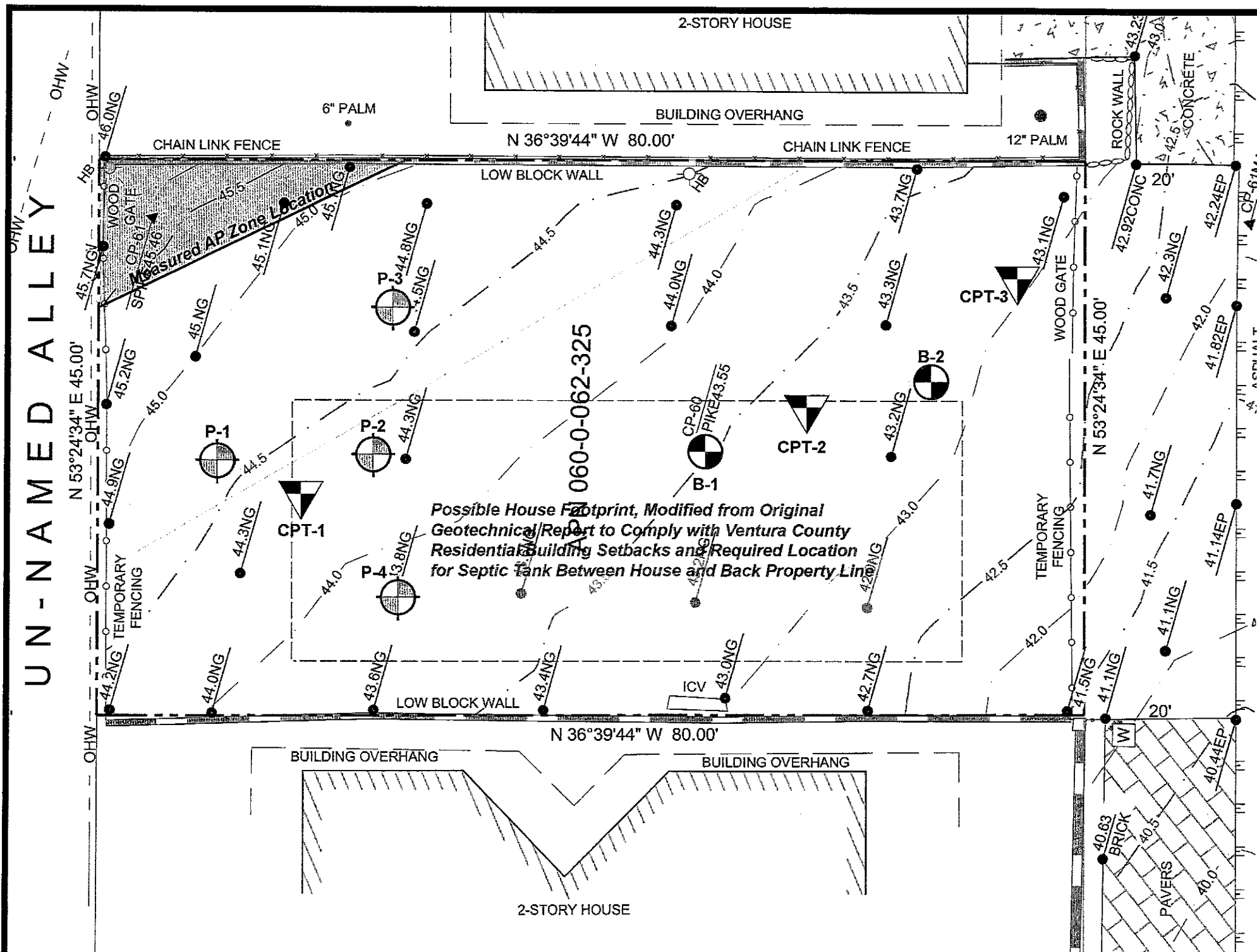
James O'Tousa, CEG  
Division Manager

c: Representative/Owner



# Appendix A

## Maps

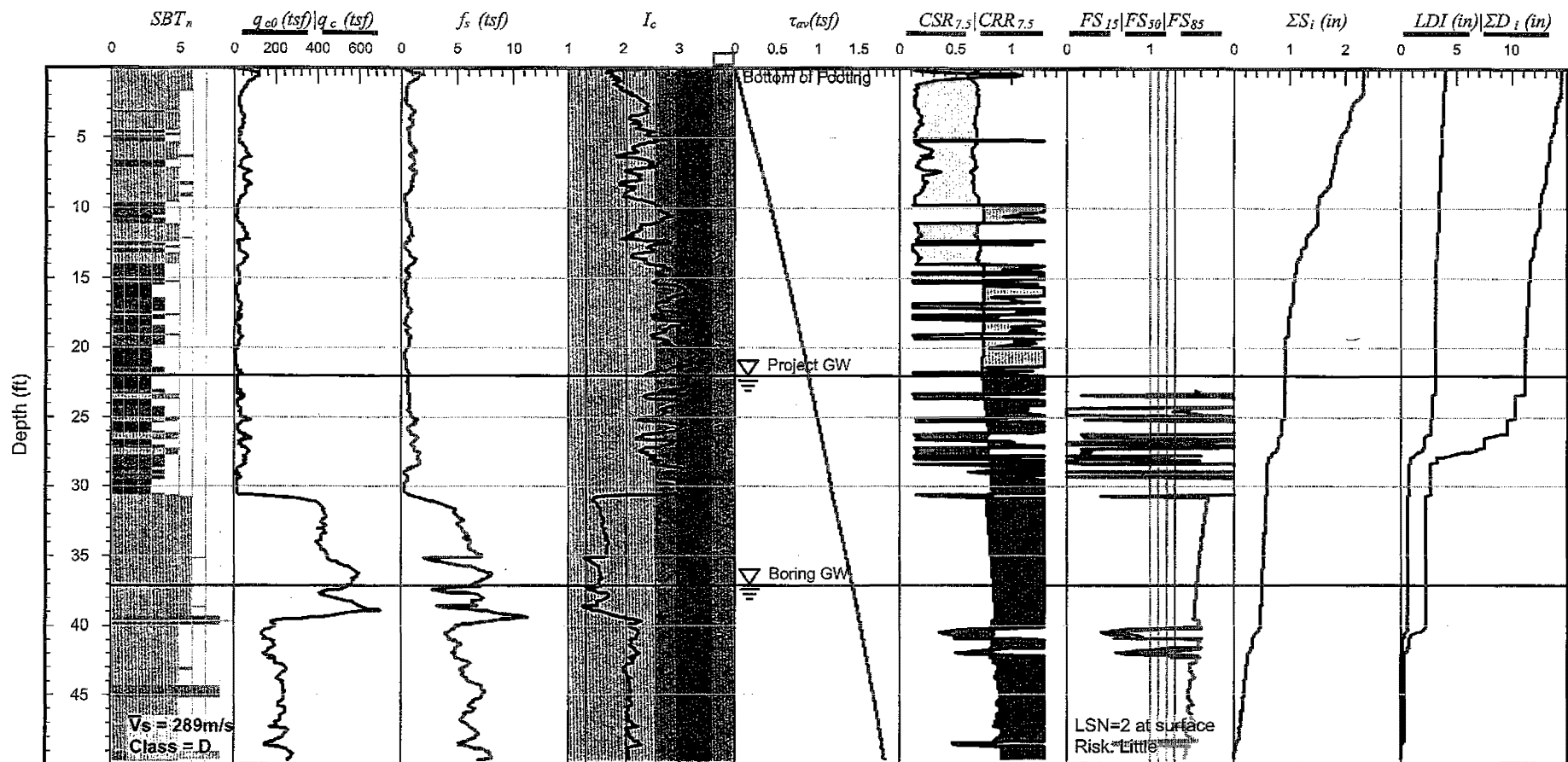




## Appendix B

### Geotechnical Calculations

C:\Users\brnson\OneDrive\Work\Projects\2023\23028 - APN 0600062325 - La Conchita\GeoSuite\_CalGeoSuite\_23028\_CPT11.dwg



- Sensitive fine grained
- Organic soils - peats
- Clay to silty clay
- Silty clay to clayey silt
- Sandy silt to silty sand
- Silty sand to clean sand
- Dense sand to gravelly sand
- Clayey sand to very stiff sand
- Very stiff fine grained \*
- \* Overconsolidated or cemented

Earthquake & Groundwater Information:  
Magnitude = 6.98  
Max. Acceleration = 1.137 g  
Project GW = 22 ft  
Maximum Settlement = 2.33 in  
Settl. at Bottom of Footing = 2.33 in

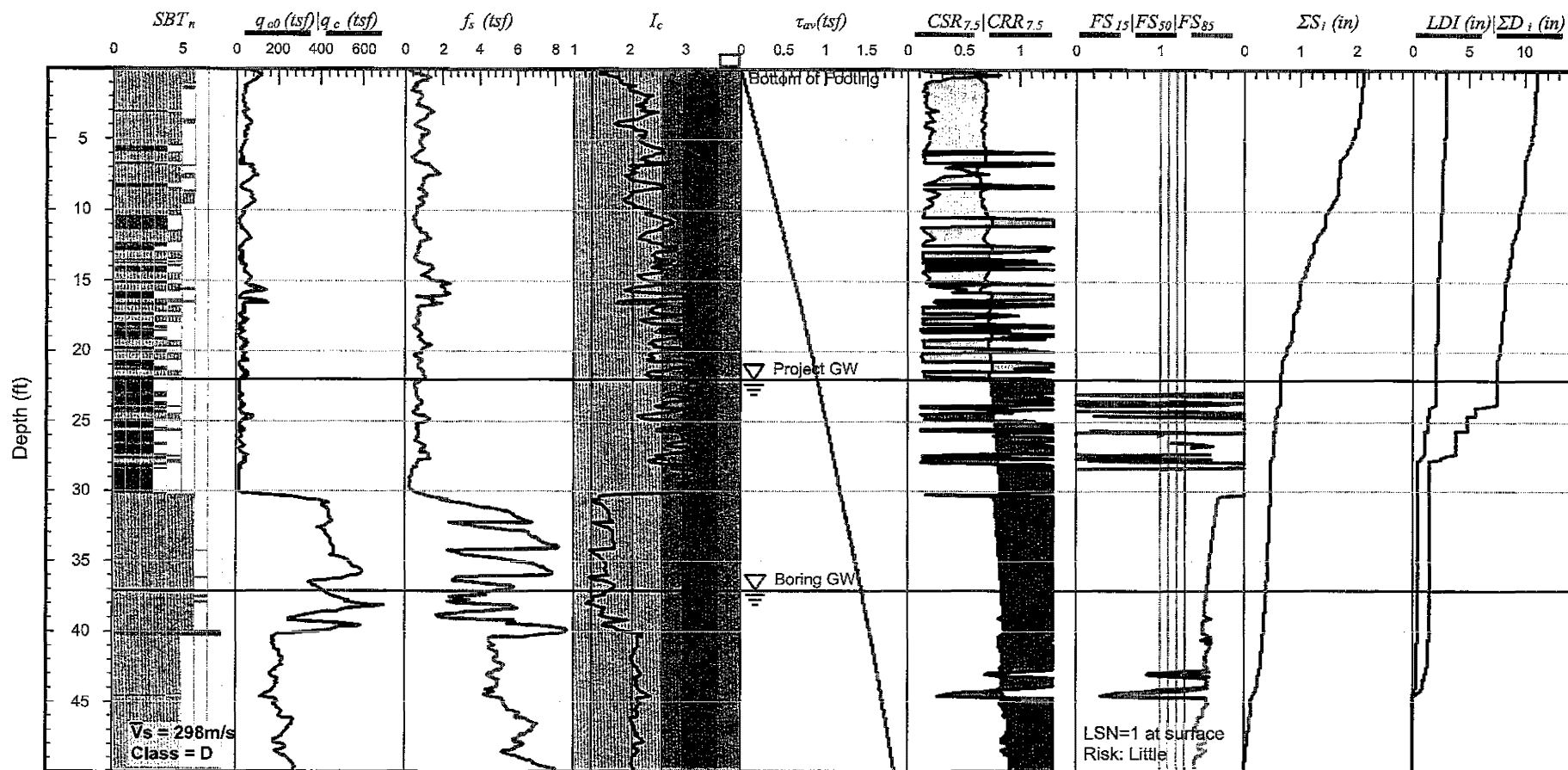
Liquefaction: Boulanger & Idriss (2010-16)  
Settl.: [dry] Pradel (1998); [sat] Idriss & Boulanger (2008)  
Lateral spreading: Zhang et al (2004)  
M correction: [Sand; Clay] Boulanger & Idriss (2004)  
 $\sigma_v$  correction: Idriss & Boulanger (2008)  
Stress reduction: Idriss & Boulanger (2008)

### Liquefaction Potential - CPT Data

# NoorzayGeo

Project:	Proposed Single Family Residence				
Location:	APN 0600062325, Santa Paula Avenue, La Conchita, California				
Job Number:	23028	CPT No.:	CPT-1	Enclosure:	B-1

C:\Users\user\OneDrive\GeoSuite\Projects\23028 - APN 0600062325, La Conchita\GeoSuite\Calc\GeoSuite\_23028\_CPT-2.cav



- Sensitive fine grained
- Organic soils - peats
- Clay to silty clay
- Silty clay to clayey silt
- Sandy silt to silty sand
- Silty sand to clean sand
- Dense sand to gravelly sand
- Clayey sand to very stiff sand
- Very stiff fine grained \*
- \* Overconsolidated or cemented

Earthquake & Groundwater Information:  
Magnitude = 6.98  
Max. Acceleration = 1.137 g  
Project GW = 22 ft  
Maximum Settlement = 2.11 in  
Settl. at Bottom of Footing = 2.11 in

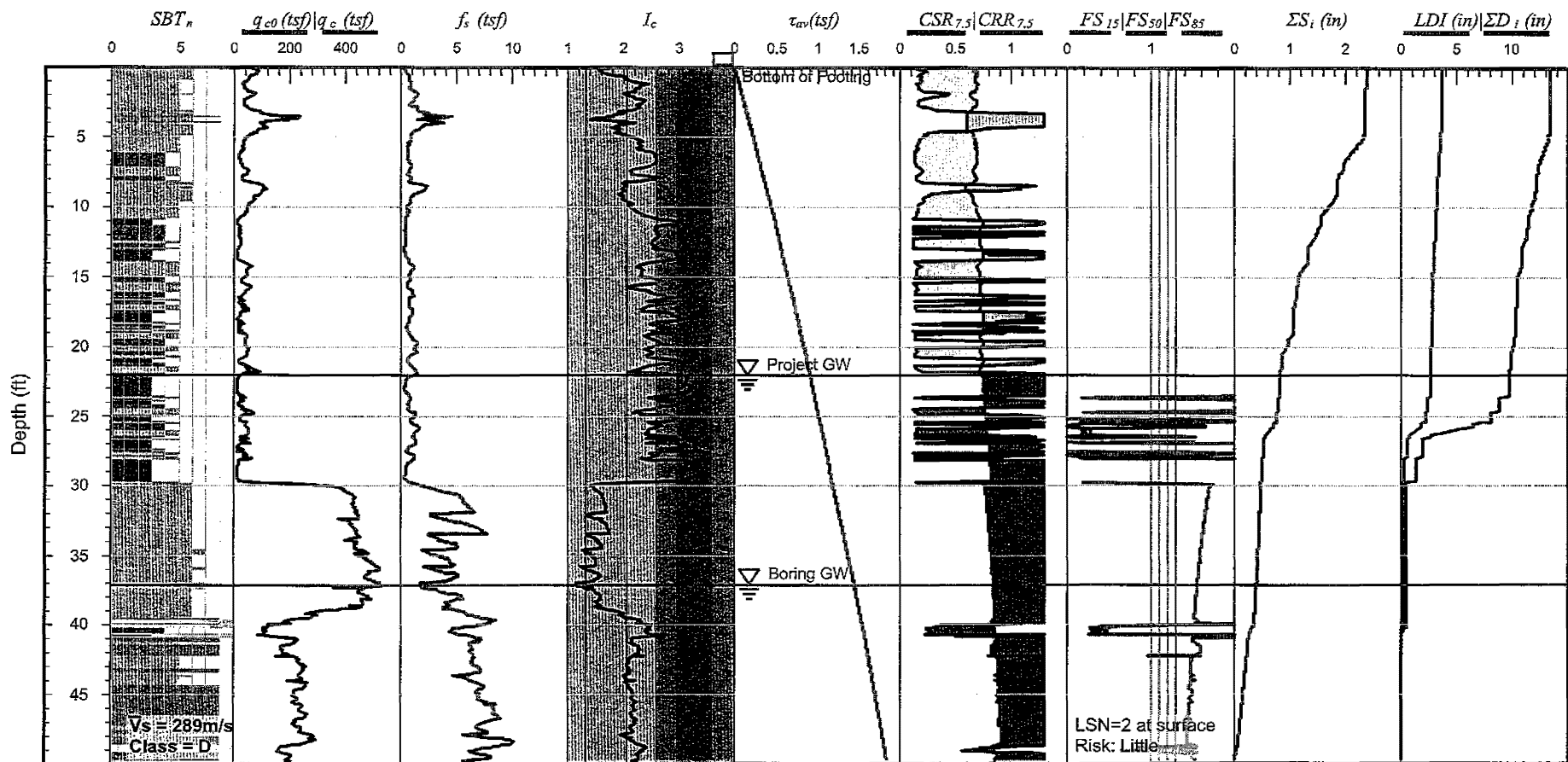
Liquefaction: Boulanger & Idriss (2010-16)  
Settl.: [dry] Pradel (1998); [sat] Idriss & Boulanger (2008)  
Lateral spreading: Zhang et al (2004)  
M correction: [Sand; Clay] Boulanger & Idriss (2004)  
ov correction: Idriss & Boulanger (2008)  
Stress reduction: Idriss & Boulanger (2008)

