

Planning Director Staff Report – Hearing on January 28, 2016

**County of Ventura · Resource Management Agency · Planning Division** 800 S. Victoria Avenue, Ventura, CA 93009-1740 · (805) 654-2478 · ventura.org/rma/planning

# KANCAL PROPERTIES DUPLEX PLANNED DEVELOPMENT (PD) PERMIT, PL15-0150

# A. PROJECT INFORMATION

- **1. Request:** The applicant requests approval of a PD Permit (Case No. PL15-0150) for the demolition of a multi-family dwelling (triplex) and construction of a two-family dwelling.
- **2. Applicant/Property Owner:** Kancal Properties, LLC, 2420 N. Woodlawn, Building 300, Wichita, Kansas, 67200
- **3. Applicant's Representative:** Mr. Walt Philipp, 950 County Square Drive #116, 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 0.09 acre property is located at 3289 Ocean Drive, near the intersection of Ocean Drive and Santa Ana Avenue, near the city of Oxnard, in the unincorporated area of Ventura County. The Tax Assessor's parcel number for the parcel that constitutes the project site is 206-0-226-010 (Exhibit 2).
- 6. Project Site Land Use and Zoning Designations:
  - a. <u>Countywide General Plan Land Use Map Designation</u>: Existing Community Urban Reserve (Exhibit 2)
  - b. <u>Coastal Area Plan Land Use Map Designation</u>: Residential High 6.1-36 dwelling units/acre (DU/ac) (Exhibit 2)
  - c. <u>Zoning Designation</u>: RBH (Residential Beach Harbor) (Exhibit 2)

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

Location in Relation to the Project Site		Zoning		Land Uses/Development
North	CRPD-25 Residential Development	du/ac , 25 dwe	(Coastal Planned Illing units	Residential (Multi-Family)

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Location in Relation to the Project Site	Zoning	Land Uses/Development	
	per acre)		
East	RBH	Residential	
South	RBH	Residential	
West	COS-10 ac-sdf (Coastal Open Space, 10 acre minimum lot size- slope density formula)	Beach	

- 8. History: Planning Division staff reviewed the permitting and violation history of the existing triplex and subject property. The existing triplex has existed on the subject property since at least 1975; however, it is unclear as to exactly when the existing triplex was built prior to oldest Building and Safety inspection record, dated May 20, 1975. The oldest Planning Division document associated with the subject property is Zoning Clearance 33637, dated November 9, 1977, for the addition of a second story including an additional bathroom to the triplex. No open or closed violation cases are associated with the subject property.
- **9. Project Description:** The applicant is requesting approval of a PD Permit to demolish an existing triplex and then construct a two-family dwelling (Ventura CZO, Section 8174-5 and Section 8172-1, definition of "Dwelling, Two-Family").

The proposed two-family dwelling will include 5,684 square feet of floor space with an additional 898 square feet of garage space, and 799 square feet of deck space split between the two dwelling units. The proposed two-family dwelling will be 28 feet tall as measured from the established flood clearance elevation. Each of the proposed dwelling units will have access to a two-car garage to accommodate a total of four parking spaces. Access to the proposed two-family dwelling from Ocean Drive will be provided by a 20 foot long, 30 foot wide driveway. No native vegetation will be removed as part of the proposed project. The proposed two-family dwelling, as well as construction activities associated with the two-family dwelling, will not extend beyond the subject property.

The Channel Islands Beach Community Services District will continue to provide water and the City of Oxnard will continue to provide sewage disposal service for the continued residential use of the property. Ocean Drive will continue to provide access to the site (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 or Regulations, Division 6, Chapter 3, Section 15000 et seq.), the subject application is a "project" that 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 proposed project qualifies for a Class 3 (New Construction or Conversion of Small Structures) Categorical Exemption pursuant to Section 15303 of the CEQA Guidelines. The Class 3 exemption applies to projects that involve the construction and location of limited numbers of new, small facilities or structures, specifically in this case, a duplex or similar multi-family residential structure totaling nor more than four dwelling units. As stated in Section A.9 of this staff report (above), the proposed project consists of the demolition of an existing triplex and construction and use of a new two-family dwelling. Furthermore, none of the exceptions set forth in Section 15300.2 apply to the proposed project. Therefore, this project is categorically exempt pursuant to Section 15303 of the CEQA Guidelines.

# C. CONSISTENCY WITH THE GENERAL PLAN

The Ventura County General Plan Goals, Policies and Programs (2015, page 4) states:

...in the unincorporated area of Ventura County, zoning and any permits issued thereunder, any subdivision of land, any public works project, any public (County, Special District, or Local Government) land acquisition or disposition, and any specific plan, must be consistent with the Ventura County General Plan Goals, Policies and Programs, and where applicable, the adopted Area Plan.

Furthermore, the Ventura County CZO (Section 8181-3.5.a) states that in order to be approved, a Coastal PD Permit must be found consistent with all applicable policies of the Ventura County Coastal Area Plan.

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

**1. Resources Policy 1.1.2-1:** All General Plan amendments, zone changes and discretionary development shall be evaluated for their individual and cumulative impacts on resources in compliance with the California Environmental Quality Act.

**Resources Policy 1.1.2-2:** Except as otherwise covered by a more restrictive policy within the Resources Chapter, significant adverse impacts on resources identified in environmental assessments and reports shall be mitigated to less than significant levels or, where no feasible mitigation measures are available, a statement of overriding considerations shall be adopted.

As discussed in Section B of this staff report (above), the proposed project's individual impacts and contribution to cumulative impacts to resources have been reviewed by the Lead Agency in compliance with CEQA. The proposed project is categorically exempt from environmental review pursuant to Section 15303 (New

Construction or Conversion of Small Structures) of the CEQA Guidelines, and will not create a significant adverse impact to resources.

Based on the discussion above, the proposed project is consistent with Policies 1.1.2-1 and 1.1.2-2.

**2. Resources Policy 1.3.2-2:** Discretionary development shall comply with all applicable County and State water regulations.

**Resources Policy 1.3.2-4:** Discretionary development shall not significantly impact the quantity or quality of water resources within watershed, groundwater recharge areas or groundwater basins.

The proposed project includes the demolition of an existing triplex and construction and use of a two-family dwelling. The net reduction in number of dwelling units would reduce the water supply service connections to the property. The Channel Islands Beach Community Services District will continue to provide water for the property, and the City of Oxnard will continue to provide sewage disposal service for the continued residential use of the subject property. Therefore, the proposed project will not significantly impact the quantity or quality of water resources.

Based on the discussion above, the proposed project is consistent with Policies 1.3.2-2 and 1.3.2-4.

**3. Resources Policy 1.10.2-1:** Discretionary development which would cause significant impacts to coastal beaches or sand dunes shall be prohibited unless the development is conditioned to mitigate the impacts to less than significant levels.

**Resources Policy 1.10.2-2:** Discretionary developments which would result in the removal of dune vegetation shall be conditioned to replace the vegetation.

The proposed demolition of the existing triplex and construction of a two-family dwelling does not include ground disturbance or grading impacts that would extend beyond the boundaries of the subject property (Exhibit 4, Condition No. 3), on the adjacent beach, or within areas that have dune vegetation. Therefore, the proposed project will not cause significant impacts to coastal beaches or result in the removal of dune vegetation.

Based on the discussion above, the proposed project is consistent with Policies 1.10.2-1 and 1.10.2-2.

4. Hazards Policy 2.12.2-2: Discretionary development in areas adjacent to coastal beaches shall be allowed only if the Public Works Agency with technical support from the Ventura County Watershed Protection District, determines from the applicant's submitted Wave Run-Up Study that wave action and beach erosion are not hazards to the proposed development, or that the hazard would be mitigated to a less-than-significant level, and that the project will not contribute significantly to beach erosion.

Pursuant to the California Coastal Commission's Coastal Sea Level Rise Policy Guidance, the provided Coastal Hazard and Wave Runup Study (GeoSoils Inc., September 2015) analyzed sea level rise in the area of the project, impacts that sea level rise may have on the project area, and how the project may impact coastal resources in the context of sea level rise.

Sea level rise in the project area, defined as the Santa Barbara Littoral Cell, was assessed based on the Highest Water recorded on January 19, 1992, of 8.10 feet above the North American Vertical Datum 1988 (NAVD88) and in 50 year increments. The projected high sea level rise estimate is +2.2 above NAVD88 feet in 50 years and in 100 years about +5.5 feet above NAVD88. Incorporating the highest water level of 8.10 feet results in a future design maximum sea level of +10.3 feet above NAVD88 in 50 years and a future design maximum sea level of +13.6 feet above NAVD88 in 100 years. The Coastal Hazard and Wave Runup Study used these values for assessing impacts associated with sea level rise and the proposed project.

Impacts associated with sea level rise identified in the Coastal Hazard and Wave Runup Study include shoreline erosion, flooding, and wave runup. The current beach is stabilized by the Channel Island Harbor jetty to the southeast and the periodic placement of sand on the nearby beaches from channel dredging and the breakwater for the harbor entrance shelters a portion of the shoreline from incoming ocean swells (GeoSoils, 2015). The study determined that the current beach is wide enough (over 500 feet, as measured from the subject property to the Mean High Tide line) is sufficient to allow for significant short term erosion without eroding to the point where the residence will be subject to wave or wave runup attack. The study analyzed the potential for long-term beach erosion by assuming an erosion rate of 1.0 feet per year, the shoreline may narrow about 75 to 100 feet over the 75 to 100 year life of the project. The beach can migrate about 100 feet landward in the future and still not result in any inundation of the project site. The proposed project is located outside the 100-year floodplain and would be reasonably safe from flooding because of the very wide beach and existing drainage paths away from the proposed project. With respect to wave attack and wave runup, the proposed two-family residence is safe from wave attack and wave runup (GeoSoils, 2015).

The proposed project will not extend beyond the boundaries of the subject property (Exhibit 4, Condition No. 3) and, therefore, does not have the potential to contribute to beach erosion or impact sensitive biological habitats by, for example, construction of a new structure on the beach or the construction of a shoreline protection structure.

Based on the discussion above, the proposed project is consistent with Policy 2.12.2-2.

**5. Hazards Policy 2.13.2-1:** All applicants for discretionary permits shall be required, as a condition of approval to provide adequate water supply and access for fire protections and evacuation purposes.

As stated in this staff report (above), the Channel Islands Beach Community Services District will continue to provide water to the subject property. The Ventura County Fire Protection District (VCFPD) reviewed the proposed project, and determined that the existing water supply and Ocean Drive are adequate for fire protection purposes.