### Liquefaction Potential - CPT Data

# NoorzayGeo

Project:	Proposed Single Family Residence				
Location:	APN 0600062325, Santa Paula Avenue, La Conchita, California				
Job Number:	23028	CPT No.:	CPT-2	Enclosure:	B-2

C:\Users\mcor\OneDrive\Geo\Projects\0600062325\_La Conchita\GeoSuite\_Calico\GeoSuite\_23028\_CPT-3.crv



- Sensitive fine grained
- Organic soils - peats
- Clay to silty clay
- Silty clay to clayey silt
- Sandy silt to silty sand
- Silty sand to clean sand
- Dense sand to gravelly sand
- Clayey sand to very stiff sand
- Very stiff fine grained \*
- \* Overconsolidated or cemented

Earthquake & Groundwater Information:  
Magnitude = 6.98  
Max. Acceleration = 1.137 g  
Project GW = 22 ft  
Maximum Settlement = 2.37 in  
Settl. at Bottom of Footing = 2.37 in

Liquefaction: Boulanger & Idriss (2010-16)  
Settl.: [dry] Pradel (1998); [sat] Idriss & Boulanger (2008)  
Lateral spreading: Zhang et al (2004)  
M correction: [Sand; Clay] Boulanger & Idriss (2004)  
ov correction: Idriss & Boulanger (2008)  
Stress reduction: Idriss & Boulanger (2008)

### Liquefaction Potential - CPT Data

Project:	Proposed Single Family Residence				
Location:	APN 0600062325, Santa Paula Avenue, La Conchita, California				
Job Number:	23028	CPT No.:	CPT-3	Enclosure:	B-3

# NoorzayGeo

# NoorzayGeo

May 19, 2023

Ms. Jennifer Vergel  
320 Lakeview Court  
Oxnard, California 93036

Project No. 23028

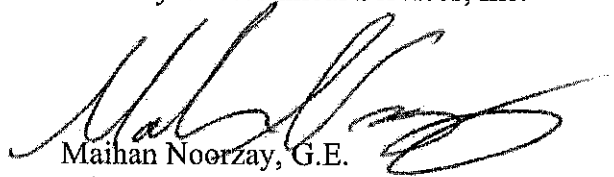
Dear Ms. Vergel:

Attached herewith is the Preliminary Geotechnical Investigation and Septic Percolation Testing report prepared for the proposed single-family residence to be located at APN No. 060-0-06-325 on Santa Paula Avenue, La Conchita, in Ventura County, California.

We appreciate this opportunity to provide geotechnical services for this project. If you have questions or comments concerning this report, please contact us at your convenience.

Respectfully submitted,

Noorzay Geotechnical Services, Inc.



Maihan Noorzay, G.E.  
Principal Engineer

Distribution: Ms. Jennifer Vergel (PDF)

**PRELIMINARY GEOTECHNICAL INVESTIGATION  
AND SEPTIC PERCOLATION TESTING  
PROPOSED SINGLE-FAMILY RESIDENCE  
APN NO. 060-0-062-325  
SANTA PAULA AVENUE, LA CONCHITA  
VENTURA COUNTY, CALIFORNIA  
PREPARED FOR  
MS. JENNIFER VERGEL  
NGS PROJECT NO. 23028**

## **INTRODUCTION**

During April and May 2023, a preliminary geotechnical investigation and septic percolation testing were performed by this firm for the proposed single-family residence to be located at APN No. 060-0-062-325 on Santa Paula Avenue in the La Conchita Community in Ventura County, California. The purposes of this investigation were to explore and evaluate the geotechnical engineering conditions at the subject site and to provide appropriate geotechnical engineering recommendations for design and construction of the proposed single-family residence.

The location of the site is depicted on the Index Map (Enclosure A-1). A topographic survey by Latitude Surveying, dated July 29, 2022 was used as base map for our Site Plan (Enclosure A-2).

The results of our investigation, together with our conclusions and recommendations, are presented in this report.

## **SCOPE OF SERVICES**

The scope of services provided during this preliminary geotechnical investigation included the following:

- A field reconnaissance of the site and surrounding area
- Logging and sampling of exploratory borings for testing and evaluation
- Percolation testing for septic design purposes
- Laboratory testing on selected samples
- Evaluation of the geotechnical engineering/geologic data to develop site-specific recommendations for site grading and foundation design
- Preparation of this report summarizing our findings, professional opinions, and recommendations for the geotechnical aspects of project design and construction



### **PROJECT CONSIDERATIONS**

Information furnished to this office indicates that a new single-family residence will be developed at the subject site on Santa Paula Avenue in the La Conchita Community in Ventura County, California. We anticipate that the structure will consist of wood framing supported on continuous or spread footings and a slab-on-grade and will be no more than two stories in height. Percolation testing was requested and performed for on-site wastewater disposal by means of leach lines.

Preliminary grading and foundation plans were not provided for review during preparation of this report. The final project grading and foundation plans should be reviewed by the geotechnical engineer.

### **SITE DESCRIPTION**

The assessor's parcel number, supplied by the Ventura County Assessor, is APN 060-0-062-325. The site is located on Santa Paula Avenue about 250 feet north of West Surfside Street in the La Conchita community in Ventura County, California. The subject property is a rectangular-shaped parcel approximately 3,600 square feet in size. The project site currently is occupied by a small greenhouse structure, planters, and a parked recreational trailer. The site is bounded by Santa Paula Avenue to the southeast, an alleyway to the northwest and by residential properties on the remaining sides. The subject property is flat and nearly level, with a shallow, downhill gradient of less than three percent toward the south.

### **FIELD INVESTIGATION**

Soil conditions underlying the subject site were explored by means of two exploratory borings and four percolation test holes excavated to a maximum depth of 51.5 feet below existing ground surface (bgs) with a truck-mounted GT-16 drill rig equipped for soil sampling. The approximate locations of our exploratory borings are indicated on Enclosure A-2.

Continuous logs of the subsurface conditions, as encountered within the exploratory borings, were recorded at the time of drilling by an engineer from this firm. Both a standard penetration test (SPT) sampler (2-inch outer diameter and 1-3/8-inch inner diameter) and a ring sampler (3-inch outer diameter and 2-1/2-inch inner diameter) were utilized in our investigation. The penetration resistance was recorded on the boring logs as the number of hammer blows used to advance the sampler in 6-inch increments (or less if noted). The samplers were driven with an automatic hammer that drops a 140-pound weight 30 inches for each blow. After the required seating, samplers are advanced up to 18 inches, providing up to three sets of blow counts at each sampling interval. The recorded blows are raw numbers without any corrections for hammer type (automatic vs. manual cathead) or sampler size (ring sampler vs. standard penetration test sampler). Both relatively undisturbed and bulk samples of typical soil types obtained were returned to the laboratory in sealed containers for testing and evaluation.

The exploratory boring logs and in-place density data are presented in Appendix B. The stratification lines presented on the boring logs represent approximate boundaries between soil types, which may include gradual transitions.

The exploratory borings were backfilled with excavated soils using reasonable effort to restore the areas to their initial condition prior to leaving the site, but it was not compacted to a relative compaction of 90 percent or greater. In an area as small and deep as a boring, consolidation and subsidence of soil backfill may occur over time causing a depression. The client is advised to observe explored areas occasionally and, when needed, backfill noted depressions.

### **LABORATORY INVESTIGATION**

Included in our laboratory testing program were in-situ moisture content and dry density tests on relatively undisturbed ring samples. The results are included on the boring logs. An optimum moisture- maximum density relationship was established in order to evaluate the relative compaction of the subsurface soils during grading. Remolded direct shear testing was performed to provide shear

strength parameters for bearing capacity and earth pressure evaluations. An expansion index test was performed to evaluate the expansion potential of the subsurface soils. No. 200 washes were performed for classification purposes. A selected sample of material was delivered to Project X Corrosion Engineering and tested for preliminary corrosivity analysis.

Laboratory test results appear in Appendix C. Soil classifications provided in our geotechnical investigation are in accordance with the Unified Soil Classification System (USCS).

### **REGIONAL GEOLOGIC SETTING**

The Ventura area lies south of the San Rafael - Topatopa Mountains, where steeply descending hills form the rugged coastline. The San Rafael – Topatopa Mountains, Santa Monica Mountains, Simi Hills, and other ranges to the west and east are portions of the Transverse Ranges Province, a nearly 300-mile-long belt of folded, faulted, and uplifted rocks of diverse lithologies. The east-west orientation of the Transverse Ranges markedly contrasts with the generally northwest-trending, structural grain of surrounding areas of California. The presence and orientation of these ranges are generally attributed to north-south directed compression and crustal shortening related to complications within the geometry of the San Andreas transform fault system. These complications are reflected in the relationships between the complex system of faults that control the shapes and locations of most topographic features within the western Transverse ranges.

Basement rocks in the western Transverse ranges are dominated by folded and faulted, Mesozoic and Tertiary, marine sedimentary and metasedimentary rocks which are underlain in many areas by Mesozoic igneous rocks. Paleozoic marine sedimentary rocks, common to the Coastal Ranges, are found in the far western portion of the Transverse Ranges.

The San Andreas fault zone passes along the north edge of the Western Transverse Ranges before it bends northward toward the San Francisco Bay area. Extending over 650 miles from the Gulf of California to the vicinity of Cape Mendocino in northwestern California, the San Andreas fault zone

often comprises a strip up to several miles wide of subparallel, branching, and anastomosing fault strands.

Locally, the subject site is underlain by paralic deposits of the Sea Cliff Terrace, which are unconsolidated, Quaternary sedimentary materials. The paralic deposits are underlain by the Sissuoc Shale, which is a well-consolidated, marine sequence of sedimentary rock that includes predominantly claystone, mudstone, and shale with lesser amounts of conglomerate. Some diatomites in this formation have unusual purity and are mined for diatomaceous earth. The general geology in the area surrounding the subject site is shown on the Regional Geology Map and legend (Enclosures A-4, A-4a).

### **FAULTING AND GROUND RUPTURE**

There are no known active faults on the subject site (Enclosure A-5). The northern one-third of the site lies within an Alquist-Priolo Special Studies zone (Enclosure A-5a); however, the project is exempt from a fault investigation per Special Publication 117A. There is room in the southern two-thirds of the property for the proposed structure (Enclosure A-2).

As with most of southern California, the subject site is situated in an area of active and potentially active faults. Active faults present several potential risks to structures, the most common of which are strong ground shaking, dynamic densification, liquefaction, mass wasting, and surface rupture at the fault plane. The following four factors are the principal determinants of seismic risk at a given location:

- Distance to seismogenically capable faults.
- The maximum or "characteristic" magnitude earthquake for a capable fault.
- Seismic recurrence interval, in turn related to tectonic slip rates.
- Nature of earth materials underlying the site.

Based upon proximity to regionally significant, active faults, ground shaking is considered to be the primary hazard most likely to affect the site. Characteristics of the major active fault zones selected for inclusion in analysis of strong ground shaking are listed in the following table. Numerous significant fault zones are located at distances exceeding 40 kilometers from the site, but greater distances, lower slip rates, and/or lesser maximum magnitudes indicate much lower risk to the site from the latter fault zones than those listed below.

<b>Fault Zone<sup>1</sup></b>	<b>Distance from Site (km)</b>	<b>Fault Length (km)<sup>1</sup></b>	<b>Slip Rate (mm/yr)<sup>1</sup></b>	<b>Reference Earthquake M<sub>(Max)</sub><sup>1</sup></b>	<b>Fault Type<sup>1</sup></b>
Red Mountain (r, 45 NE)	0.15	39±4	2.0±1.0	7.0	B
Mission Ridge (Arroyo Parida) (r, 60N)	5.2	69±7	0.4±0.2	7.2	B
Ventura-Pitas Point (r-ll-o, 75 N)	7.1	40±4	1.0±0.5	6.9	B
Santa Ynez (ll-ss)	13	65±7	2.0±1.0	7.1	B
Oak Ridge (r, 28 N)	14	37±4	1.0±1.0	6.6	B
San Cayetano (r, 45 N)	28	42±4	6.0±3.0	7.0	B
Simi-Santa Rosa (ll-r-o, 60 N)	37	40±4	1.0±0.5	7.0	B
San Andreas (Mojave Segment) (rl-ss)	58	103±10	30.0±7.0	7.4	A
<ol style="list-style-type: none"> <li>1. California Department of Conservation, Division of Mines and Geology, 1996 (Appendix A - Revised 2002), <i>Probabilistic Seismic Hazard Assessment for the State of California</i>, DMG Open-File Report 96-08.</li> <li>2. Fault Geometry: (ss) strike slip; (r) reverse; (n) normal; (rl) right lateral; (ll) left lateral; (O) oblique; (45 N) direction.</li> <li>3. International Conference of Building Officials, February 1988, <i>Maps of Known Active Fault Near-Source Zones in California and Adjacent Portions of Nevada, to be used with the 1997 Uniform Building Code</i>, Prepared by California Department of Conservation, Division of Mines and Geology in cooperation with Structural Engineers Association of California Seismology Committee.</li> </ol>					

### **SUBSURFACE SOIL CONDITIONS**

Near-surface soils consisted of up to three feet of artificial fill soils (Qaf) underlain by native, paralic deposits (Qhpr-s). Sedimentary bedrock identified as Sisquoc formation (Tsq), was found underlying the paralic deposits. The artificial fill soil was generally composed of sandy clay (CL) and clayey sand to sandy clay (SC/CL) with some gravel, which was black in color, dry, and stiff to loose in consistency. The underlying paralic deposits were composed of sandy clay (CL), clayey sand to sandy clay (SC/CL), and poorly graded sand to silty sand (SP/SM) with some gravel cobbles, which was tan brown to brown, moist to very moist, and very loose or soft to medium dense to dense. The underlying formation was composed of claystone, silty claystone, and clayey siltstone, which was massive, gray to gray brown, moist to saturated, and hard in consistency.

Groundwater was encountered within the exploratory boring at approximately 37.1 feet below ground surface. More detailed descriptions of the subsurface soil conditions encountered are included within our exploratory boring logs (Appendix B).

### **2022 CALIFORNIA BUILDING CODE - SEISMIC PARAMETERS**

Based on our review of the geologic setting, the site is underlain by paralic deposits, which overlie Sisquoc Shale. The borings were not excavated down to a depth of 100 feet. However, based on the mapped geology of the site coupled with density of the subsurface materials encountered, the soils underlying the site may be classified as Site Class D – stiff soil, according to the 2022 California Building Code (CBC).

The seismic parameters according to the 2022 CBC are summarized in the following table. The values of  $S_{M1}$  and subsequently  $S_{D1}$  have been increased by 50 percent per Section 11.4.8 of Supplement 3 for ASCE 7-16.

<b>2022 CBC - Seismic Parameters</b>	
Spectral Acceleration Parameters	$S_s = 2.320$ and $S_1 = 0.843$
Site Coefficients	$F_a = 1.0$ and $F_v = 1.7$
Adjusted Maximum Considered Earthquake Spectral Response Parameters	$S_{MS} = 2.320$ and $S_{M1} = 2.150$
Design Spectral Acceleration Parameters	$S_{DS} = 1.546$ and $S_{D1} = 1.433$
Peak Ground Acceleration ( $PGA_M$ )	1.137g
Deaggregated Magnitude (mean, over all sources)	6.98

It should be noted that the above seismic parameters should be reviewed by the civil/ structural design engineer and approved by the appropriate governmental agency prior to using for this project. The civil/ structural design engineer should consult with the project geotechnical consultant if additional geotechnical information is needed for structural design.

### **GROUNDWATER**

The site is in the southeast quarter of Section 1, Township 3 North, Range 25 West of the San Bernardino Principal Meridian at Latitude: 34.36605864° North, Longitude: 119.44943559° West. The closest available well data from the California Department of Water Resources was well number 343872N1194754W001, located over two miles northwest of the subject site. Because of the distance from this well and because of the different geological conditions in the two locations, information from this source was determined not to be relevant to conditions at the site. The California Geological Survey, Seismic Hazards Zones Report 073, plate 1.2, shows the entire community of La Conchita, from the base of the northern slope to the shore, to be in an area of consistent, historical highest depth to groundwater of 10 feet.



A large landslide study (Lettis & Associates, 2009) contained information from many previous studies focused on the La Conchita area. As stated in reports that studied the La Conchita locality intensively, the only area with uniform depth to groundwater of about 10 feet is located south of La Conchita between Highway 101 and the shore. Depth to groundwater within La Conchita is deeper, discontinuous, and perched. Lettis confirmed that, where groundwater was encountered at all beneath La Conchita, it was generally found 10 to 20 feet above sea level.

Groundwater at the subject site was encountered at 37.1 feet below ground surface during this investigation. At the location of the boring, groundwater was encountered at about 5 feet above sea level.

Based on the information available to us, we estimate a historic high groundwater level of approximately 22 feet below the existing ground surface at the subject site.

#### **LIQUEFACTION POTENTIAL AND SEISMIC SETTLEMENT**

Liquefaction is a process in which strong ground shaking causes saturated soils to lose their strength and behave as a fluid (Matti and Carson, 1991). Ground failure associated with liquefaction can result in severe damage to structures. Soil types susceptible to liquefaction include sand, silty sand, sandy silt, and silt, as well as soils having a plasticity index (PI) less than 7 (Boulanger and Idriss, 2004) and loose soils with a PI less than 12 and a moisture content greater than 85 percent of the liquid limit (Bray and Sancio, 2006). The geologic conditions for increased susceptibility to liquefaction are: 1) shallow groundwater (generally less than 50 feet in depth); 2) the presence of unconsolidated sandy alluvium, typically Holocene in age; and 3) strong ground shaking. All three of these conditions must be present for liquefaction to occur.

The site is located in an area of potential, seismically induced, liquefaction susceptibility, as identified by the State of California (Enclosure A-5a).

Severe seismic shaking may cause dry and non-saturated sands to densify, resulting in settlement expressed at the ground surface. Seismic settlement in dry soils generally occurs in loose sands and silty sands, with cohesive soils being less prone to significant settlement.

A quantitative method using an index called the liquefaction potential index (LPI) was developed and presented by Iwasaki et al. (1978, 1982). The LPI is defined as:

$$LPI = \int_0^{20} F_1 W(z) dz$$

where  $W(z) = 10 - 0.5z$ ,  $F_1 = 1 - FS$  for  $FS < 1.0$ ,  $F_1 = 0$  for  $FS > 1.0$  and  $z$  is the depth below the ground surface in meters. The LPI presents the risk of liquefaction damage as a single value with the following indicators of liquefaction-induced damage:

LPI Range and Damage	
LPI Range	Damage
LPI = 0	Liquefaction risk is very low.
$0 < LPI \leq 5$	Liquefaction risk is low.
$5 < LPI \leq 15$	Liquefaction risk is high.
$LPI > 15$	Liquefaction risk is very high.

The most recent development for quantitative descriptions of liquefaction-induced surface damage, called "liquefaction vulnerability", was made by Tonlin & Taylor (2013) after the Christchurch earthquakes occurred between 2010 and 2011 and was based on field observations and analyses of approximately 7,500 CPT investigations. A new index, the liquefaction severity number (LSN), was proposed and defined as:

$$LSN = \int \frac{\varepsilon_v}{z} dz$$

where  $\varepsilon_v$  is the calculated volumetric densification strain in the subject layer from Zhang et al. (2002) and  $z$  is the depth to the layer of interest in meters below the ground surface. The typical behaviors of sites with a given LSN are summarized in following table.

<b>LSN Ranges and Observed Land Effects</b>	
<b>LSN Range</b>	<b>Predominant Performance</b>
0-10	Little to no expression of liquefaction, minor effects
10-20	Minor expression of liquefaction, some sand boils
20-30	Moderate expression of liquefaction, with sand boils and some structural damage
30-40	Moderate to severe expression of liquefaction, settlement can cause structural damage
40-50	Major expression of liquefaction, undulations, and damage to ground surface, severe total and differential settlement of structures
>50	Severe damage, extensive evidence of liquefaction at surface, severe total and differential settlements affecting structures, damage to services

Both LPI and LSN indices were calculated for the soil profile. The results indicate that the liquefaction risk of the site is "high" per the LPI index. The site exhibits little to no expression of liquefaction per the LSN index. Little to no expression of liquefaction means that minor effects of liquefaction will be observed per Tonlin & Taylor (2013).

The Idriss and Boulanger (2010-16) and Pradel (1998) methods were used to evaluate liquefaction-induced and dry sand settlements. As input into our calculations a deaggregated modal moment

magnitude of 6.98 and an acceleration of 1.137g were utilized for the representative soil profile provided in Boring B-1. A historic groundwater table of 22 feet below the existing ground surface was used.

The results indicate that a maximum seismic settlement of approximately 1.9 inches can be anticipated. Based on the relative uniformity of soil materials encountered, differential seismic settlement is anticipated to be approximately one-half of the total seismic settlement over 40 feet. The settlement calculated is accumulated from soil layers extrapolated to a maximum depth of 51-1/2 feet below the existing ground surface and the result of our analysis is provided in Appendix D.

### **HYDROCONSOLIDATION**

Based on the anticipated grading and site preparations and the low potential for full saturation of the upper soil layers, it is our opinion that the potential for hydrocollapse settlement at the site is low.

### **STATIC SETTLEMENT**

Potential static settlement was evaluated utilizing field and laboratory data and foundation load assumptions. The calculations indicate total static settlement of approximately one-half inch beneath shallow foundations. Most of the potential static settlement should occur during construction. Based on the uniformity of the materials encountered, differential settlement is anticipated to be on the order of 1/2 the total settlement in 40 feet.

### **LANDSLIDES AND SLOPE STABILITY**

The State of California has not included the subject site within an area that is susceptible to seismically induced landsliding (Enclosure A-5a). However, the cliffs immediately northeast of the La Conchita community are included in an area of seismically induced landslide susceptibility.

Geological investigations have revealed numerous historic and prehistoric landslides and debris flows within and bordering the community. The area around La Conchita has been adversely affected by numerous historical landslides and debris flows. The Coast Highway and railroad have been buried or damaged by landslides in this area as early as 1875 and 1892, respectively. For the purpose of this report, the most pertinent events occurred in 1937-1938, 1995, and 2005. The heavy precipitation in winter of 1937-1938 caused a large debris flow that covered about 34,000 square feet of what is now La Conchita. In 1995, again triggered by heavy precipitation, a deep landslide occurred, in which a large block moved downslope, which buried part of Vista del Rincon Drive around San Fernando Avenue. A debris flow occurred shortly after in 1995 emanating from the barranca immediately west of La Conchita and damaged at least three houses in the northwest corner of the development. In 2005 a large, fast-moving debris flow cascaded down the side of the 1995 landslide block, starting at an elevation of 450 feet above mean sea level, and terminated within the La Conchita community after destroying 13 houses, severely damaging 23 others, and killing 10 people.

Of note is that the total area covered by the 1937-1938, 1995, and 2005 landslides and debris flows amounts to less than 14 percent of the total 12 acres occupied by the development, yet landslide and debris flow deposits from prehistoric events have been identified covering over 60 percent of the development area. Without significant mitigation techniques applied to the problem, all of La Conchita is at risk from future landslides and debris flows, although some areas have a higher risk than others.

A landslide/debris flow map of the La Conchita area showing the subject site was prepared by Lettis & Assoc in 2009 (Enclosure A-5c). The subject property lies within a recognized prehistoric debris flow, runout area with an inferred depth of debris flow ranging between 0 and 2 feet in thickness. The subject site is outside any historic debris flow runout areas. Another map prepared by Alan Kropp & Associates in July 2008 (Enclosure A-5d) provided setback from the potential debris flow zones as a mitigation method to the debris flow hazard. This map shows that the subject site is outside of the "limits of unoccupied area" which provides a 50-foot setback from a 2-foot minimum debris flow thickness, design-level event.

### **FLOODING POTENTIAL**

Flood Insurance Rate Maps (FIRM) were compiled by the Federal Emergency Management Agency (FEMA) for the Flood Insurance Program and are available for most areas within the United States at the FEMA web site (<http://msc.fema.gov/>). The attached FEMA Flood Map and legend (Enclosure A-6) and FEMA Flood Map Legend was created from FIRMs specific to the area of the subject site. The FEMA Flood Map shows the site is located within 'Zone X', which is not located within a potential flood zone.

Therefore, flooding should not be considered a constraint for the development of the subject project at this location.

### **Seiching**

Seiching is the oscillation of an enclosed body water, usually due to strong groundshaking following a seismic event. Seiching can affect lakes, water towers, swimming pools. There were no enclosed bodies of water observed in close enough proximity to affect the subject site. Seiching should not be considered to be a geologic constraint at this site.

### **Tsunamis**

The subject site lies outside the State of California zone of potential Tsunami Inundation (Enclosure A-5b). Additionally, Lettis & Associates (2009) addressed the tsunami issue and indicated that the potential for tsunami run-up high enough to adversely affect the La Conchita community is not a significant hazard "within the 100- and 500-year periods of interest".

### **EXPANSION POTENTIAL**

The results of our expansion index testing indicate that the soils encountered at the site are considered "low" expansive. Recommendations provided in this report are made with consideration to the expansive conditions of the on-site soils.

### **PERCOLATION TESTING**

Percolation testing was performed for leach lines at the subject site in accordance with the "Onsite Wastewater Treatment System Technical Manual" prepared by Ventura County Environmental Health Division (Manual). Four percolation tests were performed at the subject site within the anticipated primary areas for the leach lines. Three tests were performed within the approximate depth of the leach lines which is anticipated to be 4 to 5 feet bgs. One test was performed at a depth of 10 feet bgs. The test holes were pre-soaked overnight. During testing, six inches of water seeped away in less than 30 minutes, resulting in the use of a 10-minute interval for percolation testing. The testing was performed over a 1-hour period, and the drop in water was measured in 10-minute intervals. The following table summarizes the final rates obtained during our percolation testing. The field data is provided in Appendix E.

Percolation Rates			
Test No.	Depth (ft.)	Percolation Rate	Soil Type
		(minutes/inch)	
P-1	5	3.8	SC
P-2	4	6.0	CL
P-3	4	6.0	SC
P-4	10	1.7	SC/CL

Based on results of the percolation testing performed at the subject site, a percolation rate of 6.0 minutes per inch was used for design of leach lines (Enclosure A-2a). A percolation rate of 6.0 minutes per inch requires 165 square feet of absorption area per bedroom. We anticipate that the proposed structure will have no more than 3-bedrooms; therefore, a minimum of 495 square feet of absorption area is required.

Using a 3-foot wide trench and 3-feet of gravel below the pipe, we are allotted 7 square feet per foot of trench per Appendix H-301.1 of the 2021 Uniform Plumbers Code (UPC). A minimum trench length of 70.7 feet is required.

It is our opinion that the site has sufficient area to provide a 100 percent expansion of the required absorption area when/ if necessary.

The requirements set forth in section 4.2.2 of the Manual should be followed. It is our opinion that leach lines (5 feet in depth or less) will not encroach within the minimum required 5-foot vertical setback from the historic groundwater table.

### **CONCLUSIONS**

On the basis of our field and laboratory investigations, it is the opinion of this firm that the proposed development is feasible from geotechnical engineering and engineering geologic standpoints, provided the recommendations contained in this report are implemented during grading and construction.

Moderate to severe seismic shaking can be expected at the site. There are no known active faults on the subject site. The northern one-third of the site lies within an Alquist-Priolo Special Studies zone. There is room in the southern two-thirds of the property for the proposed structure.

Fill, three feet in depth or less, was encountered during our field investigation. Groundwater was encountered at 37.1 feet below ground surface in our exploratory boring at the site. Slight caving was encountered in one boring during drilling for our exploratory borings. Trenches, larger-diameter borings, or excavations that remain open for longer periods of time may be subject to caving. Temporary excavations are anticipated to conform to local and State codes with regard to the geologic materials present at the site.



The site is located in an area of potential, seismically induced, liquefaction susceptibility, as identified by the State of California. The results of our analysis indicate that the liquefaction risk of the site is "high" per the LPI index. The site exhibits little to no expression of liquefaction per the LSN index. Little to no expression of liquefaction means that minor effects of liquefaction will be observed per Tonlin & Taylor (2013).

Total seismic settlement of approximately 1.9 inches can be anticipated. Based on the relative uniformity of soil materials encountered, differential seismic settlement is anticipated to be approximately one-half of the total seismic settlement over 40 feet. Total static settlement of approximately one-half inch beneath shallow foundations should be anticipated. Differential static settlement is anticipated to be on the order of 1/2 the total settlement in 40 feet. The potential for hydrocollapse settlement at the site is considered low.

Landslides and debris flows may be considered to be a potential geologic hazard on the subject site. The subject property lies within a recognized historic or prehistoric landslide or debris flow area, with an inferred depth of debris flow range between 0 and 2 feet in thickness.

The results of our expansion index testing indicate that the soils encountered at the site are considered "low" expansive. Recommendations provided in this report are made with consideration to the expansive conditions of the on-site soils.

Based upon our field investigation and test data, it is our opinion that the upper existing soils will not, in their present condition, provide uniform or adequate support for the proposed structure. Undocumented fill and/or variable in situ conditions may be present in the upper soils. These conditions may cause unacceptable differential and/or overall settlement upon application of the anticipated foundation loads.

Because of site conditions and the presence of existing fill soils, it will be necessary to remove and recompact a minimum of 4 feet of the existing soils in building areas. To provide adequate support for

the proposed structure, it is our recommendation that soil from building areas be subexcavated as necessary and replaced with a compacted fill mat beneath footings. A compacted fill mat will provide a dense, uniform, high-strength soil layer to distribute the foundation loads over the underlying soils.

Based on the potential for debris flow, we recommend that the proposed building pad be elevated a minimum of 2 feet from the existing adjacent grade. Additionally, we recommend that a debris/ impact wall at least 4 feet in height be designed and constructed on the slope facing (northeast) side of the property. The building should also be setback from the northeastern side of the lot as far southwest (away from the slope) as possible.

The final project grading and foundation plans should be reviewed by the geotechnical engineer.

## **RECOMMENDATIONS**

### **GENERAL SITE GRADING:**

It is imperative that no clearing and/or grading operations be performed without the presence of a representative of the geotechnical engineer. An on-site, pre-job meeting with the developer, the contractor and the geotechnical engineer should occur prior to all grading-related operations. Operations undertaken at the site without the geotechnical engineer present may result in exclusions of affected areas from the final compaction report for the project.

Grading of the subject site should be performed, at a minimum, in accordance with these recommendations and with applicable portions of the CBC. The following recommendations are presented for your assistance in establishing proper grading criteria.

### **INITIAL SITE PREPARATION:**

All areas to be graded should be stripped or cleaned of significant vegetation and other deleterious materials. These materials should be removed from the site for disposal. The cleaned soils may be reused as properly compacted fill. Rocks or similar irreducible material with a maximum dimension

greater than 8 inches should not be used in compacted fills. If encountered, existing utility lines should be traced, removed, and rerouted from areas to be graded.

**MINIMUM MANDATORY REMOVAL OF EXISTING SOILS:**

All building areas (including at least 5 feet laterally beyond the footing lines, where possible) should have at least the upper 4 feet of existing soils removed and the open excavation bottoms observed by our engineer/ geologist to verify and document in writing that all undocumented fill is removed prior to refilling with properly tested and documented compacted fill. The removed and cleaned soils may be reused as properly compacted fill.

Further subexcavation may be necessary depending on the conditions of the underlying soils. The actual depth of removal should be determined at the time of grading by the project geotechnical engineer/geologist. The determination will be based on soil conditions exposed within the excavations. At minimum, any undocumented fill, topsoil, or other unsuitable materials should be removed and replaced with properly compacted fill.

In-place density tests may be taken in the removal bottom areas where appropriate to provide data to help support and document the engineer/geologist's decision.

**EXCAVATION ADJACENT TO EXISTING STRUCTURES:**

Removal and recompaction of the soils adjacent to any existing structures may result in unacceptable distress by the removal of bearing and lateral support. The following precautionary measures should be utilized during proposed subexcavation/recompaction operations to reduce the potential for distress to any existing adjacent structures.

During compacted fill mat construction for the proposed structure, the excavation and replacement of soils adjacent to any existing structures should be accomplished in the shortest period of time possible. Sufficient forces and equipment should be available to accomplish any removal and replacement of soils adjacent to existing structures within one 8-hour working day. The excavation should not be

performed during periods of rain or threat of rain. During the excavation operation, the moisture content of the soils near existing structures should be monitored. If excessive moisture contents or excessively dry soils are encountered, the geotechnical engineer should be notified immediately.

The actual excavation and recompaction of soils near existing structures should be performed in alternating sections. A checkerboard-type (A-B) system should be utilized by initially removing and recompacting every other square and thereupon going back and removing and recompacting the remaining squares. The width of these excavations is usually equal to the blade or bucket size of the available equipment but should not exceed 6 feet.

#### **PREPARATION OF FILL AREAS:**

Prior to placing fill, and after the mandatory subexcavation operation, the surfaces of all areas to receive fill should be scarified and moisture treated to a depth of 6 inches or more. The soils should be brought to near optimum moisture content and compacted to a minimum relative compaction of 90 percent in accordance with ASTM D1557.

#### **PREPARATION OF SHALLOW FOOTING AREAS:**

All footings should rest upon at least 24 inches of properly compacted fill material. In areas where the required thickness of compacted fill is not accomplished by the mandatory removal operation, the footing areas should be overexcavated to a depth of 24 inches or more below the lowest proposed footing base grade. The required overexcavation should extend at least 5 feet laterally beyond the footing lines, where reasonably possible. In instances where the 5-foot lateral overexcavation may not be accomplished, this firm should be contacted to evaluate the effect. The bottom of this excavation should then be scarified and moisture treated to a depth of at least 6 inches, brought to near optimum moisture content and compacted to a minimum of 90 percent relative compaction in accordance with ASTM D1557 prior to refilling the excavation to the required grade as properly compacted fill.