Based on the discussion above, the proposed project is consistent with Policy 2.13.2-1.

- 6. Hazards Policy 2.16.2-1: All discretionary development shall be reviewed for noise compatibility with surrounding uses> noise compatibility shall be determined from a consistent set of criteria based on the standards listed below. An acoustical analysis by a qualified acoustical engineer shall be required of discretionary developments involving noise exposure or noise generation in excess of the established standards. The analysis shall provide documentation of existing and projected noise levels at on-site and off-site receptors, and shall recommend noise control measures for mitigating adverse imapcts.
  - (1) Noise sensitive uses proposed to be located near highways, truck routes, heavy industrial activities and other relatively continuous noise sources shall incorporate noise control measures so that:
    - a. Indoor noise levels in habitable rooms do not exceed CNEL 45.
    - b. Outdoor noise levels do not exceed CNEL 60 or L<sub>eq</sub>1H of 65dB(A) during any hour.
  - (2) Noise sensitive uses proposed to be located near railroads shall incorporate noise control measures so that:
    - a. Guidelines (1)a. and (1)b. above are adhered to.
    - b. Outdoor noise levels do not exceed L<sub>10</sub> of 60dB(A).
  - (3) Noise sensitive uses proposed to be located near airports:
    - a. Shall be prohibited if they are in a CNEL 65 or greater, noise contour.
    - b. Shall be permitted in the CNEL 60 to CNEL 65 noise contour area only if means will be taken to ensure interior noise levels of CNEL 45 or less.
  - (4) Noise generators, proposed to be located near any noise sensitive use, shall incorporate noise control measures so that ongoing outdoor noise levels reeived by the noise sensitive receptor, measured at the exterior wall of the building, does not exceed any of the following standards:
    - a. L<sub>eq</sub>1H of 55dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 6:00 a.m. to 7:00 p.m.
    - b. L<sub>eq</sub>1H of 50dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 7:00 p.m. to 10:00 p.m.
    - c. L<sub>eq</sub>1H of 45dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 10:00 p.m. to 6:00 a.m.

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Section 2.16.2(4) is not applicable to increased traffic noise along any of the roads identified within the 2020 Regional Roadway Network (Figure 4.2.3) Public Facilities Appendix of the Ventura County General Plan (see 2.16.2-1(1)). In addition, State and Federal highways, all railroad line operations, aircraft in flight, and public utility facilities are noise generators having Federal and State regulations that preempt local regulations.

(5) Construction noise shall be evaluated and, if necessary, mitigated in accordance with the County Construction Noise Threshold Criteria and Control Plan.

The proposed two-family dwelling will be a noise sensitive use but is not located near: highways, truck routes, heavy industrial activities, or other relatively continuous noise sources; railroads; or airports. Additionally, the residential use of the property is not considered a noise generator that will adversely affect any nearby noise sensitive uses (e.g., existing, surrounding residences). However, the proposed project will involve noise-generating construction activities that have the potential to adversely affect surrounding residential uses. Therefore, pursuant to the requirements of the Ventura County *Construction Noise Threshold Criteria and Control Plan*, the proposed project will be subject to a condition of approval to limit noise-generating activities to the days and times when construction noise is least likely to adversely affect surrounding residential uses (Exhibit 4, Condition No. 15).

Based on the discussion above, the proposed project is consistent with Policy 2.16.2-1.

**7.** Public Facilities and Services Policy 4.1.2-1: Discretionary development shall be conditioned to contribute land, improvements or funds toward the cost of needed public improvements and services related to the proposed development.

The proposed project consists of the demolition of an existing triplex and construction of a new two-family dwelling. As discussed in the proposed project description (Section A.9 of this staff report, above), the Channel Islands Beach Community Services District provides water and the City of Oxnard Sewer Service provides sewage disposal service for the subject property. Furthermore, an existing, private driveway to Ocean Drive will continue to provide access to the site. No expansion of public facilities is required in order to allow the use of the proposed two-family dwelling.

In addition, the proposed project does not include an expansion of the residential use of the subject property beyond what is currently allowed. Therefore, the proposed project will not require any public improvements and services beyond what currently exists for the current residential use of the subject property.

Based on the discussion above, the proposed project is consistent with Policy 4.1.2-1.

8. Public Facilities and Services Policy 4.1.2-2: Development shall only be permitted in those locations where adequate public services are available (functional), under physical construction or will be available in the near future.

As discussed in Section C.2 of this staff report (above), adequate public services are currently available (functional) for the proposed project. The Channel Islands Beach Community Services District and City of Oxnard Sewer Service provides sewage disposal, for the subject property. The proposed project will not increase water or sewage demand. Furthermore, the proposed project will not increase traffic along Ocean Drive or other roads that afford public access to the project site. Therefore, no improvements to the existing public roadway system are required for the proposed use of the two-family dwelling.

Based on the discussion above, the proposed project is consistent with Policy 4.1.2-2.

**9.** Public Facilities and Services Policy 4.3.2-1: Development that requires potable water shall be provided a permanent potable water supply of adequate quantity and quality that compiles with applicable County and State water regulations. Water systems operated by or receiving water from Casitas Municipal Water District, the Calleguas Municipal Water District or the United Water Conservation District will be considered permanent supplies unless an Urban Water Management Plan (prepared pursuant to Part 2.6 of Division 6 of the Water Code) or a water supply and demand assessment (prepared pursuant to Part 2.10 of Division 6 of the Water Code) demonstrates that there is insufficient water supply to serve cumulative development within the district's service area. When the proposed water supply is to be drawn exclusively from wells in areas where groundwater supplies have been determined by the Environmental Health Division or the Public Works Agency to be questionable or inadequate, the developer shall be required to demonstrate the availability of a permanent potable water supply for the life of the project.

The Channel Islands Beach Community Services District currently serves, and will continue to serve, the project site. The proposed demolition of the existing triplex and construction of a two-family dwelling will reduce, rather than increase, water demand.

Based on the discussion above, the proposed project is consistent with Policy 4.3.2-1.

**10.** Public Facilities and Services Policy 4.4.2-2: Any subdivision, or discretionary change in land use having a direct effect upon the volume of sewage, shall be required to connect to a public sewer system. Exceptions to this policy to allow the use of septic systems may be granted in accordance with County Sewer Policy. Installation and maintenance of septic systems shall be regulated by the County Environmental Health Division in accordance with the County's Sewer Policy, County Building Code, and County Service Area 32.

The proposed project includes the demolition of an existing triplex and construction of a new two-family dwelling. The City of Oxnard Sewer Service

currently provides sewer service for the subject property, and will continue to do so for the proposed project. The proposed project will not increase the volume of sewage as the proposed project will result in a net decrease of one dwelling unit on the subject property. Furthermore, the Resource Management Agency, Environmental Health Division staff reviewed the proposed project and determined that the existing sewer connection is adequate to continue to serve the proposed duplex.

Based on the discussion above, the proposed project is consistent with Policy 4.4.2-2.

**11.Public Facilities and Services Policy 4.8.2-1**: Discretionary development shall be permitted only if adequate water supply, access and response time for fire protection can be made available.

As discussed in this staff report (above), the Channel Islands Beach Community Services District will continue to provide water to the project site. The nearest fulltime fire station to the project site is City of Oxnard Station #6 which is located approximately 1.5 miles away from the project site via Channel Islands Boulevard, Harbor Boulevard, and Santa Ana Avenue. The VCFPD reviewed the proposed project, and found that adequate water supply, access, and response time exist to serve the proposed project.

Based on the discussion above, the proposed project is consistent with Policy 4.8.2-1.

**12.Coastal Area Plan – Shoreline Access Section 30211:** Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

**Coastal Area Plan – Shoreline Access Section 30212:** Public access from the nearest public roadway to the shoreline along the coast shall be provided in new development projects except where (a) 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.

An existing, dedicated accessway exists adjacent to the subject property, between the subject property and the nearest neighbor to the north, that provides access from Ocean Drive to the nearest public beach located immediately adjacent to the subject property. The proposed development will not extend beyond the boundaries of the subject property, such that it would impede any shoreline access routes (Exhibit 4, Condition No. 3). 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 discussion above, the proposed project is consistent with Sections 30211 and 30212 of the Coastal Act.

- 13.Coastal Area Plan Environmentally Sensitive Habitat Areas 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.

The subject property is located approximately 230 feet landward from beach dunes that are mapped as potential western snowy plover habitat. The proposed development and associated construction activities and materials will not extend beyond the boundaries of the subject property (Exhibit 4, Condition No. 3), such that it would disrupt habitat values or significantly degrade these environmentally sensitive habitat areas.

Based on the discussion above, the proposed project is consistent with Section 30240 of the Coastal Act.

- **13.Coastal Area Plan Beach Erosion and Shoreline Structures Section 30253**: New development shall:
  - (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazards.
  - (2) 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.

The subject property is not located within any high fire hazard areas or near any active geologic faults. Additionally, as discussed in this staff report (above), the subject property is not located within the 100-year floodplain. The proposed development will not include development beyond the existing boundaries of the subject property (Exhibit 4, Condition No. 3). Furthermore, the proposed development will not require the construction of shoreline protective devices (Exhibit 6). Therefore, the proposed development will not contribute to beach erosion or alteration of natural landforms along the adjacent shoreline or require construction of shoreline protection devices.

Based on the discussion above, the proposed project is consistent with Section 30253 of the Coastal Act.

**14. Coastal Area Plan Housing 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 series 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.

The proposed project is sited within the Existing Community – Urban Reserve General Plan designation and is surrounded on all sides, excluding the adjacent beach, by residential development. As discussed in this staff report (above), the proposed project will result in a net reduction of one dwelling unit on the subject property and, therefore, will reduce water demand, sewage generation, and traffic generation, when compared to existing conditions. Furthermore, the existing public services, including public roadways, are adequate to serve the proposed development.

Based on the discussion above, the proposed project is consistent with Section 30250(a) of the Coastal Act.

# D. ZONING ORDINANCE COMPLIANCE

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

Pursuant to the Ventura County Ventura County CZO (Section 8174-4), the proposed use is allowed in the RBH zone district with the granting of a PD Permit. Upon the granting of the PD Permit, the proposed project will comply with this requirement.