All footing excavations should be observed by a representative of the project geotechnical engineer to verify that they have been excavated into compacted fill prior to placement of forms, reinforcement, or

concrete. The excavations should be trimmed neat, level, and square. All loose, sloughed or moisture-softened soils should be removed from the excavations prior to placing of concrete. Excavated soils derived from the footing and/or utility trenches should not be placed in building slab-on-grade areas or exterior concrete flatwork areas unless the soils are brought to near optimum moisture content and compacted to at least 90 percent of the maximum dry density.

**COMPACTED FILLS:**

The on-site soils should provide adequate quality fill material provided they are free from organic matter and other deleterious materials. Rocks or similar irreducible material with a maximum dimension greater than 8 inches should not be used in compacted fills.

If utilized, import fill should be inorganic, non-expansive granular soils free from rocks or lumps greater than 6 inches in maximum dimension. The contractor shall notify the geotechnical engineer of import sources sufficiently ahead of their use so that the sources can be observed and approved as to the physical characteristic of the import material. For all import material, the contractor shall also submit current verified reports from a recognized analytical laboratory indicating that the import has a "not applicable" potential for sulfate attack based upon current American Concrete Institute (ACI) criteria and is "mildly to moderately corrosive" to ferrous metal and copper. The reports shall be accompanied by a written statement from the contractor that the laboratory test results are representative of all import material that will be brought to the job.

Fill should be spread in near-horizontal layers, approximately 8 inches thick. Thicker lifts may be approved by the geotechnical engineer if testing indicates that the grading procedures are adequate to achieve the required compaction. Each lift should be spread evenly, thoroughly mixed during spreading to attain uniformity of the material and moisture in each layer, brought to near optimum moisture content and compacted to a minimum relative compaction of 90 percent in accordance with ASTM D1557.

Based upon the relative compaction anticipated for compacted fill soils, we estimate compaction shrinkage of approximately 10 to 15 percent. Therefore, 1.10 cubic yards to 1.15 cubic yards of in-place soil material would be necessary to yield one cubic yard of properly compacted fill material. In addition, we would anticipate compaction subsidence of approximately 0.4 to 0.6 feet in the upper 4 feet. These values are exclusive of losses due to disposal of oversized material, stripping, tree removal or removal of other subsurface obstructions, if encountered, and may vary due to differing conditions within the project boundaries and the limitations of this investigation.

Values presented for shrinkage and subsidence are estimates only. Final grades should be adjusted, and/or contingency plans to import or export material should be made to accommodate possible variations in actual quantities during site grading.

**SPREAD OR CONTINUOUS FOUNDATION DESIGN:**

The proposed structures may be safely founded on spread foundations, either individual spread footings and/or continuous wall footings, bearing on a minimum of 24 inches of compacted fill.

Interior footings should be a minimum of 18 inches wide and should be established at a minimum depth of 18 inches below lowest adjacent final subgrade level. Footing reinforcement for interior footings should consist of at least four No. 4 bars, two at the top and two at the bottom.

Exterior footings should be a minimum of 18 inches wide and should be established at a minimum depth of 24 inches below lowest adjacent final subgrade level. Footing reinforcement for exterior footings should consist of at least four No. 5 bars, two at the top and two at the bottom.

For a minimum width of 18 inches and a minimum depth of 18 inches below lowest adjacent final subgrade level, footings may be designed for a maximum safe soil bearing pressure of 1,500 pounds per square foot (psf) for dead plus live loads. These allowable bearing pressures may be increased by 175 psf for each additional foot of width and by 550 psf for each additional foot of depth to a maximum

safe soil bearing pressure 2,000 psf for dead plus live loads. These bearing values may be increased by one-third for wind or seismic loading.

For footings thus designed and constructed, we would anticipate a maximum total settlement (static and seismic) of approximately 2.4 inches. Differential settlement between similarly loaded adjacent footings is expected to be approximately half the total settlement over 40 feet. Static settlement is expected to occur during construction or shortly after.

#### **LATERAL LOADING:**

Resistance to lateral loads will be provided by passive earth pressure and base friction. For footings bearing against compacted fill, passive earth pressure may be considered to be developed at a rate of 290 psf per foot of depth. Base friction may be computed at 0.34 times the normal load. Base friction and passive earth pressure may be combined without reduction. Other than conservative soil modeling, the lateral passive earth pressure and base friction values recommended do not include factors of safety. If the design is to be based on allowable lateral resistance values, we recommend that minimum factors of safety of 1.5 and 2.0 be applied to the friction coefficient and passive lateral earth pressure, respectively. The resulting allowable lateral resistance values follow:

<b>Allowable Lateral Resistance Values</b>			
	<b>Ultimate</b>	<b>Allowable</b>	<b>Factor of Safety</b>
<b>Passive Lateral Earth Pressure (psf/ft)</b>	290	145	2.0
<b>Base Friction Coefficient</b>	0.34	0.23	1.5

#### **DEBRIS/ IMPACT WALL:**

A free standing debris/ impact wall should be designed and constructed along the slope facing/ northeast side of the property to divert flowing mud around the structure in the case of a debris flow. The wall should be at least 4 feet in height. The wall should be designed for an equivalent fluid pressure of 150 pcf. The backside of the wall should be cleared of any mud or debris following storm events.

### **SLABS-ON-GRADE:**

To provide adequate support, concrete slabs-on-grade should bear on a minimum of 24 inches of compacted soil. The final pad surfaces should be rolled to provide smooth, dense surfaces. As a minimum, concrete slabs-on-grade should be 4 inches in thickness and should have No. 3 bars spaced at 18 inches on center each way.

Slabs to receive moisture-sensitive coverings should be provided with a moisture vapor retarder/barrier. We recommend that a vapor retarder/barrier be designed and constructed according to the American Concrete Institute 302.1R, Concrete Floor and Slab Construction, which addresses moisture vapor retarder/barrier construction. At a minimum, the vapor retarder/barrier should comply with ASTM E1745 and have a nominal thickness of at least 10 mils. The vapor retarder/barrier should be properly sealed, per the manufacturer's recommendations, and protected from punctures and other damage. Per the Portland Cement Association ([www.cement.org/tech/cct\\_con\\_vapor\\_retarders.asp](http://www.cement.org/tech/cct_con_vapor_retarders.asp)), for slabs with vapor-sensitive coverings, a layer of dry, granular material (sand) should be placed under the vapor retarder/barrier. For slabs in humidity-controlled areas, a layer of dry, granular material (sand) should be placed above the vapor retarder/barrier.

### **Flatwork**

Use of maximum control joint spacing of no more than 8.0 feet in each direction and a construction joint spacing of 10 to 12 feet should be used in the design of flatwork. Construction joints that abut foundations or slabs should include a felt strip, or approved equivalent, that extends the full depth of the exterior slab. Although not required, it is suggested that exterior slabs be doweled into adjacent foundations.

If the subgrade earth materials are allowed to become saturated, there is a risk of vertical differential movement of the exterior concrete hardscape, sidewalks, curbs / gutters, etc. Therefore, proper drainage should be established away from such improvements and minimal precipitation or irrigation



water allowed to percolate into the earth materials adjacent to and/or under the exterior concrete flatwork or hardscape, curbs / gutters, etc.

#### **EXCAVATIONS:**

The soils encountered within our exploratory borings are generally classified as a Type "C" soil in accordance with the CAL/OSHA excavation standards. Unless specifically evaluated by our engineering geologist, all the trench excavations should be performed following the recommendation of CAL/OSHA (State of California, 2013) for Type "C" soil. Based upon a soil classification of Type "C", the temporary excavations should not be inclined steeper than 1.5 horizontal to 1 vertical for maximum trench depth of less than 20 feet. For trench excavations deeper than 20 feet or for conditions that differ from those described for Type "C" in the CAL/OSHA excavation standards, this firm should be contacted.

#### **RAISING PAD ELEVATION AND PLACEMENT OF STRUCTURE:**

Based on the potential for debris flow, we recommend that the proposed building pad be elevated a minimum of 2 feet from the existing adjacent grade. This should be done after performing the mandatory overexcavation and recompaction of the existing soils.

The building should also be setback from the northeastern side of the lot as far southwest (away from the slope) as possible.

#### **POTENTIAL EROSION AND DRAINAGE:**

The potential for erosion should be mitigated by proper drainage design. The site should be graded so that surface water flows away from structures at a minimum gradient of 5 percent for a minimum distance of 10 feet from structures. Impervious surfaces within 10 feet of structures should be sloped a minimum of 2 percent away from the building. Water should not be allowed to flow over graded areas or natural areas so as to cause erosion. Graded areas should be planted or otherwise protected from erosion by wind or water.

Water should not be permitted to collect or pond in landscaped areas.

The structure should be provided with roof drains, gutters, and downspouts connected to subsurface pipes. Roof water should not be allowed to discharge onto the ground surface without collecting into surface drains and pipes. Water should not be allowed to collect against foundations or retaining walls. These walls are typically built to withstand the effects of normal soil moisture and may require subsurface drains to collect and transfer excessive water away from the structures.

All drainage devices should be checked at least twice per year to ensure that they are not blocked. All blockages should be cleared.

Swales that have been graded around the structure or on the lot should not be blocked. These swales are typically constructed to provide drainage toward the driveways, street, or other positive outlet.

#### **SOIL CORROSION:**

A selected sample of material was tested for preliminary corrosivity analysis. Laboratory testing consisted of pH, resistivity, chlorides, and sulfates. The results of the laboratory tests appear in Appendix C.

The result from the resistivity test indicates a "moderately corrosive" condition to ferrous metals. Specific corrosion control measures, such as coating of the pipe with non-corrosive material or alternative non-metallic pipe material, are considered necessary.

Results of the soluble sulfate testing indicate a Class S0 anticipated exposure to sulfate attack. Based on the criteria from Table 19.3.2.1 of the American Concrete Institute Manual of Concrete Practice (2014), special measures, such as specific cement types or water-cement ratios, are not considered necessary for this Class S0 exposure to sulfate attack.

The soluble chloride content of the soils tested was not at levels high enough to be of concern with respect to corrosion of reinforcing steel. The results should be considered in combination with the soluble chloride content of the hardened concrete in determining the effect of chloride on the corrosion of reinforcing steel.

Noorzay Geotechnical Services does not practice corrosion engineering. If further information concerning the corrosion characteristics, or interpretation of the results submitted herein, is required, then a competent corrosion engineer could be consulted.

#### **CONSTRUCTION OBSERVATION:**

All grading operations, including site clearing and stripping, should be observed by a representative of the geotechnical engineer. The geotechnical engineer's field representative will be present to provide observation and field testing and will not supervise or direct any of the actual work of the contractor, his employees, or agents. Neither the presence of the geotechnical engineer's field representative nor the observations and testing by the geotechnical engineer shall excuse the contractor in any way for defects discovered in his work. It is understood that the geotechnical engineer will not be responsible for job or site safety on this project, which will be the sole responsibility of the contractor.

#### **LIMITATIONS**

Noorzay Geotechnical Services has striven to perform our services within the limits prescribed by our client, and in a manner consistent with the usual thoroughness and competence of reputable geotechnical engineers and engineering geologists practicing under similar circumstances. No other representation, express or implied, and no warranty or guarantee is included or intended by virtue of the services performed or reports, opinion, documents, or otherwise supplied.

This report reflects the testing conducted on the site as the site existed during the investigation, which is the subject of this report. However, changes in the conditions of a property can occur with the passage of time, due to natural processes or the works of man on this or adjacent properties. Changes

in applicable or appropriate standards may also occur whether as a result of legislation, application, or the broadening of knowledge. Therefore, this report is indicative of only those conditions tested at the time of the subject investigation, and the findings of this report may be invalidated fully or partially by changes outside of the control of Noorzay Geotechnical Services. This report is therefore subject to review and should not be relied upon after a period of one year.

The conclusions and recommendations in this report are based upon observations performed and data collected at separate locations, and interpolation between these locations, carried out for the project and the scope of services described. It is assumed and expected that the conditions between locations observed and/or sampled are similar to those encountered at the individual locations where observation and sampling was performed. However, conditions between these locations may vary significantly. Should conditions that appear different than those described herein be encountered in the field by the client or any firm performing services for the client or the client's assign, this firm should be contacted immediately in order that we might evaluate their effect.

If this report or portions thereof are provided to contractors or included in specifications, it should be understood by all parties that they are provided for information only and should be used as such.

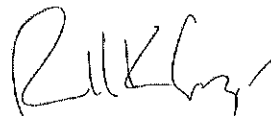
The report and its contents resulting from this investigation are not intended or represented to be suitable for reuse on extensions or modifications of the project, or for use on any other project.

**CLOSURE**

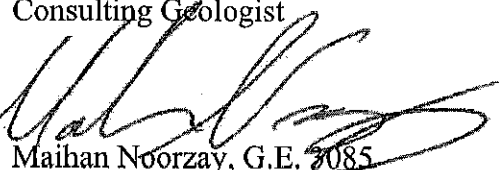
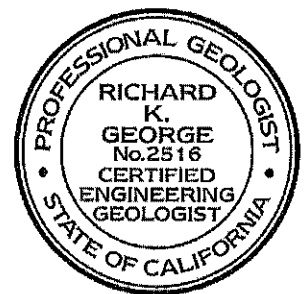
We appreciate this opportunity to be of service and trust this report provides the information desired at this time. Should questions arise, please do not hesitate to contact this office.

Respectfully submitted,

Noorzay Geotechnical Services, Inc.



Richard George, C.E.G. 2516  
Consulting Geologist



Maihan Noorzay, G.E. 3085  
Principal Engineer

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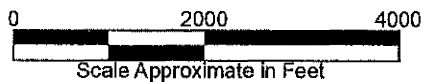
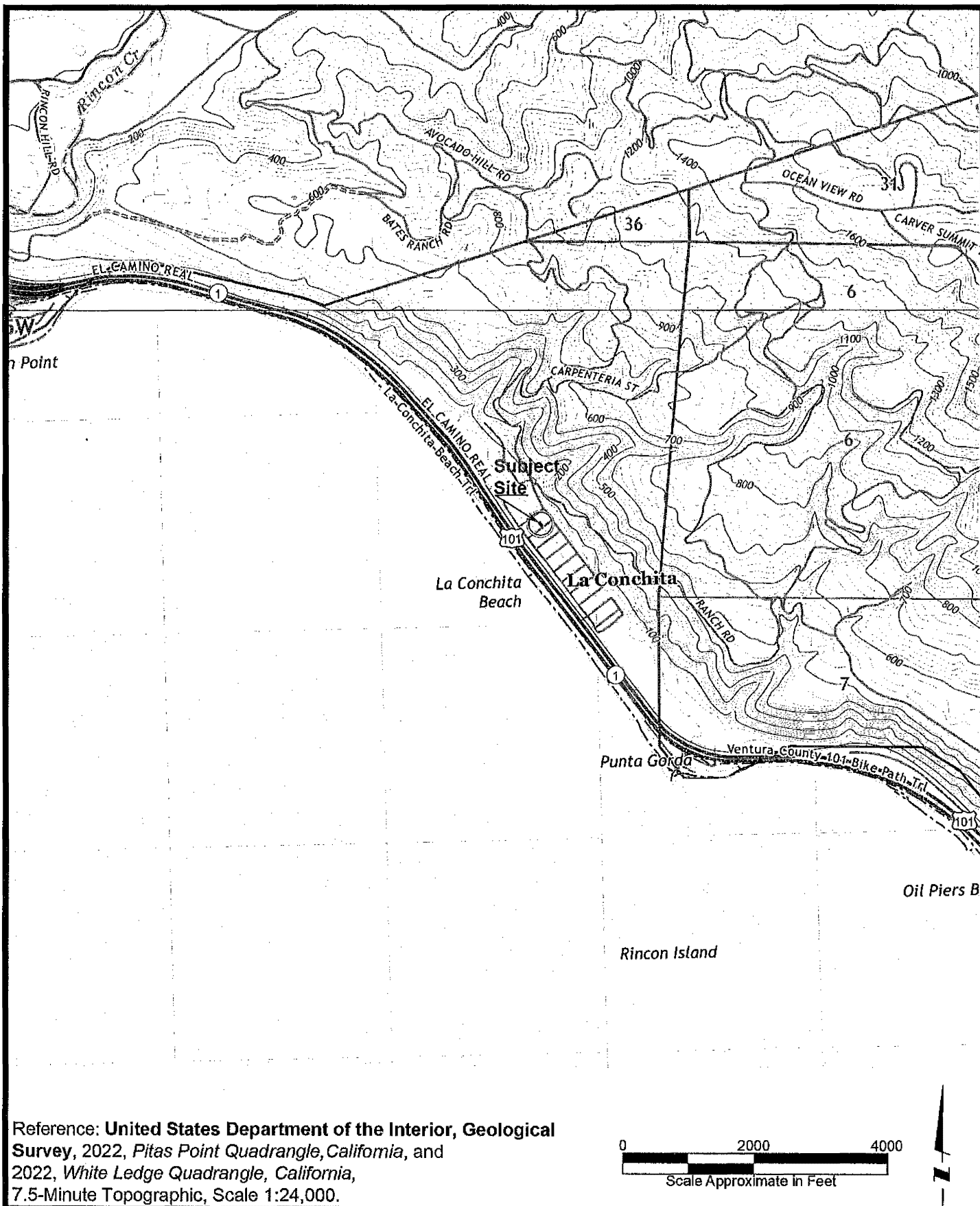
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## **APPENDIX A**