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

Type of Requirement	Zoning Ordinance Requirement	Complies?	
Minimum Lot Area (Gross)	3,000 square feet per two-family dwelling	Yes, the subject property is 3,967 square feet	
Maximum Percentage of Building Coverage	65%	Yes, the proposed two- family dwelling will cover 57 percent of the subject property.	
Front Setback	20 feet	Yes, the proposed two- family dwelling will be set back 20 feet – 8.5 inches from Ocean Drive.	
Side Setback	3 feet	Yes, the proposed two- family dwelling will be set back 3 feet – 1 inch from	

# Table 1 – Development Standards Consistency Analysis

Type of Requirement	Zoning Ordinance Requirement	Complies?
		each side property line.
Rear Setback	6 feet	Yes, the proposed two- family dwelling will be set back 6 feet from the rear property line.
Maximum Building Height	28 feet	Yes, the proposed two- family dwelling will be 28 feet tall measured from the 14.06 foot flood clearance level.

# Table 1 – Development Standards Consistency Analysis

# 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 Sections C and D of this staff report, the Planning Director can make the finding that the proposed development is consistent with the intent and provisions of the County's Certified Local Coastal Program.

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

The proposed project consists of a request to allow the demolition of an existing triplex and construction of a new two-family dwelling. The immediately surrounding parcels to the north, east, and south support similar residential development, whereas to the west of the project site is beach.

As discussed in Section C of this staff report (above), the proposed project does not include a change of use that has the potential to create any land use conflicts with surrounding residential and beach development, generate new traffic, or introduce physical development that is incompatible with the surrounding, legally established development. Furthermore, as discussed in Section C.5 of this staff report (above)–with the adoption of the recommended condition of approval to limit the days and times of noise-generating construction activities—the proposed project will not generate noise that is incompatible with surrounding residential and beach uses. Therefore, the demolition of the existing triplex and construction of the proposed two-family dwelling will be consistent with the character of the surrounding, legally established 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 project consists of a request for approval of a PD Permit to demolish an existing triplex and construct a new two-family dwelling. This use is not a conditionally permitted use and, therefore, the requirement of this finding does not apply.

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

The proposed demolition of an existing triplex and construction of a new twofamily dwelling will not expand the current permitted use of the subject property. As discussed in Section C of this staff report (above), the proposed project does not include any new physical development that may interfere with surrounding residential and beach uses on other properties located within the vicinity of the subject property. The proposed project will result in a net reduction in traffic generation, water demand, and demand for sewage disposal services, and existing public services are adequate to serve the proposed development along with existing residential development on neighboring property. Furthermore, as discussed in Section D of this staff report (above), the proposed project will comply with the maximum building height, minimum building setback, and maximum building coverage standards of the RBH zone. Therefore, the demolition of the existing triplex and construction of the new two-family dwelling will not be obnoxious or 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].

The proposed demolition of the existing triplex and construction of a new twofamily dwelling will not expand the current permitted use of the subject property. As discussed in Section C of this staff report (above), adequate public resources and infrastructure exist to serve the new two-family dwelling. The Channel Islands Beach Community Services District will continue to provide water, and the City of Oxnard Sewer Service will continue to provide sewage disposal to the subject property. Furthermore, the proposed project will not generate new traffic, and Ocean Drive and the surrounding public road network are adequate to continue serving the new, two-family dwelling. Therefore, the proposed demolition of the existing triplex and construction of the two-family dwelling 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) and Ventura County CZO (Section 8181-6.2 et seq.). 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*. As of the date of this document, the Planning Division has not received any comments.

# G. RECOMMENDED ACTIONS

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

- CERTIFY that the 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 of the CEQA Guidelines;
- 3. **MAKE** the required findings to grant a PD Permit (Case No. PL15-0033) pursuant to 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** PD Permit Case No. PL15-0150, subject to the conditions of approval (Exhibit 4); and
- 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 PD 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.

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If you have any questions concerning the information presented above, please contact Matt Sauter at (805) 654-2492 or matthew.sauter@ventura.org.

Prepared by:

Matt Sauter, Case Planner Residential Permits Section Ventura County Planning Division

#### **EXHIBITS**

Reviewed by:

Dan Klemann, Manager Residential Permits Section Ventura County Planning Division

- Exhibit 2 Aerial Location, General Plan and Zoning Designations, and Land Use Maps Exhibit 3 Site Plans
- Exhibit 4 Conditions of Approval

Exhibit 5 – Soil Engineering Study (Heathcote Geotechnical, 2015)

Exhibit 6 - Coastal Hazard and Wave Run-Up Study (GeoSoils Inc., 2015)





Ventura County, California Resource Management Agency GIS Development & Mapping Services Map created on 12-11-2015



County of Ventura Planning Director Hearing PL15-0150 **Exhibit 2 – Maps** 



Disclaimer: This Map was created by the Venuma County Resource Management Agency, Marging Services - GIS which a designed and operated solidy for the convenience of the County and latted public agencies. The County does no twarrant the accuracy of this marging should be made in relamate thereon.









Торо Мар PL15-0150 APN: 206-0-226-010



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 mapand no decision involving a risk of economic loss or physical injury should be made in reliance thereon.







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County of Ventura Planning Director Hearing PL15-0150 **Aerial Photography** 



Disclaimer: This Map was created by the Ventura County Resource Management Agency, Mapping Services - (35 which is designed and cperate objet /or the conventinence of the County and related public agencies. The County does no warrant the accuracy of this magrand no direction inviking a relate of a conomic less or physical injury should be marke in reliance thereon.







County of Ventura Planning Director Hearing PL15-0150 General Plan & Zoning Map



RH



SITE PLAN 1/8" = 1'-0"

## FLOOD PLAIN CONSTRUCTION REQUIREMENTS

- 1 CENTER LINE OF ADJACENT STREET: 12.56
- 2 APPROVED FLOOD ELEVATION OF THE LOWEST HABITABLE FLOOR IS 14,06, 1988 NAVD.

County of Ventura Planning Director Hearing PL15-0150 **Exhibit 3 – Site Plans** 

VICINITY MAP

N.T.S.

#### INDEX

- C SITE PLAN, PROJECT INFO
- A3. FIRST FLOOR
- A4 SECOND FLOOR
- A5. THIRD FLOOR
- A6 ROOF PLAN
- A7: ELEVATIONS
- A8 ELEVATIONS
- A9 SECTION

# CONSTAL REVIEW

#### BUILDING ANALYSIS

THREE STORY DUPLEX	
TYPE OF OCCUPANCY:	R-3
TYPE OF CONSTRUCTION:	TYPE V-B
FIRE SPRINKLERS:	REQUIRED

#### AREAS

ADDRESS	3285 O D	3289 O. D.
FIRST FLOOR	644 S F	725 S.F.
SECOND FLOOR	991 S.F.	1,181 S.F.
THIRD FLOOR	1,006 S.F.	1,137 S.F.
TOTAL FLOOR AREA	2,641 S.F.	3,043 S.F.
GARAGE	407 S.F.	491 S.F.
SECOND FLR DECK	185 S.F.	237 S.F.
THIRD FLR, DECK	141 S.F	236 S.F.
LOT		3,967 S.F.
LOT COVERAGE		57 %

PROPOSED RESIDENTIAL DUPLEX:
KANCAL PROPERTIES, LLC.
3285 & 3289 OCEAN DRIVE Hollywood Beach, Oxnard, ca. A.P. No. 206-0-226-010 Lot 54

#### OWNER

KanCAL PROPERTIES, LLC. 2420 N. WOODLAWN BLDG. 300 WICHITA, KS. 67220 316-259-0529

#### CONSULTANTS

CIVIL ENGINEER:	LAIMA REEDER P.E. (805) 985-1700
SOILS ENGINEER:	HEATHCOTE GEOTECHNICAL FRED HEATHCOTE 6469978 JOB: 05090
SURVEYOR: COAS GREC JOB	ST & VALLEY LAND SURVEYING 9 WARDEL (805) 642–6246 NO: 05–4068

SHEET TITLE SITE PLAN PROJECT INFORMATIONS

#### DATE 08/18/15

SHEET NO

С



COASTAL REVIEW Integral Design, InC. AND CONSTRUCTION WALT PHILIPP So county soure Drive, suite 116 VENURA, CALFORNA 93003 805 / 644-5594 (OFFICE) 805 / 654-8385 (FAX) KANCAL PROPERTIES, LLC. CA. PROPOSED RESIDENTIAL DUPLEX: 3285 & 3289 OCEAN DRIVE HOLLYWOOD BEACH, OXNARD, C A.P. NO. 206-0-226-010 LOT 54 OWNER KanCAL PROPERTIES, LLC 2420 N. WOODLAWN BLDG, 300 WICHITA, KS. 67220 316-259-0529 SHEET TITLE FIRST FLOOR OATE 08/18/15 A3



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SHEET TITLE SECOND FLOOR

DATE 08/18/15 SHEET NO.

A4



COASTAL REVIEW ATTENTION ΑΤΤΕΝΤΙΟΝ ΑΤΕ ΤΕ ΡΡΟΛΡΓΟΥ ΟΥ ΝΑΟ ΑΤΕ ΡΡΟΠΕΟΤΟ ΒΥ Α ΟΦΡΠΟΥ ΟΥ ΝΑΓΕΚΑΝ ΟΕΘΟΥ ΝΟ ΗΝΥ ΟΤΑ ΜΤΥ ΟΥ ΝΑΓΕΚΑΝ ΟΕΘΟΥ ΝΟ ΟΥ ΠΟΣΟΥ ΟΥ ΝΑΓΙΑΝΑ ΑΝΑ ΑΝΑ ΟΕΘΟΥ ΑΠΙ ΕΓΟ ΟΤΑ ΟΥ ΑΝΑ ΑΝΑ ΑΝΑ ΑΝΑ ΟΕΘΟΥ ΝΟΙ ΕΕ ΟΤΑ ΑΝΑ ΑΝΑ ΟΕΘΟΥ ΝΟΙ ΕΕ ΟΤΑ ΑΝΑ ΑΝΑ ΟΕΘΟΥ ΑΝ Integral Design, Inc -10 - 116 - PHILIPP WALT PHILI 950 COUNTY SQUAR VENTURA, CALIFORNI 805 / 644-5594 ( KANCAL PROPERTIES, LLC. сĂ. PROPOSED RESIDENTIAL DUPLEX: 3285 & 3289 OCEAN DRIVE HOLLYWOOD BEACH, OXNARD, C A.P. NO. 206-0-226-010 LOT 54 OWNER KanCAL PROPERTIES, LLC 2420 N. WOODLAWN BLDG. 300 WICHITA, KS. 67220 316-259-0529 SHEET TITLE THIRD FLOOR DATE 08/18/15 SHEET NO A5



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COASTAL REVIEW ATTENTION THESE PLANS SPEC ARE THE PROPERTY BY & COPYRICHT OF THEY OR ANY OTHE Integral Design, Inc. AND CONSTRUCTION -8385 (FAX) 950 COUNTY SQUARE DRIVE, SUITE 116 VENTURA, CALIFORNIA 93003 805 / 644-5594 (OFFICE) 805 / 654 HILIPP WALT KANCAL PROPERTIES, LLC. 3285 & 3289 OCEAN DRIVE HOLLYWOOD BEACH, OXNARD, CA. A.P. NO. 206-0-226-010 LOT 54 PROPOSED RESIDENTIAL DUPLEX: OWNER

KanCAL PROPERTIES, LLC, 2420 N. WOODLAWN BLDG. 300 WICHITA, KS. 67220 316-259-0529

		_
	SHEET TITLE	
ROOF	PLAN	
51		

DATE	
08/18/15	
SHEET NO	

A6





# NORTH ELEVATION

1/4" = 1'-0"



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	AND CONSTRUCTION	WALT PHILIPP 950 county souare drive, suite 116 ventura, calfornia 93003 805 / 644-5594 (office) 805 / 654-8385 (fax)
PROPOSED RESIDENTIAL DUPLEX:	KANCAL PROPERTIES, LLC.	3285 & 3289 OCEAN DRIVE HOLLYWOOD BEACH, OXNARD, CA. A.P. NO. 206-0-226-010 LOT 54
Kan 242 BLC WIC 316	CAL PRO 0 N. W 0G. 300 HITA, H 0-259-	WNER OPERTIES, LLC, OODLAWN ) (S_ 67220 0529

DATE 08/18/15 SHEET NO

A7



WEST ELEVATION

1/4" = 1'-0"





COASTAL REVIEW

KanCAL PROPERTIES, LLC 2420 N. WOODLAWN BLDG, 300 WICHITA, KS. 67220 316-259-0529

SHEET TITLE

DATE 08/18/15 SHIFET NO

**A8** 



1/4" = 1'-0"

COASTAL REVIEW ΑΤΤΕΝΤΙΟΝ ΝΕΞΕ Α. VIS. ΕΡΟΠΛΑΊΡΑΙ, ΝΗ Ι ΆΛΑΨΥΓΑ ΑΝ ΤΗς ΟΡΗΡΑΤΙ ΟΓ ΝΟΙ Α.Ρ. ΡΙΟΙΙΟΙΟΟ ΒΥ Α. ΟΦΗΡΑΤΙ ΟΓ ΝΟΙ Α.Ρ. ΡΙΟΙΙΟΙΟΟ ΒΥ Α. ΟΦΗΡΑΤΙ ΟΓΚΑΓΙΔΑΙ Α.Ε. ΕΝ ΟΗ ΑΝΤΙ ΟΙΚΑΓΙΔΑΙ Α.Ε. ΟΓ ΟΓΙΣΑΝΤΟΙ ΟΙΚΑΙΟΙΑΙ Α.Ε. ΟΙ ΟΙΕ ΟΥΡΟΙΟ ΟΙ ΙΕΖΟΙ ΟΙΑ ΑΝΤΟΓΕΙΕΙ ΜΟΙ ΔΙ ΤΟΙΑΙ ΟΓΙΟΙΟ ΤΗ ΑΝΤΟΓΕΙΕΙ ΜΟΙ Α.Ε. ΟΙ ΤΟΙΑΙ ΟΙΕ ΟΙΕΙΟ ΟΙ ΙΕΖΟΙ ΟΙΑ ΑΝΤΟΓΕΙΕΙ ΜΟΙ ΟΙ ΤΟΙΑΙ ΟΓΙΟΙΟ ΤΗ ΑΝΤΟΓΕΙΕΙ ΜΟΙ ΟΙ ΤΟΙΑΙ ΟΓΙΟΙΟ ΤΗ ΑΝΤΟΓΕΙΕΙ ΜΟΙ Α.Ε. Α.Ε. ΤΟΙΑΙ ΟΓΙΟΙΟ ΜΟΙ ΤΗ ΑΝΤΟΓΕΙΕΙ ΑΝΤΟΓΕΙΕΙ ΜΟΙ ΟΙ ΤΟΙΑΙ ΟΙ ΑΝΤΟΓΕΙ ΑΝΤΟΓΕΙΑΙ ΑΝΤΟΓΕΙΕΙ ΜΟΙ ΟΙ ΤΟΙΑΙ ΟΙ ΑΝΤΟΓΕΙΑΙ ΑΝΤΟ Integral Design, Inc. AND CONSTRUCTION WALT PHILIPP 950 COUNT SOUARE DRIVE, SUITE 116 VENTURA, CALIFORNIA 93003 805 / 644-5594 (OFFICE) 805 / 654-8385 (FAX) KANCAL PROPERTIES, LLC. cA. PROPOSED RESIDENTIAL DUPLEX: 3285 & 3289 OCEAN DRIVE HOLLYWOOD BEACH, OXNARD, C A.P. NO. 206-0-226-010 LOT 54 OWNER KanCAL PROPERTIES, LLC 2420 N. WOODLAWN BLDG. 300 WICHITA, KS. 67220 316-259-0529 SHEET TITLE SECTION DATE 08/18/15 SHEET NO A9

# CONDITIONS OF APPROVAL FOR PLANNED DEVELOPMENT (PD) PERMIT CASE NO. PL15-0150

# **RESOURCE MANAGEMENT AGENCY (RMA) CONDITIONS**

# Planning Division (PL) Conditions

# 1. <u>Project Description</u>

This PD Permit is based on and limited to compliance with the project description found in this condition below, all County land use hearing exhibits in support of the project marked Exhibits 1, 2, 3, 4, 5, and 6 dated January 28, 2016, and conditions of approval set forth below. Together, these documents describe the Project. Any deviations from the Project must first be reviewed and approved by the County in order to determine if the Project deviations conform to the original approval. Project deviations may require Planning Director approval for changes to this PD 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) constitutes a violation of the conditions of this PD Permit.

The Project description is as follows:

The Project consists of the demolition of an existing triplex and construction of a new three-story, two-family dwelling. The new, three-story, two-family dwelling will meet the setback requirements for the Residential Beach Harbor zone of the *Ventura County Coastal Zoning Ordinance* (Section 8175-2).

The two-family dwelling will include 5,684 square feet of floor space with an additional 898 square feet of garage space, and 799 square feet of deck space split between the two dwelling units. The two-family dwelling will be 28 feet tall as measured from the established flood clearance elevation. Each of the dwelling units will have access to a two-car garage to accommodate a total of four parking spaces. Access to the two-family dwelling from Ocean Drive will be provided by a 20 foot long, 30 foot wide driveway. The property is currently occupied by the existing triplex to be demolished and no native vegetation is located on-site.

The Channel Islands Beach Community Services District will continue to provide water and the City of Oxnard will continue to provide sewage disposal service for the continued residential use of the property. Ocean Drive will continue to provide access to the site.

The grading, development, use, and maintenance of the property, the size, shape, arrangement, and location of structures, parking areas and landscape areas, and the protection and preservation of resources 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. (PL-1)

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Conditions for Discretionary Entitlement No. PL15-0150 Date of Public Hearing: January 28, 2016 Date of Approval: [DATE] Permittee: Charles Caro Location: 3289 Ocean Drive, Oxnard Page 2 of 11

# 2. Required Improvements for PD Permit

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

**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, dated January 28, 2016. The Permittee shall 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 the Planning Division'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 Public Works Agency Director allow the Permittee to provide financial security and a final executed agreement, approved as to form by 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 this PD Permit.

**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*. (PL-3)

## 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 the Project site.

**Requirement:** The Permittee shall maintain the Project site in compliance with the described uses outlined in Condition No. 1 (Project Description). Only equipment and/or materials which the Planning Director determines to substantially comply with Condition No. 1 (Project Description), or which are authorized by any subsequent amendments to this PD Permit, shall be stored on the property during the life of this PD Permit. All construction activities (e.g., ground disturbance), storage of construction materials, and storage of construction equipment shall be prohibited outside of the Project site.

**Documentation:** Pursuant to Condition No. 1 (Project Description), the PD Permit and any amendments thereto.

Timing: Prior to occupancy and for the life of the PD Permit.

**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*. (PL-4)

# 4. PD Permit 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 Permit. 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 Permit modification is required. If a PD Permit 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, Section 21000-21178) and the State CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, Section 15000-15387), as amended from time to time. (PL-5)

# 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. (PL-6)

# 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 for the granting 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.

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. (PL-7)

Conditions for Discretionary Entitlement No. PL15-0150 Date of Public Hearing: January 28, 2016 Date of Approval: [DATE]

- 7. Time Limits
  - a. At the conclusion of the local appeal period set forth in the *Ventura County Coastal Zoning Ordinance* (Section 8181-9.2), or following a final decision on a filed appeal, the Planning Division shall send a Notice of Final Decision to the California Coastal Commission (CCC). The CCC may set another appeal period pursuant to terms and conditions set forth in the California Coastal Act (Pub. Res. Code, Section 30000 *et seq.*). Following the expiration of the CCC's appeal period, and if no appeals are filed, the decision regarding the PD Permit will be considered "effective." Once the approval decision becomes effective, the Permittee must obtain a Zoning Clearance in order to conduct the construction activities and use the property as set forth in Condition No. 1 (Project Description).
  - b. 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 Permit becomes effective. 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 conduct the construction activities, and the Permittee has requested the time extension in writing at least 30 days prior to the one year expiration date.
  - c. 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. (PL-8)
- 8. <u>Documentation Verifying Compliance with Other Agencies' Requirements Related</u> to this PD Permit

**Purpose:** To ensure compliance with and notification of federal, state, 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 the County Planning Division in the form that is acceptable to the agency issuing the entitlement or clearance, to be included in the Planning Division Project file.

**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. (PL-9)

- 9. 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, 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. (PL-12)
- 10. 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, judgements, 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) 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

Conditions for Discretionary Entitlement No. PL15-0150 Date of Public Hearing: January 28, 2016 Date of Approval: [DATE]

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. (PL-13a)

# 11. Invalidation of Condition(s)

If any of the conditions or limitations of this PD Permit are held to be invalid, that holding shall not invalidate any of the remaining PD Permit conditions or limitations. In the event the Planning Director determines that any condition contained herein is in conflict with any other condition contained herein, then where principles of law do not provide to the contrary, the conditions most protective of public health and safety and natural environmental resources shall prevail to the extent feasible.