### **MAPS**





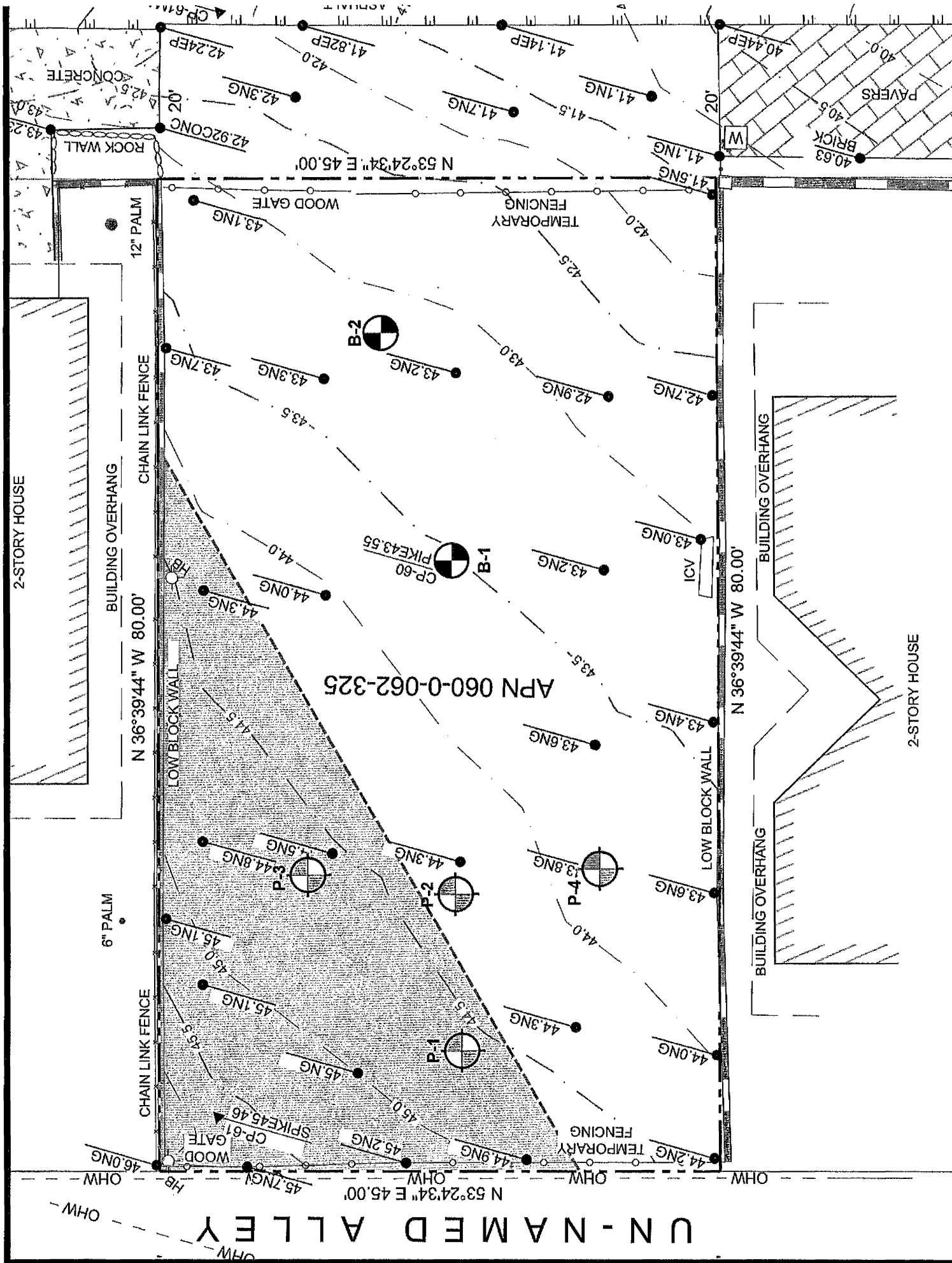
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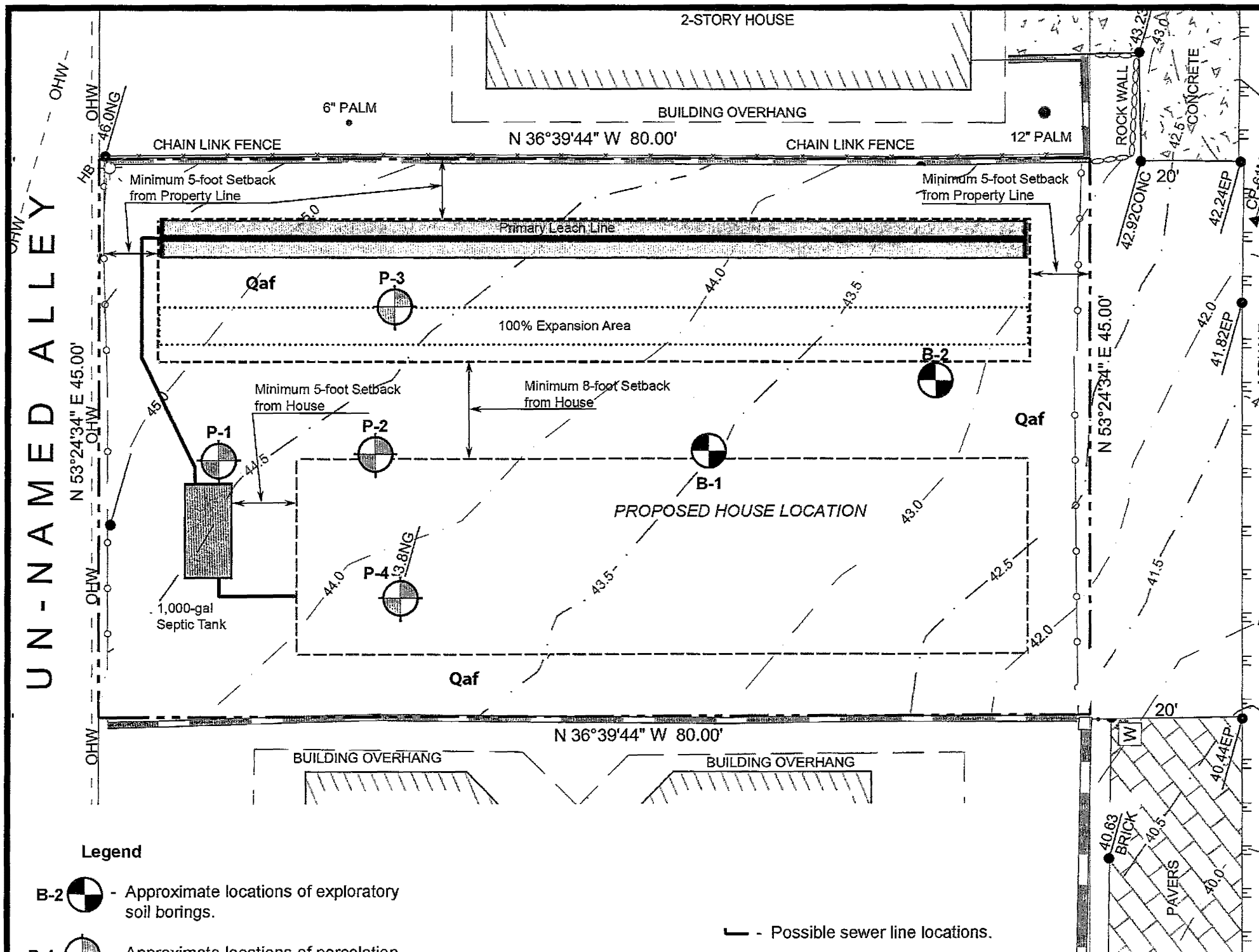
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RG

**Index Map**  
APN 060-0-062-32  
Santa Paula Avenue  
La Conchita, California

NoorzayGeo

A-1





INTENTIONALLY LEFT BLANK  
NO CROSS-SECTION NEEDED

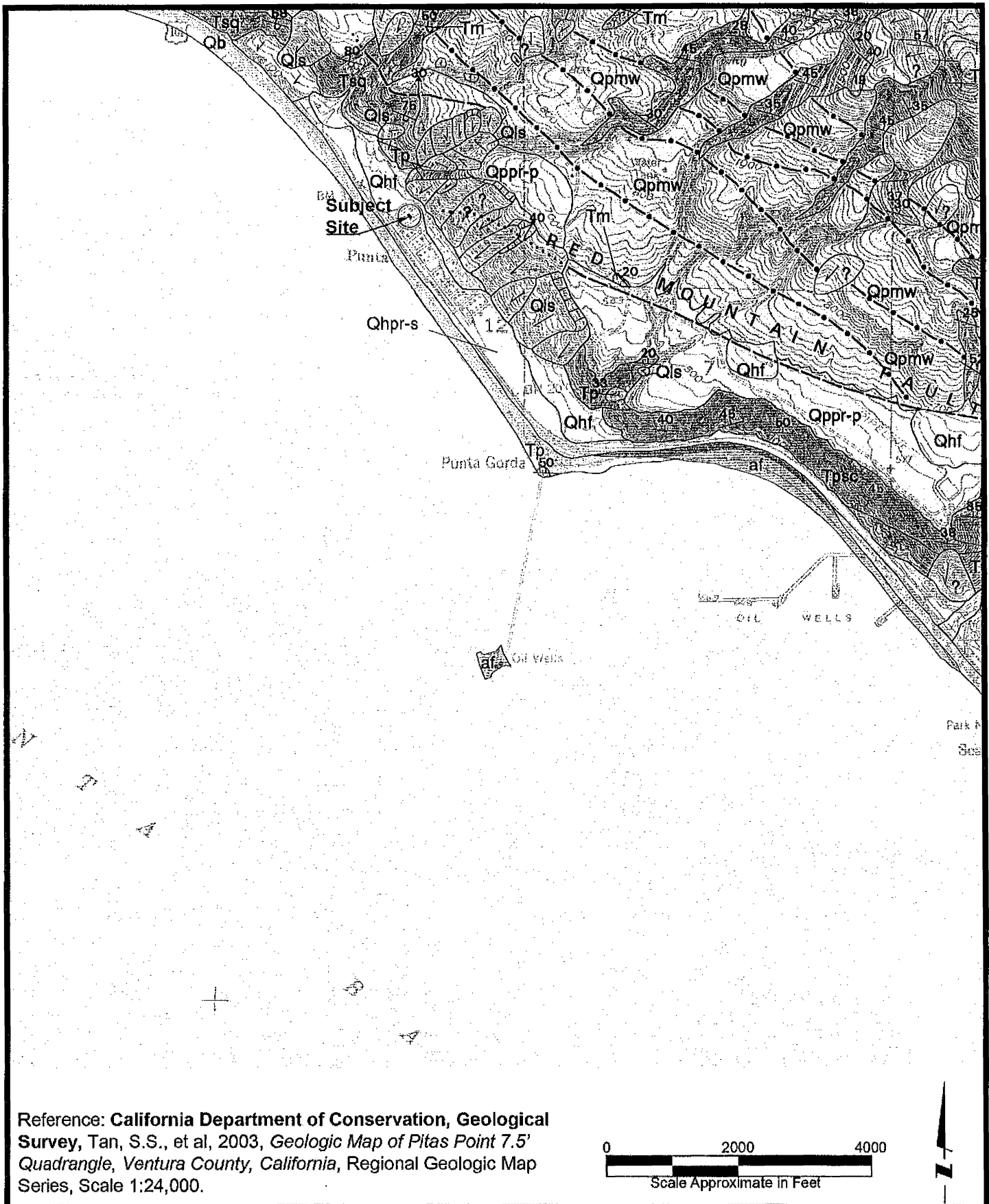
DATE  
05/09/2023

DRAWN BY:  
RG

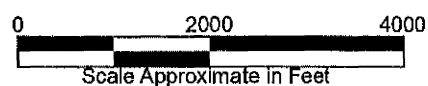
**Geologic Cross-section**  
APN 060-0-062-32  
Santa Paula Avenue  
La Conchita, California

NoorzayGeo

A-3



Reference: California Department of Conservation, Geological Survey, Tan, S.S., et al, 2003, *Geologic Map of Pitas Point 7.5' Quadrangle, Ventura County, California*, Regional Geologic Map Series, Scale 1:24,000.



<small>DATE</small> 05/09/2023	<b>Regional Geologic Map</b> APN 060-0-062-32 Santa Paula Avenue La Conchita, California	<h1>NoorzayGeo</h1>	A-4
<small>DRAWN BY:</small> RG			

# Legend for Geologic Symbols and Units

————— - - - - - . . . . .

Contact (left)—Separates geologic-map units. Solid where meets map-accuracy standard; dashed where may not meet map-accuracy standard; dotted where concealed.

||||| - - - - - |||||

Contact (left)—Separates terraced alluvial units where younger alluvial unit is incised into older alluvial unit; hachures at base of slope, point toward topographically lower surface. Solid where meets map-accuracy standard; dashed where may not meet map-accuracy standard.

↑      ↓  
20      ↓

Anticline/Syncline (left)—Folds in sedimentary rock; line is centerline of fold, arrows pointing toward centerline is syncline; arrows pointing away from centerline is anticline.

||||| ← → — - - - - ? . . .

Fault (above)—Solid where meets map-accuracy standard; dashed where may not meet map accuracy standard. Dotted where concealed by mapped covering unit; queried where existence uncertain. Hachures indicate scarp, with hachures on downdropped block. Paired arrows indicate relative movement; single arrow indicates direction and amount of fault-plane dip. Bar and ball on down-thrown block.

af	Artificial fill material (late Holocene).
Qb	Active beach deposits (late Holocene).
Qls	Landslide deposits, including active (Holocene, Pleistocene).
Qhpr-s	Paralic deposits of Sea Cliff marine terrace (Pleistocene).
Qhf	Alluvial fan deposits (Holocene).
Qppr-p	Paralic deposits of Punta Grad marine terrace (Pleistocene).
Qpmw	Mass wasting deposits, colluvial, talus, landslide (Pleistocene).
Qsb	Santa Barbara claystone (Pleistocene).
Ip	Pico formation, undivided (Pliocene).
Tpsc	Pico formation, sandstone and conglomerate (Pliocene).
Tsq	Sisquoc Shale, silty shale and claystone (Pliocene, Miocene).

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**Regional Geologic Map Legend**  
APN 060-0-062-32  
Santa Paula Avenue  
La Conchita, California

NoorzayGeo

A-4a

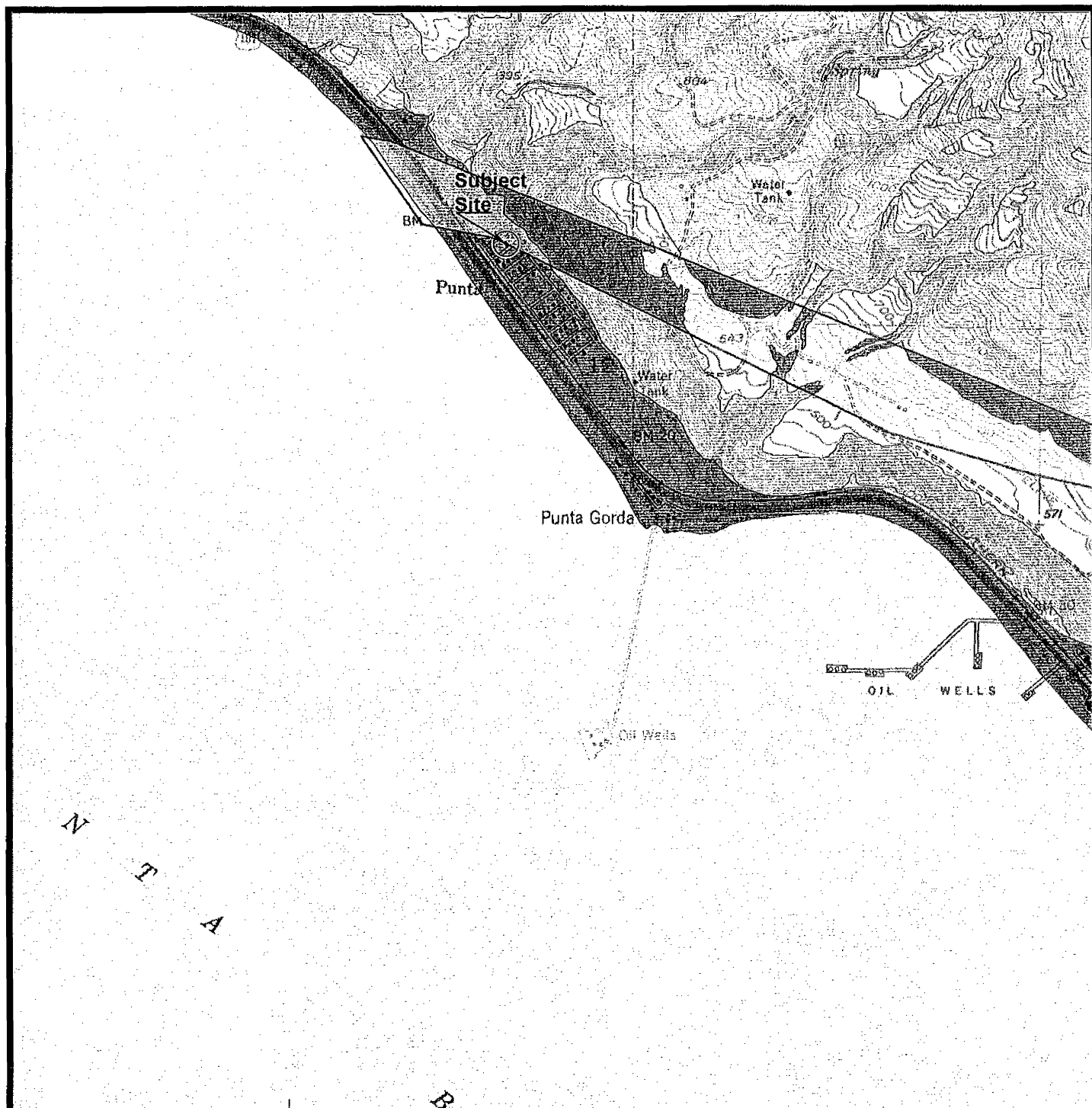


**I**




Scale Approximate in Miles

A-5





#### Legend

-  Areas within earthquake fault study zones.
-  Areas of potential, seismically-induced liquefaction.
-  Areas of potential, seismically-induced landslides.