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 law, or threatened to be filed therein, which action is brought in the time period provided for by the Code of Civil Procedures (Section 1094.6), or other applicable law, this PD Permit shall be allowed to continue in force until the expiration of the limitation period applicable to such action, or until final resolution of such action, provided the Permittee has, in the interim, fully complied with the fee, exaction, dedication, or other mitigation measure being challenged.

If a court of law invalidates any condition, 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. (PL-14)

# 12. Relationship of PD Permit Conditions, Laws, and Other Permits

The Permittee shall design, maintain, and operate the Project site and any facilities thereon in compliance with all applicable requirements and enactments of federal, state, and County 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 is in conflict with any other PD Permit

#### Conditions for Discretionary Entitlement No. PL15-0150 Date of Public Hearing: January 28, 2016 Date of Approval: [DATE]

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 issuance 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. (PL-16)

## 13. Change of Owner and/or Permittee

**Purpose:** To ensure that the Planning Division is properly and promptly notified of any change of ownership or change of Permittee affecting the Project site.

**Requirement:** The Permittee shall file, as an initial notice with the Planning Director, the new name(s), address(es), telephone/FAX number(s), and email addresses of the new owner(s), lessee(s), operator(s) of the permitted uses, and the company officer(s). The Permittee shall provide the Planning Director with a final notice once the transfer of ownership and/or operational control has occurred.

**Documentation:** The initial notice must be submitted with the new Property Owner's and/or Permittee's contact information. The final notice of transfer must include the effective date and time of the transfer and a letter signed by the new Property Owner(s), lessee(s), and/or operator(s) of the permitted uses acknowledging and agreeing to comply with all conditions of this PD Permit.

**Timing:** The Permittee shall provide written notice to the Planning Director 10 calendar days prior to the change of ownership or change of Permittee. The Permittee shall provide the final notice to the Planning Director within 15 calendar days of the effective date of the transfer.

**Monitoring and Reporting:** The Planning Division maintains notices submitted by the Permittee in the Project file and has the authority to periodically confirm the information consistent with the requirements of Section 8183-5 of the *Ventura County Coastal Zoning Ordinance*. (PL-20)

# 14. Construction Noise

**Purpose:** In order for the Project to comply with the Ventura County General Plan *Goals, Policies and Programs* (2011) Noise Policy 2.16.2-1(5) 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 on-site location visible to the general public. 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 affected public.

**Timing:** The sign shall be installed prior to the issuance of a building permit and throughout grading and construction activities. The Permittee shall maintain a "Complaint Log," noting the date, time, complainant's name, nature of the complaint, and any corrective action taken.

**Monitoring and Reporting:** The Permittee shall provide photo documentation showing posting of the required signage to the Planning Division prior to the commencement of grading or construction activities. (PL-59)

# PUBLIC WORKS AGENCY (PWA) CONDITIONS

# Integrated Waste Management Division (IWMD) Conditions

# 15. Construction & Demolition (C&D) Debris Recycling Plan (Form B)

**Purpose:** Ordinance 4421 requires the Permittee to divert recyclable C&D materials generated by the Project (e.g., wood, metal, greenwaste, soil, concrete, asphalt, paper, or cardboard) from local landfills through recycling, reuse, or salvage. Please review Ordinance 4421 at: www.vcpublicworks.org/ord4421.

**Requirement:** The Permittee must submit a comprehensive recycling form (Form B – Recycling Plan) to the IWMD for the construction and demolition activities associated with the Project that require a building permit.

**Documentation:** The Form B – Recycling Plan must ensure a minimum of 60% of the recyclable C&D debris generated by the Project will be diverted from the landfill by reuse. salvage. A copy of Form B is available recvclina. or at: www.vcpublicworks.org/formsB&C. A comprehensive list of permitted recyclers, Countyfranchised haulers, and solid waste and recycling facilities in Ventura County is available at: www.vcpublicworks.org/C&D. A list of local facilities permitted to recycle soil, wood, and greenwaste is available at: www.vcpublicworks.org/greenwaste. A complete list of County-franchised solid waste haulers is available at: www.vcpublicworks.org/commercialhaulers.

**Timing:** Upon Building and Safety Division's issuance of a building permit for the Project, the Permittee must submit a Form B – Recycling Plan to the IWMD for approval.

**Monitoring & Reporting:** The Permittee is required to keep a copy of the approved Form B – Recycling Plan until the Building and Safety Division's issuance of a final permit. (IWMD-2)

# 16. <u>C&D Debris Reporting Form (Form C)</u>

**Purpose:** Ordinance 4421 requires the Permittee to divert recyclable C&D materials generated by the Project (e.g., wood, metal, greenwaste, soil, concrete, paper,

Conditions for Discretionary Entitlement No. PL15-0150 Date of Public Hearing: January 28, 2016 Date of Approval: [DATE] Permittee: Charles Caro Location: 3289 Ocean Drive, Oxnard Page 9 of 11

cardboard, or plastic containers) from local landfills through recycling, reuse, or salvage. Please review Ordinance 4421 at: www.vcpublicworks.org/ord4421.

**Requirement:** The Permittee must submit a Form C – Reporting Form to the IWMD for approval prior to issuance of the final Building and Safety Division permit. A copy of Form C – Reporting Form is available at: www.vcpublicworks.org/formsB&C.

**Documentation:** The Permittee must submit original recycling facility receipts and/or documentation of reuse with the Form C – Reporting Form to verify a minimum of 60% of the recyclable C&D debris generated by the Project was diverted from the landfill.

**Timing:** A complete Form C – Reporting Form, with required recycling facility receipts and/or documentation of reuse, must be submitted to the IWMD for approval prior to the Building and Safety Division's issuance of a final permit.

**Monitoring & Reporting:** The Permittee is required to keep a copy of the approved Form C – Reporting Form until the Building and Safety Division's issuance of a final permit. (IWMD-3)

## OTHER VENTURA COUNTY AGENCIES CONDITIONS

#### Ventura County Fire Protection District

#### 17. Address Numbers

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

**Requirement:** The Permittee shall install a minimum of 4 inch 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 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 Ventura County Fire Protection District's Form #126 "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 Ventura County Fire Protection District's Form #126 "Requirements for Construction" shall be kept on file with the Fire Prevention Bureau. The Fire Prevention Bureau shall conduct a final inspection to ensure that all structures are addressed according to the approved plans/form. (VCFPD-41a)

#### 18. Fire Flow

**Purpose:** To ensure that adequate water supply is available to the Project for firefighting purposes.
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#### Permittee: Charles Caro Location: 3289 Ocean Drive, Oxnard Page 10 of 11

**Requirement:** The Permittee shall verify that the water purveyor can provide the required volume and duration at the Project site. 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 psi for a minimum 2 hour duration.

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

**Timing:** The Permittee shall submit verification from the water purveyor that the purveyor can provide the required fire flow, to the Fire Prevention Bureau 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. (VCFPD-32)

## 19. 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 Ventura County Fire Protection District. The fire sprinkler system 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 Fire Prevention Bureau 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 Fire Prevention Bureau. The Fire Prevention Bureau 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 Fire Prevention Bureau, the Permittee, and the Permittee's successors-in-interest, shall maintain the fire sprinkler system for the life of the development. (VCFPD-40)

## 20. Fire Department Clearance

**Purpose:** To provide the Permittee a list of all applicable Ventura County Fire Protection District requirements for the Project.

**Requirement:** The Permittee shall obtain the Ventura County Fire Protection District Form #126 "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 #126 "Requirements for Construction."

Conditions for Discretionary Entitlement No. PL15-0150 Date of Public Hearing: January 28, 2016 Date of Approval: [DATE] Permittee: Charles Caro Location: 3289 Ocean Drive, Oxnard Page 11 of 11

**Timing:** The Permittee shall submit the Ventura County Fire Protection District Form #126 Application to the Fire Prevention Bureau for approval before issuance of building permits.

**Monitoring and Reporting:** A copy of the completed Ventura County Fire Protection District Form #126 shall be kept on file with the Fire Prevention Bureau. The Fire Prevention Bureau will conduct a final on-site inspection of the Project site to ensure compliance with all conditions and applicable codes/ordinances. (VCFPD-51) SOIL ENGINEERING INVESTIGATIO PROPOSED DUPLEX AT 3289 OCEAN DRIVE OXNARD, CALIFORNIA FOR CARO 1 (1997)



SOIL TESTING • FOUNDATIONS • INSPECTION

County of Ventura Planning Director Hearing PL15-0150 Exhibit 5 – Soil<sub>3</sub>Engineering Study



HEATHCOTE GEOTECHNICAL SOIL TESTING . FOUNDATIONS . INSPECTION 1884 EASTMAN AVENUE, SUITE 105, VENTURA, CALIFORNIA 93003



Charles Caro C/O Walt Philipp 950 County Square Drive 116 Date: August 20, 2015 Ventura, CA 93003

Job: 15046

Ladies/Gentlemen:

We are pleased to present this soil engineering report to aid in the design of the proposed project.

The report is for a soil engineering investigation for a proposed duplex. The project is located at 3289 Ocean Drive, Oxnard, California. The Assessor's parcel number is 206-0-226-010.

The project involves erecting a new structure with two to three stories. The structure will be built near existing grade. The structure will be of wood frame construction. The loads will be relatively light. No basement is intended. Slab on grade will be used. The existing buildings are to be demolished.

Minimal grading is anticipated.

This project will be safe for intended use as long as the recommendations given are followed.

Submittal of this report to appropriate governmental agencies is the responsibility of the owner or his representatives.

The report will follow and includes; a comprehensive task list, observations and findings, recommendations, basis of report, results of testing, plot plan, and borings.

It has been our pleasure to serve you and if you have any questions or need additional service, please contact us.

Fred Heathcote Civil Engineer No. C48316

Phone: (805) 644-9978

FESSIONAL No. C48-116 Exp. 6-30-16 Fax: (805) 644,-9906 OFC 40

# COMPREHENSIVE TASK LIST

# GENERAL

This portion of the report specifies all the work that was performed and the procedures used. This investigation did not address the possibility of any geologic hazards or contaminants in the soil, although none were noted.

### SITE WORK

- 1. Reviewed site for soil engineering problems.
- 2. Drilled two borings, up to 50 feet in depth, using a 4 inch rotary wash. Undisturbed samples taken with a 2-1/2 inch I.D. sampler using a 140 pound weight dropped 30 inches. Standard penetration tests were performed to assess strong ground motion settlement using a rope and cathead with a downhole 140 pound hammer to drive the samples. The samples are driven 18 inches with the blowcount from the bottom 12 inches being used as the standard penetration number.
- 3. Visual logging of the borings for classification of soil types and characteristics.
- 4. Obtained a bulk sample for laboratory testing.

# LABORATORY TESTING

- Determined in place density and moisture of undisturbed samples and is shown on boring logs.
- 2. Performed expansion index test of the soils. The test was performed according to the guidelines set forth in the latest ASTM version.
- 3. Performed compaction test of the soils to aid in grading and density testing. The test was performed according to latest version of ASTM (five layers, 25 blows/layer,10 lb. hammer,18" drop,1/30 c.f. mold).

Results of testing are presented in the boring logs and following the Basis of Report.

### REPORT

- 1. Comprehensive task list
- 2. Findings and Observations
  - a) site conditions
  - b) soil conditions
  - c) geologic conditions
  - d) liquefaction
  - e) subsidence

# 3 Recommendations

- a) foundation:bearing values, depths, settlements, and lateral values
- b) slabs on grade
- c) drains and grades
- d) construction procedures: earthwork, inspection
- 4. Basis of report
- 5. Results of testing
- 6. Boring logs

# FINDINGS AND OBSERVATIONS

# SITE CONDITIONS

The area for the proposed project is located on flat topography. The site does have existing buildings. Residences are present on adjacent lots. The lot is on the west side of Ocean Drive.

### SOILS CONDITIONS

Fill soils were not encountered on the site.

The natural soils are sands. These upper natural soils are moderately compressible. The soil has a medium strength. The soil has a low expansion potential with an expansion index of 0. The densities are greater with depth.

Groundwater was first observed at a depth of 8 feet. Historical groundwater is at 6 feet. This historical groundwater is not within 5 feet of the finished floor elevation.

#### **GEOLOGIC HAZARDS**

This report is not a geology report, but certain things should be noted.

Flooding is a possibility due to the distance to wave action.

Tsunamis are a possibility. The last tsunami was over 150 years ago. Consequently, the chance of a tsunami affecting the site in the near future is considered remote. The question of when the next tsunami will occur is based in probability. This means that you are just as likely to see a tsunami in any given year. The probability of having a tsunami in any "one" given year does not go up or down with the passage of time. This means you could have 2 tsunamis in one year or have one in two thousand years. The mentioning of past events 150 years ago is to establish probabilities through history search in much the same way as we predict probabilities of earthquakes. The probability of having a tsunami increases with the time period considered. It is much likelier to see a tsunami in a 1000 year period as opposed to a 50 year period. In this manner, we expect that it is unlikely that the project will experience a tsunami in the next 100 years. No exact probability is given due to the limited nature of the observations of tsunamis over time in this area.

No identified faults are within the nearby vicinity of the project. This information could be addressed in a geology report to determine the exact distances to any known faults, if desired.

No slope stability problems are present.

#### LIQUEFACTION

The site is situated within the alluvial area of the Oxnard plain. As with most of Southern California, this area is bordered by faults which are active potentially active and inactive. Faults which are most concern from a ground shaking viewpoint are the San Andreas, Simi-Santa Rosa, San Cayetano, Ventura Pitas Point, Santa Ynez, Malibu Coast and Oak Ridge faults. Each are capable of generating large to moderate earthquakes and of causing significant shaking at the site. The site will experience significantly strong coseismic ground motions caused by activity on regional faults at some time in the future.

The earthquake magnitudes are listed using maximum probable values. These values are used with the distances from the site to formulate the accelerations. The probabilistic methods are used to determine the accelerations from emperical data. The chart of this data is presented at the end of this letter. The fault data is shown below.

		MAX	
FAULT	DISTANCE (k)	PROB MAG.	ACCEL.
	4.5		
SIMI-SPRINGVILLE	15	6./	.22
SAN CAYETANO	22	6.8	.17
OAKRIDGE	7	6.9	.40
MALIBU COAST	15	6.7	.22
SAN ANDREAS	82	7.8	.11
SANTA YNEZ	35	7.0	.12
VENTURA PITAS	14	6.8	.24

The acceleration used for liquefaction analysis is taken from the Seismic Hazards Evaluation of the Oxnard Quadrangle. The 10% exceedance in 50 years peak ground acceleration for alluvial conditions is 0.60. The predominant earthquake is 6.7.

Groundwater was found at 8 feet below the surface. We are assuming a historical high water level of 6 feet in the liquefaction analysis. The standard penetration numbers are presented on the boring logs.

To convert standard penetration data to a N160 value, corrections are made for the overburden, and rod length. No corrections are needed for the sampling method of a cathead. No corrections are needed for liners in the spt device.

The soil profile will most likely experience liquefaction between 6-12 feet. The liquefaction induced settlement is on the order of 1-1/2 inches. Emperical data has been developed to relate standard penetration values with bulk modulus of settlement. These values are used to determine the settlement in the layers.

Due to the depth of the groundwater, the narrower foundations will not suffer a shear failure. Influence of the footings will typically be 4 to 8 feet beneath the surface. Liquefaction residual shear strength is not considered a factor due to the size of the structure. The size of the structure will allow us to keep foundations to a size less than 3 feet in width. Most of the additional foundation stresses in the soil profile are in the upper 5 feet of the soils. Almost all the additional foundation stresses are reduced to near zero at 8 feet below the surface. The residual shear strength of the liquefied zones at a depth of 6 to 7 feet are sufficient for the type of loadings that we are placing. Bearing value drops to around 300 psf in the liquefied zones. The pressure drops to around .3 of the pressure at the soil foundation interface. This gives a foundation value of 300 psf of a starting pressure of 1500 psf. Thus foundations kept at this size will be sufficiently designed for shear. Foundations should be designed for primarily strip footings and pad footings no larger than 3 feet.

We have evaluated the possibility of lateral spreading toward the ocean which is about 400 feet from the project. The first component of the lateral spread is slope for any of the methods. The ground is virtually flat in the area. From our experience, there is not a sloping layer that is subsurface. We do not feel that lateral spreading will occur on the project.

Slightly enlarged footings and slabs will be used to mitigate liquefaction induced settlement problems.

#### SUBSIDENCE

The site is listed in an area of subsidence. The County of Ventura Hazards Report shows .05' per year. This is a general lowering of the ground surface due to removal of water or oil from underground. This can cause problems with drainage courses, utilities, flooding in new areas etc. The owner should be aware of this process. Groundwater under the site appears to be at 8 feet.

## SEISMIC VALUES

- Building Code Reference DocumentASCE 7-10 Standard(which utilizes USGS hazard data available in 2008)
- Site Coordinates34.17°N, 119.23°W
- Site Soil Classification Site Class D "Stiff Soil"
- Risk CategoryI/II/III

# **USGS-Provided Output**

$S_S =$	2.047 g	$S_{MS} =$	2.047 g	$S_{DS} =$	1.364 g
$S_1 =$	0.723 g	$S_{M1} =$	1.085 g	$S_{D1} =$	0.723 g

RECOMMENDATIONS

# FOUNDATIONS

The expansion potential of the soils indicates a foundation design for very low expansion soils is needed for the foundations. Foundations should have at least 2-#5 bar at top and bottom.

No lateral pressure on foundations due to seismic loads are anticipated.

No lateral loads or movement are expected on foundations due to liquefaction. There are no retaining walls that will be affected by liquefaction. There is no flotation of buried structures that will affect the project.

No ground stabilization is deemed necessary. Our foundations have been structurally reinforced from normal due to liquefiable soils. Differential settlement has been accounted for in the design.

#### Supporting Soils

The proposed residence may be supported on the natural soils.

#### Depth and Width

The footings must extend at least 24 inches below finished grade. Minimum width for the footings is 18 inches.

Foundations should be designed for primarily strip footings and pad footings no larger than 3 feet. Any pads larger than this would need to be evaluated for liquefaction shear loss.

#### Allowable Bearing Value

The proposed foundations may be designed to place a load of 2000 pounds per square foot on the soil. This value may be increased by 1/3 for wind or seismic forces.

# Settlement

Load induced settlement of the structures should not exceed  $\frac{1}{2}$  inch. Differential settlement should be less than  $\frac{1}{4}$  inch. Liquefaction induced settlement is on the order of 1-1/2 inch.

#### Lateral Values

The allowable sliding resistance value is equal to 130 pounds per square foot. This value is to be multiplied by the contact area. In no case shall this

value exceed one half the dead load. The allowable passive pressure is equal to a fluid density of 100 pounds per cubic foot. This value may be increased by 1/3 for wind or seismic forces. Sliding resistance and passive pressure may be used to resist lateral forces without reduction.

#### **SLABS ON GRADE**

The slabs if any, may be placed on the resulting compacted fill from proper grading. The slabs should be designed for soils of very low expansion. Reinforcing should have a minimum of #4 bars at 18 inches on centers each way. Slab should be a minimum of 5 inches thick.

If a floor covering is used that will be affected by moisture, then we recommend that you use a 4 inch layer of gravel beneath the slab as a capillary break. The gravel should be of 3/4 inch variety with less than 10% sand with very little amount of fines.

A visquene covering must be used to serve as a water vapor barrier. To reduce problems associated with the concrete curing process, a 2 inch layer of sand should be placed on top of the visquene or a low slump concrete should be used.

## DRAINS AND GRADES

All grades shall drain away from the foundations. Downspouts should be drained away from the foundations.

#### CONSTRUCTION PROCEDURES

#### EARTHWORK

To support slabs for the structure if any, the following must be excavated.

1) In the area of the proposed building all organic material should be removed and taken off site.

2) Any loose soils generated from the demolition and removal of foundations.

After excavation the following must be accomplished.

 All bottoms of the excavation, areas to receive slabs, and foundations should be scarified and compacted to 90% compaction.

- All fills and backfills should be placed in horizontal layers less than 8 inches in loose thickness.
- 3) The soils shall be compacted to a minimum of 90% of the maximum density rendered by the latest version of the ASTM(D-1557). Field density testing per latest ASTM version for Sand Cone Method.
- 4) The moisture content should not vary more than 2% from the optimum moisture content, although the grading process will be more easily accomplished with the soils being 1 to 2% wetter than optimum moisture content.
- 5) Any utility trenches will need to be properly backfilled as detailed in 2,3 and 4 above.
- 6) All on site soils may be used. Any import soils should be approved by our firm and should not have an expansion index greater than 35.

#### INSPECTION

This is an important step to obtain quality construction and to obtain correct design. The following will need inspection by our firm.

- \* Foundations
- \* All earthwork
  - a) All fill and backfills
  - b) Testing frequency is at all bottoms and every 2 vertical feet

Inspection, by our firm, is needed to assure that the soil conditions are consistent with this report and design assumptions. Inspection by local government agencies may also be needed.