References: California Department of Conservation,  
Geological Survey, 2002, Seismic Hazards Zones,  
Pitas Point Quadrangle, Official Map, Scale 1:24,000.

California Department of Conservation, Division of Mines  
and Geology Survey, 1991, Earthquake Fault Zones,  
Pitas Point Quadrangle, Revised Official Map, Scale 1:24,000.

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**Alquist-Priolo / Seismic Hazards Map**  
APN 060-0-062-32  
Santa Paula Avenue  
La Conchita, California

NoorzayGeo

A-5a



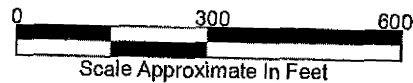


# LEGEND



Tsunami Inundation Area

Outside Tsunami Inundation Area



References: California Department of Conservation, Geological Survey, 2023, Interactive Tsunami Inundation Map for Emergency Planning, Scale 1:3,600.

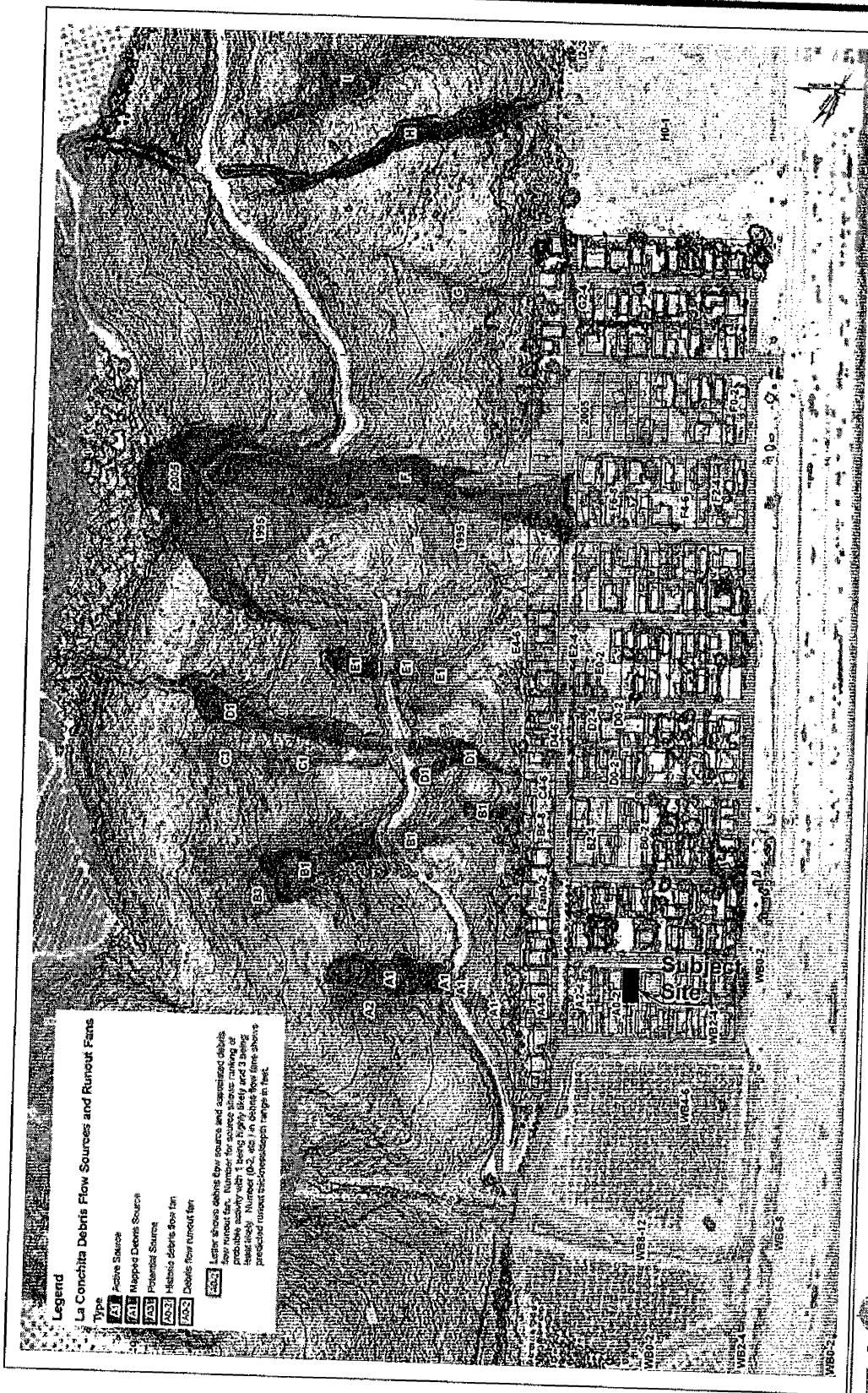
DATE  
05/09/2023

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**Tsunami Inundation Map**  
APN 060-0-062-32  
Santa Paula Avenue  
La Conchita, California

NoorzayGeo

A-5b



LA CONCHITA LANDSLIDE - PHASE 2  
Figure 8.7  
02 JAN 06, 1983, CSH

William Lettis & Associates, Inc, 2009, La Conchita Slope Stabilization Project, Geological Study, La Conchita, California, Final Report, Figure 8.7.

0 400 800  
Approximate Scale in Feet

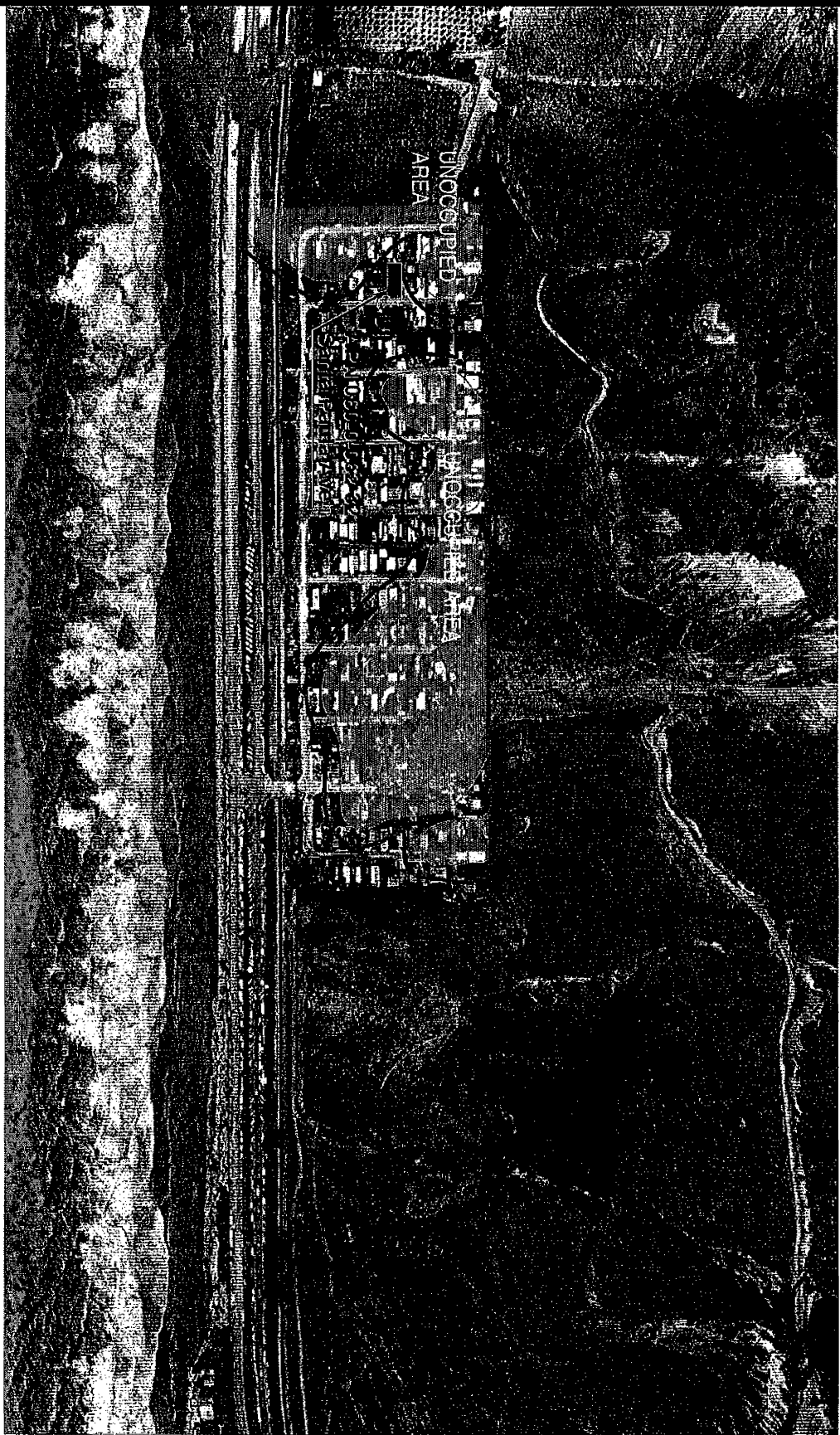
DATE  
05/10/2023

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RG

**La Conchita Landslide/Debris Flow Map**  
APN 060-0-062-32  
Santa Paula Avenue  
La Conchita, California

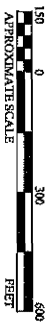
NoorzayGeo

A-5c



**LEGEND:**

- 2-foot minimum debris flow thickness, design-level event
- Units of unoccupied area



Base: Photograph by K. Curtis Services, Inc., dated January 2005.



**ALAN KROPP  
& ASSOCIATES**  
*Geotechnical  
Consultants*

**SETBACKS**

PHASE 2 CONCEPTUAL DESIGN REPORT		
La Conchita, California		
PROJECT NO.	DATE	FIGURE
2528-1	July 2008	4

DATE  
05/10/2023

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**La Conchita Landslide/Debris Flow Map**  
APN 060-0-062-32  
Santa Paula Avenue  
La Conchita, California

**NoorzayGeo**

A-5d





# FLOOD HAZARD INFORMATION

SEE THIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT  
THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING  
DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT  
[HTTPS://MSC.FEMA.GOV](https://msc.fema.gov)

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, XSE
		Regulatory Floodway
		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X

## OTHER AREAS OF FLOOD HAZARD

## OTHER AREAS GENERAL STRUCTURES

	Future Conditions 1% Annual Chance Flood Hazard Zone X
	Area with Reduced Flood Risk due to Levee See Notes, Zone X
	Area with Flood Risk due to Levee Zone D
	Areas of Minimal Flood Hazard Zone X
	Area of Undetermined Flood Hazard Zone D
	Channel, Culvert, or Storm Sewer
	Levee, Dike, or Floodwall

	Cross Sections with 1% Annual Chance Water Surface Elevation
	Coastal Transect
	Coastal Transect Baseline
	Profile Baseline

	Hydrographic Feature
	Base Flood Elevation Line (BFE)
	Limit of Study
	Jurisdiction Boundary

0 500 1000  
Scale Approximate in Feet

Reference: FEMA Flood Insurance Rate Map, 01/29/2021, Panel 06111C 0702F, Scale 1:6,000

DATE  
05/09/2023

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**FEMA Flood Map**  
APN 060-0-062-32  
Santa Paula Avenue  
La Conchita, California

**NoorzayGeo**

A-6

**APPENDIX B**  
**EXPLORATORY LOGS**

## SUBSURFACE EXPLORATION LEGEND

UNIFIED SOIL CLASSIFICATION SYSTEM Visual-Manual Procedure (ASTM D2488)					CONSISTENCY / RELATIVE DENSITY		
MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES	CRITERIA		
Coarse-Grained Soils*	Gravels  50 % or more of Coarse Fraction Retained on No. 4 Sieve	Clean Gravels	GW	Well Graded Gravels and Gravel-Sand Mixtures, Little or no Fines	Reference: 'Foundation Engineering', Peck, Hansen, Thornburn, 2nd Edition.		
			GP	Poorly Graded Gravels and Gravel-Sand Mixtures, Little or no Fines	<u>Standard Penetration Test</u> Granular Soils  Penetration Resistance, N, (Blows / Foot)  Relative Density  0 - 4 Very Loose  4 - 10 Loose  10 - 30 Medium  30 - 50 Dense  > 50 Very Dense		
		Gravels with Fines	GM	Silty Gravels, Gravel-Sand-Silt Mixtures**			
			GC	Clayey Gravel, Gravel-Sand-Clay Mixtures**			
	Sands  More than 50 % of Coarse Fraction Passes No. 4 Sieve	Clean Sands	SW	Well Graded Sands and Gravely Sands, Little or no Fines			
			SP	Poorly Graded Sands and Gravely Sands, Little or no Fines			
		Sands with Fines	SM	Silty Sands, Sand-Silt Mixtures**			
			SC	Clayey Sands, Sand-Clay Mixtures**			
	Fine Grained Soils*	Silt and Clays  Liquid Limits 50 % or less	ML	Inorganic Silts, Sandy Silts, Rock Flour	<u>Standard Penetration Test</u> Cohesive Soils  Penetration Resistance, N, (Blows / Foot)  Consistency  Unconfined Compressive Strength, (Tons / Sq. Ft.)  < 2 Very Soft 0.25 - 0.5 2 - 4 Soft 0.5 - 1.0 4 - 8 Medium 1.0 - 2.0 8 - 15 Stiff 2.0 - 4.0 15 - 30 Very Stiff 2.0 - 4.0 > 30 Hard > 4.0		
			CL	Inorganic Clays of Low to Medium Plasticity, Gravely Clays, Sandy Clays, Silty Clays, Lean Clays			
			OL	Organic Silts and Organic silty Clays of Low Plasticity			
		Silt and Clays  Liquid Limits Greater than 50 %	MH	Inorganic Silts, Micaceous or Diatomaceous silts, Plastic Silts			
			CH	Inorganic Clays of High Plasticity, Fat Clays			
			OH	Organic Clays of Medium to High Plasticity			
Highly Organic Soils			PT	Peat, Muck, or Other Highly Organic Soils			

\* Based on material passing the 3-inch sieve.

\*\* More than 12% passing the No. 200 sieve; 5% to 12% passing No. 200 sieve requires use of dual symbols (i.e., SP-SM., GP-GM, SP-SC, GP-GC, etc.); Border line classifications are designated as CH/CL, GM/SM, SP/SW, etc.

U.S. Standard Sieve Size      12"      3"      3/4"      #4      #10      #40      #200

Unified Soil Classification Designation	Boulders	Cobbles	Gravel		Sand			Silt and Clay
			Coarse	Fine	Coarse	Medium	Fine	

Moisture Condition		Material Quantity		Other Symbols	
Dry	Absence of moisture, dusty, dry to the touch.	Trace	< 5 %	C - Core Sample	
		Slightly	5 - 12%	S - SPT Sample	
Moist	Damp but no visible moisture.	Little	12 - 25%	B - Bulk Sample	
Wet	Visible free water, usually below the water table.	Some	25 - 50 %	CK - Chunk Sample	
				R - Ring Sample	
				N - Nuclear Gauge Test	
				▽ - Water Table	

DATE  
2023

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RG

**Simplified USCS Soils  
Classification Chart**

**NoorzayGeo**

B

# NoorzayGeo

## SUBSURFACE EXPLORATION LOG Exploratory Boring No. 1

Project Number: 23028

Date: 4/27/23

Logged By: MN

Type of Rig: GT-16

Drive Wt. 140 lbs.