# **BASIS OF REPORT**

# **RIGHT OF USE**

This report is intended exclusively for the use of the Caros and the project designers.

#### METHODS

This report has been developed based on our understanding of the project details, field review, boring excavations, laboratory testing, engineering analyses, and experience with similar soil conditions with similar use and loads.

#### DEGREE OF PERFORMANCE

The work was performed using the methods and degree of care used by other soil engineering firms operating in this vicinity, for similar projects, in this time period. This firm is responsible only for our own negligent errors and negligent omissions. Any error or omission that results in an unexpected cost that normally would have been present, is not the responsibility of our firm. Nothing else is warranted, implied or expressed, as to the details presented in this report.

# VALIDITY OF REPORT

#### **Changes**

This report is valid for this specific project as described in the text of the report and on the plot plan. Any change in project size, loads, location, grade or use would require a review of this report.

#### Inspection

The recommendations given in this report are based on the assumption that all necessary inspection work will be performed during the construction phase of the project. The initial soil engineering investigation is only a part of the work needed to obtain correct engineering design. The soil conditions are only anticipated in the initial report. The inspection work verifies the conditions are as expected and allow our firm the ability to modify the recommendations in the event that the soil conditions are different.

The presence of inspection will provide the owner with the ability to obtain advice as to soil related construction procedures and answer related questions as to the implementation of the recommendations provided in this report.

If another firm is used to perform the construction inspection of the soil related aspects, our professional liability and responsibility would be drastically reduced to the point that we would no longer be the soils engineer of record.

# **RESULTS OF TESTING**

# **EXPANSION INDEX TEST**

Sample Location:	Boring 100-1'
Soil type:	Sand
Confining Pressure:	144 psf
Initial Moisture Content: (% of dry wt.)	9.1
Final Moisture Content: (% of dry wt.)	15.2
Dry Density:	101 pcf
Expansion Index:	0

TEST METHOD: THE LASTEST ASTM VERSION EXPANSION INDEX TEST

# **COMPACTION TEST**

Sample Location:	Boring100-1'
Soil type:	Sand
Maximum Dry Density:	112 pcf
Optimum Moisture Content: (% of dry wt.)	10

TEST METHOD: LATEST VERSION OF ASTM COMPACTION TEST





42	39	37	STANDARD PEN (blows per foot)
			MOISTURE CONTENT (% of dry weight)
			DRY DENSITY (lbs. per cubic foot)
			DRIVE ENERGY (kip-feet)
			ELEVATION (feet)
50	4 0	1 1	DEPTH (feet)
			SAMPLE LOCATION
			BORING CONTINUED JOE: 15046 FRELD ENGINEER: FRED HEATHCOTE DATES DRILLED: AUGUST 6, 2015 DRELLING EQUIPMENT: 4-INCH ROTARY WASH
			<b>⊢</b> →

		the second se
		STANDARD PEN (blows per foot)
4.1	స 5	MOISTURE CONTENT (% of dry weight)
101	88	DRY DENSITY (lbs. per cubic foot)
6	CI	DRIVE ENERGY (kip-feet)
		ELEVATION (feet)
UT 1	3 1	DEPTH (feet)
		SAMPLE LOCATION
	SP SAND-fine,light greyish brown,damp,mod dense	BORING 2 JOB 15046 FIELD ENGINEER FRED HEATHCOTE DATES DEILLED; AUGUST 6, 2015 DRULING EQUIPMENT: 4-INCH ROTARY VASEI



1	56	94	6	S	u	n

\*\*\*\*\* LIQUEFACTION ANALYSIS CALCULATION SHEET Copyright by CivilTech Software www.civiltech.com (425) 453-6488 Fax (425) 453-5848 \*\*\*\*\*\*\* Licensed to , 8/20/2015 10:37:05 AM Input File Name: C:\Liquefy5\15046.liq Title: CARO Subtitle: Subtitle or Proj No. Surface Elev.= Hole No.=B-1 Depth of Hole= 50.0 ft Water Table during Earthquake= 6.0 ft Water Table during In-Situ Testing= 8.0 ft Max. Acceleration= 0.6 g Earthquake Magnitude= 6.7 Input Data: Surface Elev.= Hole No.=B-1 Depth of Hole=50.0 ft Water Table during Earthquake= 6.0 ft Water Table during In-Situ Testing= 8.0 ft Max. Acceleration=0.6 g Earthquake Magnitude=6.7 1. SPT or BPT Calculation. Settlement Analysis Method: Ishihara / Yoshimine\* 3. Fines Correction for Liquefaction: Stark/Olson et al.\* 4. Fine Correction for Settlement: During Liquefaction\* 5. Settlement Calculation in: All zones\* 6. Hammer Energy Ratio, Ce = 17. Borehole Diameter, Cb = 18. Sampling Method, Cs = 19. User request factor of safety (apply to CSR) , User= 1 Plot one CSR curve (fs1=1) 10. Use Curve Smoothing: Yes\* \* Recommended Options

Page 1

Test SPT	Data: gamma pcf	Fines %	
14.0	110.0	0.0	
14.0	110.0	0.0	
21.0	120.0	0.0	
30.0	120.0	0.0	
32.0	120.0	0.0	
34.0	120.0	0.0	
36,0	120.0	0.0	
38.0	120.0	0.0	
37.0	120.0	0.0	
39,0	120.0	0.0	
42.0	120.0	0.0	
	Test SPT 14.0 14.0 21.0 30.0 32.0 34.0 36.0 38.0 37.0 39.0 42.0	Test Data: SPT gamma pcf 14.0 110.0 14.0 110.0 21.0 120.0 30.0 120.0 32.0 120.0 34.0 120.0 34.0 120.0 36.0 120.0 38.0 120.0 37.0 120.0 39.0 120.0	Test Data:SPTgamma pcfFines %14.0110.00.014.0110.00.021.0120.00.030.0120.00.032.0120.00.034.0120.00.036.0120.00.037.0120.00.039.0120.00.042.0120.00.0

Output Results:

Settlement of Saturated Sands=1.32 in. Settlement of Unsaturated Sands=0.05 in. Total Settlement of Saturated and Unsaturated Sands=1.37 in. Differential Settlement=0.685 to 0.904 in.

15046.sum

Depth ft	CRRm	CSRsf	F.S.	S_sat. in.	S_dry in.	S_all in.
0.00	0.26	0.39	5.00	1.32	0.05	1.37
1.00	0.26	0.39	5.00	1.32	0.04	1.37
2.00	0.26	0,39	5.00	1.32	0.04	1.36
3.00	0.26	0.39	5.00	1.32	0.03	1.35
4.00	0.26	0.39	5.00	1.32	0.02	1.34
5.00	0.26	0.39	5.00	1.32	0.01	1.33
6.00	0.26	0.38	0.67*	1.32	0.00	1.32
7.00	0.24	0.42	0.58*	1.03	0.00	1.03
8.00	0.27	0.45	0.60*	0.74	0.00	0.74
9.00	0.34	0.47	0.73*	0.51	0.00	0.51
10.00	0.39	0.49	0.79*	0.34	0.00	0.34
11.00	0.42	0.51	0.83*	0.21	0.00	0.21
12.00	0.46	0.52	0.88*	0.11	0.00	0.11
13.00	0.53	0.54	0.98*	0.03	0.00	0.03
14.00	2.67	0.55	4.86	0.00	0.00	0.00
15.00	2.67	0.56	4.77	0.00	0.00	0.00
16.00	2.67	0.57	4.69	0.00	0.00	0.00
17.00	2.67	0.58	4.62	0.00	0,00	0.00
18.00	2.67	0.58	4.56	0.00	0.00	0.00
19.00	2.67	0.59	4,51	0.00	0.00	0.00
20.00	2.67	0.60	4.47	0.00	0.00	0.00
21.00	2.67	0.60	4.43	0.00	0.00	0.00

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				1	15046.sum	n			
	22.00	2.67	0.61	4,39	0.00	0.00	0.00		
	23,00	2.67	0.61	4.36	0.00	0.00	0.00		
	24.00	2.67	0.62	4.34	0.00	0.00	0.00		
	25.00	2.67	0.62	4.31	0.00	0.00	0.00		
	26.00	2.67	0.62	4.29	0.00	0.00	0.00		
	27.00	2.67	0.63	4.27	0.00	0.00	0.00		
	28.00	2.67	0.63	4.25	0.00	0.00	0.00		
	29.00	2.67	0.63	4.24	0.00	0.00	0.00		
	30.00	2.67	0.63	4.22	0.00	0.00	0.00		
	31.00	2.67	0.63	4.24	0.00	0.00	0.00		
	32.00	2.67	0.63	4.25	0.00	0.00	0.00		
	33.00	2.67	0.62	4.27	0.00	0.00	0.00		
	34.00	2.67	0.62	4.29	0.00	0.00	0.00		
	35.00	2.67	0.62	4.31	0.00	0.00	0.00		
	36.00	2.67	0.62	4.33	0.00	0.00	0.00		
	37.00	2.67	0.61	4.36	0.00	0.00	0.00		
	38.00	2.67	0.61	4.38	0.00	0.00	0.00		
	39.00	2.67	0.61	4.41	0.00	0.00	0.00		
	40.00	2.67	0.60	4.44	0.00	0.00	0.00		
	41.00	2.67	0.60	4.46	0.00	0.00	0.00		
	42.00	2.67	0.59	4.49	0.00	0.00	0.00		
	43.00	2.67	0.59	4.53	0.00	0.00	0.00		
	44.00	2.67	0.59	4.56	0.00	0.00	0.00		
2	45.00	2.67	0.58	4.59	0.00	0.00	0.00		
	46.00	2.67	0.58	4.63	0.00	0.00	0.00		
	47.00	2.68	0.57	4.68	0.00	0.00	0.00		
	48.00	2.67	0.57	4.71	0.00	0.00	0.00		
	49.00	2.66	0.56	4.73	0.00	0.00	0.00		
	50.00	2.66	0.56	4.76	0.00	0.00	0.00		
	* = c	(A. 1.4 m)	- Co otti ou	Detenti	-1 7-00				
	T F.S.	נו> נו ביייו הי	eraction	CDD	al zone	to 3	CCD ic	limited to 2)	
	(+.5. )	15 I1MIT	εα το 5,	LKK 1S	limited	to 2,	CSK 15	IImited to 2)	
	Units		Depth	≠ ft, St	ress or	Pressure	= tsf (a	atm), Unit Weig	ht =
pcf, Se	ttlement	t = in.		-					
	CRRm		Cyclic	resista	nce rati	o from s	oils		
	CSRsf		Cyclic	stress	ratio in	duced by	a given	earthquake (wi	th user
request	factor	of safe	ty)						
	F.S.		Factor	of Safe	ty again	st lique	faction,	F.S.=CRRm/CSRs	f
	S_sat Settlement from saturated sands								

Settlement from Unsaturated Sands

S\_dry S\_all Total Settlement from Saturated and Unsaturated Sands NoLiq No-Liquefy Soils

Page 3

September 3, 2015

KanCal Properties LLC 2420 N. Woodlawn Building 300 Wichita, Kansas 67220

SUBJECT: Coastal Hazard & Wave Runup Study for 3286 & 3289 Ocean Drive, Oxnard CA, 93035.