Elevation: 43.5

Drill Hole Dia.: 8"

Drop: 30"

Boring Depth (ft.): 51.5

Depth (ft.)	Sample Type	Penetration Resistance	Soil Classification	Dry Density (lb/ft <sup>3</sup> )	Moisture Content (%)	Lithology	Groundwater	Description
1	B		CL			Qaf		<b>Artificial Fill:</b> Clay, black, dry, stiff, with gravel, some bricks in fill
2								
3			CL			Ohpr-s		<b>Paralic Deposits:</b> Sandy clay, brown, moist, stiff, with gravel
4								
5	S	3						Sandy clay, brown, moist, stiff, some gravel
6		4						
7		5						
8								
9								
10	S	1	SC					Clayey sand, brown, moist, very loose to loose, with gravel
11		1						
12		3						
13								
14			CL					Clay, brown to gray brown, moist, soft to firm, trace gravel
15	S	1						
16		2						
17		2						
18								
19								
20	S	2	CL					Sandy clay with gravel, brown, moist to very moist, firm to stiff
21		3						
22		5						
23								
24								

S - SPT Sample    R - Ring Sample    B - Bulk Sample    N - Nuclear Gauge Test    D - Disturbed Sample

# NoorzayGeo

## SUBSURFACE EXPLORATION LOG Exploratory Boring No. 1 (con't.)

Project Number: 23028

Date: 4/27/23

Logged By: MN

Type of Rig: GT-16

Drive Wt. 140 lbs.

Elevation: 43.5

Drill Hole Dia.: 8"

Drop: 30"

Boring Depth (ft.): 51.5

Depth (ft.)	Sample Type	Penetration Resistance	Soil Classification	Dry Density (lb/ft <sup>3</sup> )	Moisture Content (%)	Lithology	Groundwater	Description
25	S	2	SC/CL			Qhpr-s		<b>Paralic Deposits (con't):</b> Clayey sand to sandy clay, brown, moist to very moist, loose to firm
26		2						
27		4						
28								
29			SP					Poorly graded sand, tan brown, moist, dense, fine to medium sand
30	S	7						
31		16						
32		25						
33								
34								
35	S	10						
36		23						...very dense
37		37				Tsq	▽	<b>Sisquoc Shale:</b> Claystone, massive, gray brown, moist, hard. Recovered as clay. Groundwater measured at 37.1' bgs.
38								Claystone, gray, wet, hard, with fine sand
39								
40	S	14						
41		30						
42		50/5.5"						Clayey siltstone to silty claystone, gray, wet, hard; fine-grained sand
43								
44								
45	S	15						
46		33						
47		50/5.5"						
48								

S - SPT Sample    R - Ring Sample    B - Bulk Sample    N - Nuclear Gauge Test    D - Disturbed Sample



# NoorzayGeo

## SUBSURFACE EXPLORATION LOG Exploratory Boring No. 1 (con't.)

Project Number: 23028

Date: 4/27/23

Logged By: MN

Type of Rig: GT-16

Drive Wt. 140 lbs.

Elevation: 43.5

Drill Hole Dia.: 8"

Drop: 30"

Boring Depth (ft.): 51.5

Depth (ft.)	Sample Type	Penetration Resistance	Soil Classification	Dry Density (lb/ft <sup>3</sup> )	Moisture Content (%)	Lithology	Groundwater	Description
49						Tsq		Sisquoc Shale: (con't): Clayey siltstone to silty claystone, gray, wet, hard, fine-grained sand
50	S	18						
51		30						
51.5		50/5.5"						
52								End of boring at 51.5' bgs
53								Groundwater encountered at 37.1' bgs
54								Slight caving noted
55								Backfilled with soil cuttings
56								
57								
58								
59								
60								
61								
62								
63								
64								
65								
66								
67								
68								
69								
70								
71								
72								

S - SPT Sample    R - Ring Sample    B - Bulk Sample    N - Nuclear Gauge Test    D - Disturbed Sample

# NoorzayGeo

## SUBSURFACE EXPLORATION LOG Exploratory Boring No. 2

Project Number: 23028  
Type of Rig: GT-16  
Drill Hole Dia.: 8"

Date: 4/27/23  
Drive Wt. 140 lbs.  
Drop: 30"

Logged By: MN  
Elevation: 43.2  
Boring Depth (ft.): 16.5

Depth (ft.)	Sample Type	Penetration Resistance	Soil Classification	Dry Density (lb/ft <sup>3</sup> )	Moisture Content (%)	Lithology	Groundwater	Description
1			SC/CL			Qaf		Artificial Fill: Clayey sand to sandy clay, black, dry, loose to stiff, with gravel
2								
3			SC/CL			Qhpr-s		Paralic Deposits: Clayey sand to sandy clay, brown, moist, loose to stiff, with gravel
4								
5	R	4						
6		5		87.1	24.3			
7		6						
8								
9								
10	R	4						...very loose to firm
11		4		82.9	26.5			
12		4						
13								
14								
15	R	7						Clayey sand to sandy clay with gravel, brown, moist, loose to stiff, cobble in shoe of sampler
16		8		81.3	25.2			
17		6						End of boring at 16.5' bgs No groundwater encountered No caving noted Backfilled with soil cuttings
18								
19								
20								
21								
22								
23								
24								

S - SPT Sample    R - Ring Sample    B - Bulk Sample    N - Nuclear Gauge Test    D - Disturbed Sample

# NoorzayGeo

## SUBSURFACE EXPLORATION LOG Percolation Test No. 1

Project Number: 23028

Date: 4/27/23

Logged By: MN

Type of Rig: GT-16

Drive Wt. 140 lbs.

Elevation: 44.6

Drill Hole Dia.: 12"

Drop: 30"

Boring Depth (ft.): 5

Depth (ft.)	Sample Type	Penetration Resistance	Soil Classification	Dry Density (lb/ft <sup>3</sup> )	Moisture Content (%)	Lithology	Groundwater	Description
1			SC/CL			Qaf		Artificial Fill: Sandy clay to clayey sand, black, dry, stiff, some gravels
2								
3			SC			Qhpr-s		Paralic Deposits: Clayey sand, brown, moist, medium dense
4	B 4-5'							
5								End of boring at 5' bgs and used for percolation test No groundwater encountered No caving noted Backfilled with soil cuttings
6								
7								
8								
9								
10								
11								
12								

S - SPT Sample    R - Ring Sample    B - Bulk Sample    N - Nuclear Gauge Test    D - Disturbed Sample

# NoorzayGeo

## SUBSURFACE EXPLORATION LOG Percolation Test No. 2

Project Number: 23028

Date: 4/27/23

Logged By: MN

Type of Rig: GT-16

Drive Wt. 140 lbs.

Elevation: 44.3

Drill Hole Dia.: 12"

Drop: 30"

Boring Depth (ft.): 4

Depth (ft.)	Sample Type	Penetration Resistance	Soil Classification	Dry Density (lb/ft <sup>3</sup> )	Moisture Content (%)	Lithology	Groundwater	Description
1			CL			Qaf		Artificial Fill: Sandy clay, black, dry, stiff, some gravels
2								
3	B		CL			Qhpr-s		Paralic Deposits: Sandy clay, brown, moist, stiff, cobbles and gravels at 4'
3-4'								
4								End of boring at 4' bgs and used for percolation test No groundwater encountered No caving noted Backfilled with soil cuttings
5								
6								
7								
8								
9								
10								
11								
12								

S - SPT Sample    R - Ring Sample    B - Bulk Sample    N - Nuclear Gauge Test    D - Disturbed Sample

# NoorzayGeo

## SUBSURFACE EXPLORATION LOG Percolation Test No. 3

Project Number: 23028

Date: 4/27/23

Logged By: MN

Type of Rig: GT-16

Drive Wt. 140 lbs.

Elevation: 44.7

Drill Hole Dia.: 12"

Drop: 30"

Boring Depth (ft.): 4

Depth (ft.)	Sample Type	Penetration Resistance	Soil Classification	Dry Density (lb/ft <sup>3</sup> )	Moisture Content (%)	Lithology	Groundwater	Description
1			CL			Qaf		<b>Artificial Fill:</b> Sandy clay, black, dry, stiff, with gravels
2								
3								
3-4'	B		SC			Qhpr-s		<b>Paralic Deposits:</b> Clayey sand with gravels, brown, moist, medium dense, gravels and cobbles at 4'
4								End of boring at 4' bgs and used for percolation test No groundwater encountered No caving noted Backfilled with soil cuttings
5								
6								
7								
8								
9								
10								
11								
12								

S - SPT Sample    R - Ring Sample    B - Bulk Sample    N - Nuclear Gauge Test    D - Disturbed Sample

# NoorzayGeo

## SUBSURFACE EXPLORATION LOG Percolation Test No. 4

Project Number: 23028

Date: 4/27/23

Logged By: MN

Type of Rig: GT-16

Drive Wt. 140 lbs.

Elevation: 43.8

Drill Hole Dia.: 12"

Drop: 30"

Boring Depth (ft.): 10

Depth (ft.)	Sample Type	Penetration Resistance	Soil Classification	Dry Density (lb/ft <sup>3</sup> )	Moisture Content (%)	Lithology	Groundwater	Description
1			CL			Qaf		<b>Artificial Fill:</b> Sandy clay, black, dry, stiff, with gravels
2								
3			CL			Qhpr-s		<b>Paralic Deposits:</b> Sandy clay, brown, moist, stiff, with gravels
4	B 4-5'							
5								
6								
7								
8								
9	B 9-10'		SC					Clayey sand, brown, moist to very moist, loose to medium dense, with gravels
10								End of boring at 10' bgs and used for percolation test No groundwater encountered No caving noted Backfilled with soil cuttings
11								
12								

S - SPT Sample    R - Ring Sample    B - Bulk Sample    N - Nuclear Gauge Test    D - Disturbed Sample

## **APPENDIX C**

### **LABORATORY TESTING**

# NoorzayGeo

## In-Situ Moisture Content and Dry Density ASTM D2937

Job Name: Santa Paula Ave. - La Conchita  
Job Number: 23028  
Sampled By: M. Noorzay  
Date Sampled: 4/27/23

Tested By : M. Noorzay  
Date Completed: 5/9/23  
Input By: M. Noorzay

Boring Number	B-2	B-2	B-2			
Sample Depth (ft)	5	10	15			
Sample Number	1	2	3			
Sample Type	RING	RING	RING			
USCS Description	SC/CL	SC/CL	SC/CL			
Number of Rings	4	4	3			
Total Weight of Rings + Soil (gms)	704	687.5	504.5			
Volume of Rings(ft <sup>3</sup> )(1r = 0.0027 ft <sup>3</sup> )	1.063E-02	1.063E-02	7.972E-03			
Weight of Rings (gms)(1r = 45.497 g)	182.0	182.0	136.5			
Weight of Soil (gms)	522.0	505.5	368.0			
Wet Density (pcf)	108.3	104.8	101.8			
% Saturation (Assumed Gs=2.7)	70.2	69.3	63.4			
Container Number	1	2	3			
Tare (gms)	0.0	0.0	0.0			
Wet Soil + Tare (gms)	248.2	250.0	221.5			
Dry Soil + Tare (gms)	199.7	197.6	176.9			
Weight of Water (gms)	48.5	52.4	44.6			
Water Content (%)	24.3	26.5	25.2			
Dry Density (pcf)	87.1	82.9	81.3			



Job Name: Santa Paula Ave.- La Conchita

Tested By : M. Noorzay

Job Number: 23028

Date Completed: 5/9/23

Sampled By: M. Noorzay

Input By: M. Noorzay

Date Sampled: 4/27/23

Boring No.	Depth (ft.)	B= Original Dry Mass (g)	C= Wash Dry Mass (g)	A= % Passing #200	USCS
B-1	5	173.6	85.8	50.6	CL
B-1	10	162.5	97.6	39.9	SC
B-1	15	153.1	56.7	63.0	CL
B-1	20	174.9	82.2	53.0	CL
B-1	30	215.0	207.9	3.3	SP
B-1	40	187.8	56.2	70.1	CL
B-1	45	204.4	50.5	75.3	CL/ML
P-1	4-5	199.3	105	47.3	SC
P-2	3-4	201.3	99	50.8	CL
P-3	3-4	202.9	110.1	45.7	SC
P-4	4-5	198.4	71.2	64.1	CL
P-4	9-10	198.1	119.7	39.6	SC

**Calculation for Percent of Material Finer than 75-µm (No. 200) Sieve by Washing:**

$$A = \frac{B - C}{B} \times 100$$

Where:

A= Percent of Material Finer than 75-µm (No.200) Sieve by Washing

B= Original Dry Mass of Sample (g)

C= Dry Mass of Sample after Washing (g)

Note: Report the material passing the 75-µm (No. 200) sieve by washing to the nearest 0.1%.

If greater than 10%, report to the nearest 1%.

# NoorzayGeo

## Expansion Index

ASTM D4829

Job Name:	<u>Santa Paula Ave.- La Conchita</u>	Tested By :	<u>M. Noorzay</u>
Job Number:	<u>23028</u>	Date Completed:	<u>5/9/23</u>
Sampled By:	<u>M. Noorzay</u>	Input By:	<u>M. Noorzay</u>
Date Sampled:	<u>4/27/23</u>	Sample Number:	<u>B-1 @ 0-5'</u>

SAMPLE CONDITION	Initial	Initial	Initial
Wt. Specimen & Ring (gr)	558.6		
Wt. of ring (gr)	179.7		
Wt. Specimen (gr)	378.9		
Wt. Specimen (lbs)	0.83358		
Specimen diameter (in)	4		
Init. Spec. Height (in)	1		
Volume of ring (cu. Ft.)	0.007272		
Moist Density (pcf)	114.63		
Wt. moist soil+tare (gr)	200		
Wt. dry soil+tare (gr)	177.9		
Wt. of tare (gr)	0		
Wt. dry soil (gr)	177.9		
Wt. of water (gr)	22.1		
M/C (%)	12.4		
DRY DENSITY (pcf)	101.96		
% Saturation* (48-52)	51		

Final Moisture	Start (g)	384.9
	End (g)	293.9
	%	31.0

Date	Time	Dial
5/7/23	6:00PM	0.462
5/7/23	6:10PM	0.475
5/7/23	6:30PM	0.482
5/8/23	6:00PM	0.510

Expansion Index:	48
Expansion Potential:	LOW

Expansion Index	Potential Expansion
0-20	Very Low
21-50	Low
51-90	Medium
91-130	High
Above- 130	Very High

# NoorzayGeo

## Modified Proctor

ASTM D1557

Job Name: Santa Paula Ave.- La Conchita

Tested By : M. Noorzay

Job Number: 23028

Date Completed: 5/9/23

Sampled By: M. Noorzay

Input By: M. Noorzay

Date Sampled: 4/27/23

Sample Number: B-1 @ 0-5'

Sample Description: SC/CL

Trial Number	1	2	3	4	5
Water Added (%)	0	2	4	6	
Weight of Soil + Mold (grams)	5778.9	5842.4	5797.0	5760.7	
Weight of Mold (grams)	4117.9	4117.9	4117.9	4117.9	
Weight of Wet Soil (grams)	1661.0	1724.5	1679.1	1642.8	
Wet Density (pcf)	109.9	114.1	111.1	108.7	

Container ID	1	2	3	4	
Wet Soil + Container (grams)	200.0	200.0	200.0	200.0	
Dry Soil + Container (grams)	173.4	169.8	166.8	164.2	
Weight of Container (grams)	0.0	0.0	0.0	0.0	
Weight of Dry Soil (grams)	173.4	169.8	166.8	164.2	
Weight of Water (grams)	26.6	30.2	33.2	35.8	
Moisture Content (%)	15.3	17.8	19.9	21.8	
Dry Density (pcf)	95.2	96.8	92.6	89.2	

Compaction Method

ASTM D1557 ☒

ASTM D698 ☐

Method ☐ B

Mold Size ☐ 4

Mold Vol. ☐ 0.0333333

Preparation Method

Moist ☒ X

Dry ☐

Maximum Dry Density (pcf)

**96.8**

Maximum Dry Density w/ Rock Correction (pcf)

**102.7**

Optimum Moisture Content (%)

**17.8**

Optimum Moisture Content w/ Rock Correction (%)

**16.0**

### METHOD B

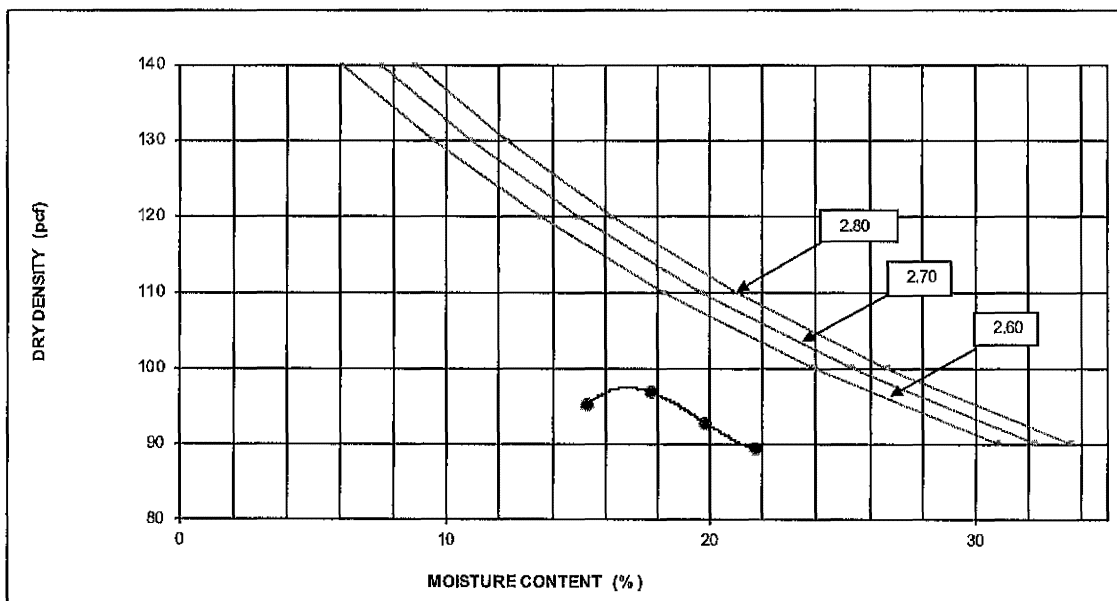
Percent Retained on 3/8" Sieve:

**13.9%**

Mold : 4 in. (101.6 mm) diameter

Layers : 5 (Five)

Blows per layer : 25 (Twenty-five)



# NoorzayGeo

## Direct Shear

ASTM D3080

Job Name: Santa Paula Ave.- La Conchita

Tested By : M. Noorzay

Job Number: 23028

Date Completed: 5/9/23

Sampled By: M. Noorzay

Input By: M. Noorzay

Date Sampled: 4/27/23

Sample Number: B-1 @ 0-5'

Sample Description: SC/CL

Samples Tested	1	2	3
Boring ID	B-1	B-1	B-1
Depth (in/ft.)	0-5	0-5	0-5

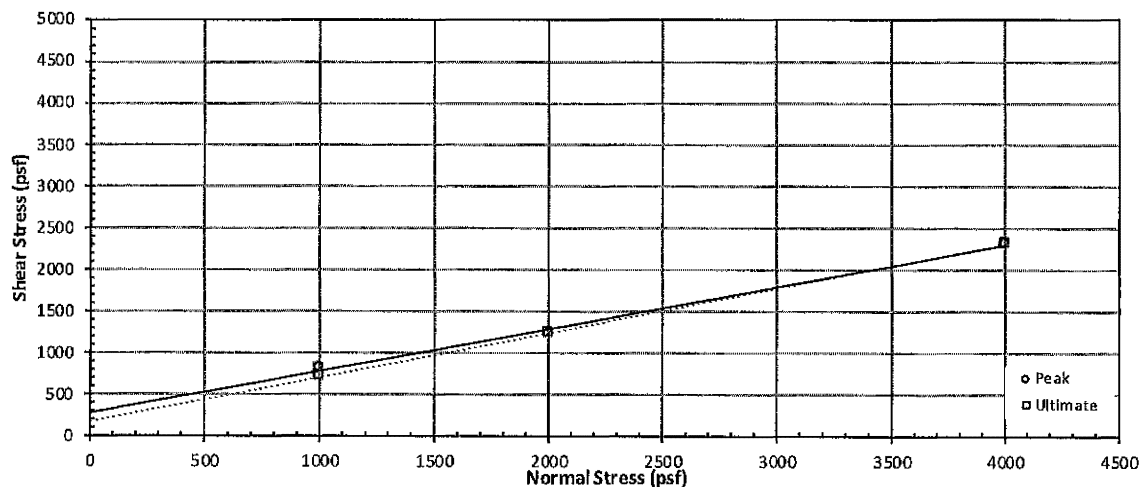
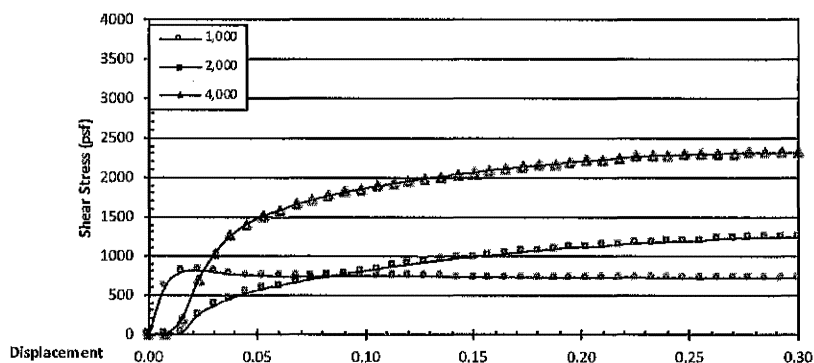
Friction, phi (Deg)  
Cohesion (psf)

Peak	Ultimate
26.8	28.1
276.4	180.6

Normal Stress (psf)	1000	2000	4000
Maximum Shear Stress (psf)	814	1241	2315
Ultimate Shear Stress (psf)	719	1238	2315
Soil Type	SC/CL	SC/CL	SC/CL

Sample Type: RM  
Method: Drained  
Consolidation: Yes  
Saturation: Yes  
Strain Rate (in/min): 0.005

Shear Stress v. Displacement





### Soil Analysis Lab Results

Client: Noorzay Geotechnical Services, Inc.  
Job Name: APN 0600062325, La Conchita  
Client Job Number: NGS# 23028  
Project X Job Number: S230504C  
May 5, 2023

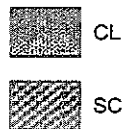
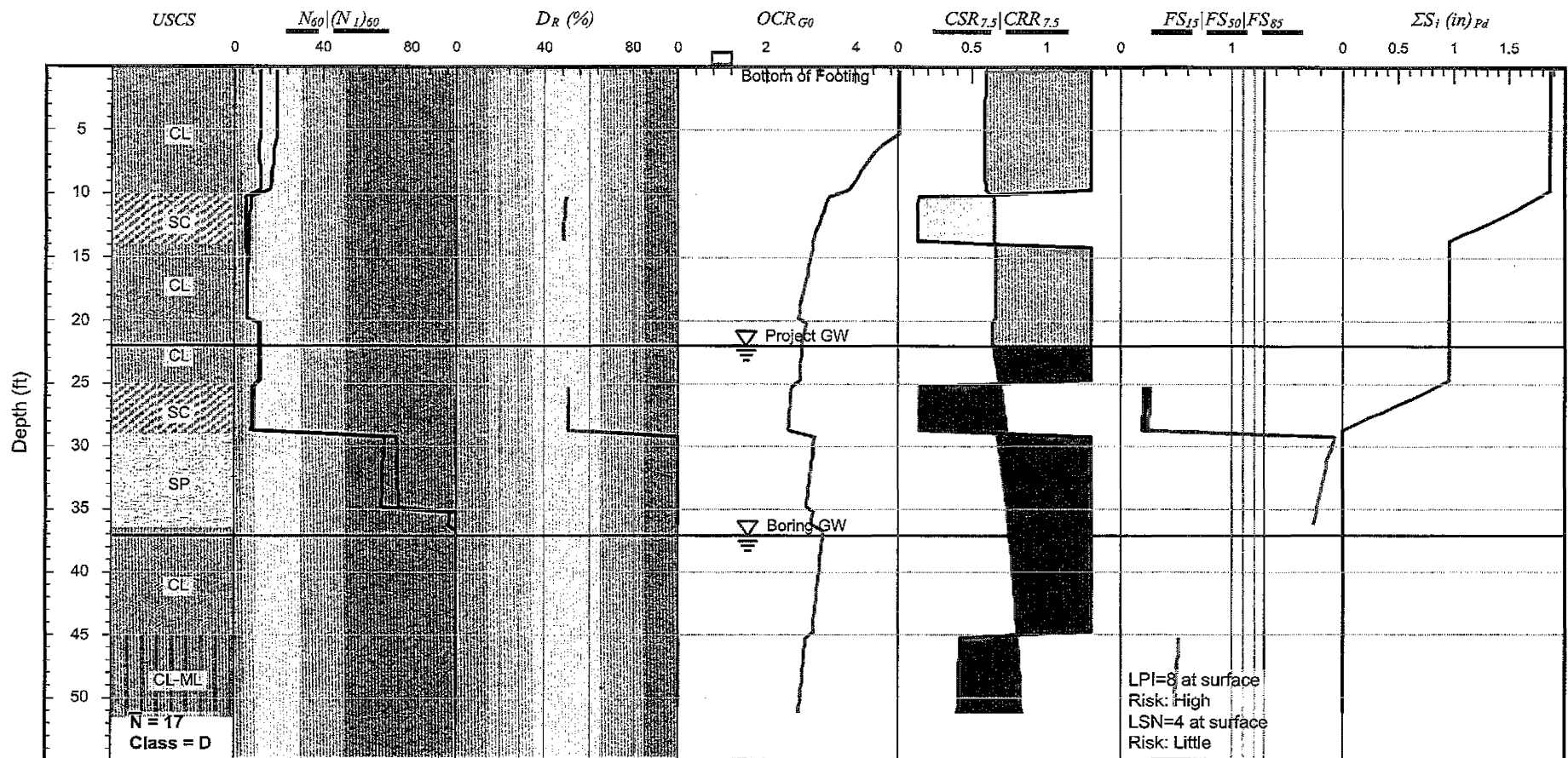
Bore# / Description	Method	ASTM D4327		ASTM D4327		ASTM G187		ASTM G51
	Depth	Sulfates $\text{SO}_4^{2-}$		Chlorides $\text{Cl}^-$		Resistivity As Rec'd   Minimum		pH
	(ft)	(mg/kg)	(wt%)	(mg/kg)	(wt%)	(Ohm-cm)	(Ohm-cm)	
B-1 SC/CL	0-5	17.7	0.0018	4.8	0.0005	3,819	2,546	7.9

Cations and Anions, except Sulfide and Bicarbonate, tested with Ion Chromatography  
mg/kg = milligrams per kilogram (parts per million) of dry soil weight  
ND = 0 = Not Detected | NT = Not Tested | Unk = Unknown  
Chemical Analysis performed on 1:3 Soil-To-Water extract  
PPM = mg/kg (soil) = mg/L (Liquid)

**Note:** Sometimes a bad sulfate hit is a contaminated spot. Typical fertilizers are Potassium chloride, ammonium sulfate or ammonium sulfate nitrate (ASN). So this is another reason why testing full corrosion series is good because we then have the data to see if those other ingredients are present meaning the soil sample is just fertilizer-contaminated soil. This can happen often when the soil samples collected are simply surface scoops which is why it's best to dig in a foot, throw away the top and test the deeper stuff. Dairy farms are also notorious for these items.

**APPENDIX D**  
**GEOTECHNICAL CALCULATIONS**

C:\Users\moo\OneDrive\Documents\Projects\230228\230228 - APN 0600062325, La Conchita\GeoSuite\_230228\_B-1.csv



SP

CL-ML

#### Earthquake & Groundwater Information:

Magnitude = 6.98  
Max. Acceleration = 1.137 g  
Project GW = 22 ft  
Maximum Settlement = 1.87 in  
Settl. at Bottom of Footing = 1.87 in

#### Liquefaction: Boulanger & Idriss (2010-16)

Settl.: [dry] Pradel (1998); [sat] Idriss & Boulanger (2008)  
Lateral spreading: Idriss & Boulanger (2008)  
M correction: [Sand; Clay] Boulanger & Idriss (2004)  
cv correction: Idriss & Boulanger (2008)  
Stress reduction: Idriss & Boulanger (2008)

#### Liquefaction Potential - SPT Data

Project:	Proposed Single Family Residence				
Location:	APN 0600062325, Santa Paula Avenue, La Conchita, California				
Job Number:	23028	Boring No.:	B-1	Enclosure:	D-1

# NoorzayGeo

**APPENDIX E**  
**PERCOLATION DATA**



**LEACH LINE PERCOLATION TEST DATA**

Location:	APN 0600062325, La Conchita		Test Hole Number:	P-1
Client:	Ms. Jennifer Vergel		Job Number:	23028
Depth (ft):	5'		Tested By:	MN
Size of Test Hole	60	in. deep	Date Excavated/Presoaked:	4/27/23
	12	in. dia.	Date Tested:	4/28/23
Weather:	mid 60s, low 70s, overcast			
Soil Classification:	clayey sand (SC)			

**PRESOAK PERIOD**

Test holes were pre-soaked overnight, 6 inches of water seeped away in less than 30 minutes, time interval of 10 minutes was used for percolation testing

**TEST PERIOD**

Time		Time Interval (h:mm:ss)	Water Level (ft)	Change in Water Level (in.)	Percolation Rate (min./in.)
Start:	9:25:00 AM	0:10:00	4.50	2.64	3.79
Stop:	9:35:00 AM		4.72		
Start:	9:35:00 AM	0:10:00	4.72	3.24	3.09
Stop:	9:45:00 AM		4.99		
Start:	9:45:00 AM	0:10:00	4.50	3.24	3.09
Stop:	9:55:00 AM		4.77		
Start:	9:55:00 AM	0:10:00	4.77	2.28	4.39
Stop:	10:05:00 AM		4.96		
Start:	10:05:00 AM	0:10:00	4.50	2.76	3.62
Stop:	10:15:00 AM		4.73		
Start:	10:15:00 AM	0:10:00	4.73	2.64	3.79
Stop:	10:25:00 AM		4.95		

**LEACH LINE PERCOLATION TEST DATA**

Location:	APN 0600062325, La Conchita		Test Hole Number:	P-2
Client:	Ms. Jennifer Vergel		Job Number:	23028
Depth (ft):	4'		Tested By:	MN
Size of Test Hole	48	in. deep	Date Excavated/Presoaked:	4/27/23
	12	in. dia.	Date Tested:	4/28/23
Weather:	mid 60s, low 70s, overcast			
Soil Classification:	sandy clay (CL)			

**PRESOAK PERIOD**

Test holes were pre-soaked overnight, 6 inches of water seeped away in less than 30 minutes, time interval of 10 minutes was used for percolation testing

**TEST PERIOD**

Time		Time Interval (h:mm:ss)	Water Level (ft)	Change in Water Level (in.)	Percolation Rate (min./in.)
Start:	9:25:00 AM	0:10:00	3.50	1.20	8.33
Stop:	9:35:00 AM		3.60		
Start:	9:35:00 AM	0:10:00	3.60	1.20	8.33
Stop:	9:45:00 AM		3.70		
Start:	9:45:00 AM	0:10:00	3.70	1.08	9.26
Stop:	9:55:00 AM		3.79		
Start:	9:55:00 AM	0:10:00	3.79	2.28	4.39
Stop:	10:05:00 AM		3.98		
Start:	10:05:00 AM	0:10:00	3.50	1.80	5.56
Stop:	10:15:00 AM		3.65		
Start:	10:15:00 AM	0:10:00	3.65	1.68	5.95
Stop:	10:25:00 AM		3.79		

**LEACH LINE PERCOLATION TEST DATA**

Location:	APN 0600062325, La Conchita		Test Hole Number:	P-3
Client:	Ms. Jennifer Vergel		Job Number:	23028
Depth (ft):	4'		Tested By:	MN
Size of Test Hole	48	in. deep	Date Excavated/Presoaked:	4/27/23
	12	in. dia.	Date Tested:	4/28/23
Weather:	mid 60s, low 70s, overcast			
Soil Classification:	clayey sand (SC)			

**PRESOAK PERIOD**

Test holes were pre-soaked overnight, 6 inches of water seeped away in less than 30 minutes, time interval of 10 minutes was used for percolation testing

**TEST PERIOD**

Time		Time Interval (h:mm:ss)	Water Level (ft)	Change in Water Level (in.)	Percolation Rate (min./in.)
Start:	9:25:00 AM	0:10:00	3.50	3.36	2.98
Stop:	9:35:00 AM		3.78		
Start:	9:35:00 AM	0:10:00	3.78	2.52	3.97
Stop:	9:45:00 AM		3.99		
Start:	9:45:00 AM	0:10:00	3.50	2.40	4.17
Stop:	9:55:00 AM		3.70		
Start:	9:55:00 AM	0:10:00	3.70	2.16	4.63
Stop:	10:05:00 AM		3.88		
Start:	10:05:00 AM	0:10:00	3.50	1.68	5.95
Stop:	10:15:00 AM		3.64		
Start:	10:15:00 AM	0:10:00	3.64	1.68	5.95
Stop:	10:25:00 AM		3.78		

**LEACH LINE PERCOLATION TEST DATA**

Location:	APN 0600062325, La Conchita		Test Hole Number:	P-4
Client:	Ms. Jennifer Vergel		Job Number:	23028
Depth (ft):	10'		Tested By:	MN
Size of Test Hole	120	in. deep	Date Excavated/Presoaked:	4/27/23
	12	in. dia.	Date Tested:	4/28/23
Weather:	mid 60s, low 70s, overcast			
Soil Classification:	clayey sand (SC) to sandy clay (CL)			

**PRESOAK PERIOD**

Test holes were pre-soaked overnight, 6 inches of water seeped away in less than 30 minutes, time interval of 10 minutes was used for percolation testing

**TEST PERIOD**

Time		Time Interval (h:mm:ss)	Water Level (ft)	Change in Water Level (in.)	Percolation Rate (min./in.)
Start:	9:25:00 AM	0:10:00	9.50	6.00	1.67
Stop:	9:35:00 AM		10.00		
Start:	9:35:00 AM	0:10:00	9.50	6.00	1.67
Stop:	9:45:00 AM		10.00		
Start:	9:45:00 AM	0:10:00	9.50	6.00	1.67
Stop:	9:55:00 AM		10.00		
Start:	9:55:00 AM	0:10:00	9.50	6.00	1.67
Stop:	10:05:00 AM		10.00		
Start:	10:05:00 AM	0:10:00	9.50	6.00	1.67
Stop:	10:15:00 AM		10.00		
Start:	10:15:00 AM	0:10:00	9.50	6.00	1.67
Stop:	10:25:00 AM		10.00		