## Dear Mr. & Mrs. Mason:

The following report is in response to your request for a coastal hazard and wave runup study for the proposed duplex structure at the subject address in Hollywood Beach, Oxnard, Ventura County, California. The proposed project includes the removal of the existing triplex structure and construction of a new duplex structure. The analysis is based upon site elevations, existing published reports concerning the local coastal processes, our site inspection, and knowledge of local coastal conditions. This report constitutes an investigation of the oceanographic conditions expected at the site in consequence of extreme storm and wave action over the next 75 to 100 years (including the latest California Coastal Commission (CCC) Sea Level Rise [SLR] Guidance [August 2015]). It includes an analysis of wave runup and overtopping of the existing beach, the resulting impacts on the proposed development, and the potential coastal hazards at the site. The purpose of the study is to provide the necessary information for a Coastal Development Permit required by the County of Ventura and the California Coastal Commission. It also provides a discussion, with conclusions and recommendations, regarding the susceptibility of the proposed development to wave attack and shoreline erosion. The analysis uses design storm conditions typical of the January 18-19, 1988, and 1982-83 type storm waves and beach conditions.

#### SITE VISIT & INFORMATION REVIEWED

The site was visited on August 30, 2015 by the undersigned. Figure 1 is a 2013 aerial photograph of the site down loaded from the California Coastal Records Project web site. The site is mapped in the FEMA X Zone (area outside the 1% chance of flooding), see Figure 2. In order to determine the potential for wave runup to reach the site, historical

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County of Ventura Planning Director Hearing PL15-0150 Exhibit 6 – Coastal Hazard and Wave Run-Up Study

aerial photographs over the last several decades were reviewed. None of the photographs examined showed that wave runup reached the site over the several decade time frame. The review of the aerial photographs showed a very wide beach even though some of the photos were taken in the winter and spring, when the beach is seasonally the narrowest. In addition to aerial photographs, a long term (40 years) resident who lives on Ocean Drive stated that the water has not reached the beach front residences along Ocean Drive over the 40+ years that he has lived there. The narrowest beach he can recall was in the early 80's (likely the 1982-83 El Nino winter) when the beach was still over 200 feet wide. Based upon review of the historical information and the fact that the beach is stabilized by Channel Islands Harbor inlet jetties to the southeast, it is highly unlikely that the shoreline will erode back to the site allowing direct wave attack on the proposed structure However, under severely eroded beach conditions and extreme storms, wave runup may, though unlikely, reach near the site in the next 75 years.



Figure 1. Subject site and wide beach in 2013. Note the sand dunes in the foreground.

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Figure 2. FEMA flood zone map for the site area.

The units of measurement in this report are feet (ft), pounds force (lbs), and second (sec). Coast & Valley Land Surveying, Inc. produced a topographic map of the site dated March 20, 2015, referenced to North American Vertical Datum (NAVD88). In addition, a finish first floor elevation, approved by the County of Ventura, was provided by Mr. Walt Philipp. A site inspection was made on August 30, 2015 by the undersigned. During the site inspections additional observation of the beach slope were taken using a peep scope and rod. On August 30, 2015, the distance from the Ocean Drive centerline to the Mean High Water (MHT) line was approximately 700 feet.

# COASTAL PROCESSES

The subject site lies within the Santa Barbara Littoral Cell. A littoral cell is a coastal compartment that contains a complete cycle of littoral sedimentation including sources, transport pathways and sediment sinks. The Santa Barbara Littoral Cell extends from Point Conception to Point Mugu, a distance of 96 miles. It is one of the longest littoral cells in Southern California and contains a variety of coastal types and shoreline orientations.

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An extensive shoreline management study was conducted for the section of the littoral cell from Goleta to Point Mugu by Noble Consultants (BEACON 1989). The coastal processes sections of that report remain valid and have been used as a basis for this analysis.

The BEACON study divided the Santa Barbara Littoral Cell into sub cells based upon shoreline characteristics and the location of sediment sources and sinks. The subject site, Hollywood Beach/Channel Islands Harbor lies within the sub cell from Ventura Harbor to Channel Islands Harbor. This area may be characterized as a wide sandy alluvial plain. Private development and harbor construction have played a large role in the historical shoreline evolution in this area. Ventura's Pierpont Bay area was stabilized by groins as early as 1936. Ventura Harbor was completed in 1964. The beaches from McGrath State Beach and Port Hueneme have always been wide and abundant (BEACON 1989). Channel Islands Harbor was completed in 1960 with the material dredged from the harbor used to build up the eroded beach to the east of Port Hueneme (built in 1940). Shoreline erosion problems have been persistent east of Port Hueneme resulting in the sediment bypassing efforts and the construction of groins in 1967. The BEACON report states that the Hollywood Beach has been "relatively" stable over the past 50 years. However, even though the beach is quasi-stable, the site is relatively low lying and wave runup and overtopping may reach near the site.

# WAVES AND TIDES

Waves of all periods approach the Hollywood Beach shoreline, however, almost all of the energy is contained in the medium and long period waves( approximately 5 to 20 seconds). These waves approach the Southern California Bight and encounter the offshore islands. The offshore islands, such as Santa Cruz, Santa Rosa, Santa Catalina and San Miguel, partially shelter this section of coast from ocean swells. Between these islands are the windows that waves can pass through and approach the Hollywood Beach shoreline. Waves can approach the study area through wave windows from the west and north and from a small window to the south. In addition to the sheltering of the site by the wave windows, the subject site is within the lee/protection of the Channel Island Harbor breakwater. The breakwater shelters the site from all south and west incoming swells and partially from swells from the north. The BEACON study contains a summary of historical storms as far back as 1905. These historic storms have resulted in significant damage to some coastal structures such as homes and roadways.

As waves travel into shallower and shallower water the wave crest is bent and becomes nearly parallel to shore, and the wave heights are modified depending on whether waves are being focused or de-focused at a particular location along the shoreline. This process

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is called refraction and it is dependent upon the bathymetry, and the wave height, period, and direction. Extreme wave conditions in shallow water have been calculated using historical wave data. The California Department of Boating and Waterways in partnership with the US Army Corps of Engineers maintain wave recording buoys throughout Southern California. The record of historical waves for this region, both from direct observation or recording and from hindcast analysis, is very extensive. Waves as high as 20 feet were recorded on January 17, 1998 and 14 to 16 foot high waves with period in excess of 20 seconds were recorded during the 1982-83 El Niño.

The datum used in this report is North American Vertical Datum 1988 (NAVD88), which is -2.66 feet Mean Sea Level (MSL). The National Oceanographic and Atmospheric National Ocean Survey tidal data station closest to Hollywood is located at Santa Barbara. The tidal datum elevations for the latest tidal epoch, January 1991 - March 2010, are as follows:

Highest Water January 19, 1992	8.10 feet
Mean High Water (MHT)	4.50 feet
Mean Sea Level (MSL)	2.66 feet
NAVD88	0.00 feet
Mean Lower Low Water	-0.13 feet

# WAVE RUNUP AND OVERTOPPING

As waves encounter the beach at the subject site, water can rush up, and sometimes over, the beach berm. In addition, beaches can become narrower due to a long term erosion trend. Often, wave runup and overtopping, strongly influence the design and the cost of coastal projects. Wave runup is defined as the vertical height above the still water level to which a wave will rise on a structure (beach slope) of infinite height. Overtopping is the flow rate of water over the top of a finite height structure (the beach berm) as a result of wave runup.

Wave runup and overtopping is calculated using the US Army Corps of Engineers Automated Coastal Engineering System, ACES. ACES is an interactive computer based design and analysis system in the field of coastal engineering. The methods to calculate runup and overtopping implemented within this ACES application are discussed in greater detail in Chapter 7 of the <u>Shore Protection Manual</u> (1984). The overtopping estimates calculated herein are corrected for the effect of onshore winds. Figure 3 is a diagram showing the analysis terms.

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Figure 3. Wave runup terms from ACES manual.

The wave, wind and water level data used as input to the ACES runup and overtopping application was taken from the historical data reported in USACOE (1986), BEACON (1989), and updated to include El Nino conditions such as the winter of 1997-1998 and 2005. The shoreline within the Santa Barbara Channel has experienced a series of extreme storms over the years. These events have impacted coastal property and beaches depending upon the severity of the storm, the direction of wave approach and the local shoreline orientation. The onshore wind speed was chosen to be 30 knots for the analysis.

# Sea Level Rise

Any incorporation of sea level rise (SLR) in the design of a coastal project needs to appropriately consider several factors that include the expected life of the structure, the range of future SLR estimates and their accuracy, and the elevation of the proposed development. The August 2015 CCC Sea-Level Rise Policy Guidance provides a SLR range, over the time period from 2000 to 2100, of 16.56 inches to 65.76 inches. The Guidance document was adopted in the August 2015 CCC meeting. The CCC has essentially adopted the National Research Council (NRC) 2012 SLR estimates of 16.56 inches to 65.76 inches over the time period from 2000 to 2100. Figure 4 compares many of the current SLR estimates including the US Army Corps of Engineers, the CA Coastal

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Conservancy, the NRC, CA Ocean Protection Council, and the predictions of leading climate scientists (Vermeer and Rahmstorf). It is clear that while there is some agreement over the next 30 years, beyond 30 years from today there is little agreement on SLR projections as evidenced by the large range of SLR in the year 2100.



Figure 4. Sea level rise prediction comparison, Everest International Consultants, Inc.

The design water levels in this analysis is the maximum historical still water level of +8.10 feet NAVD88 plus the maximum expected rise in sea level over the next 50 and 100 years. The proposed residential structure has an expected life of 75 to 100 years. Using Figure 4 the high sea level rise estimate in 50 years is 2.2 feet and in 100 years about 5.5 feet. If 2.2 feet is added to this +8.10 feet NAVD88 elevation a future design maximum sea level of + 10.3 feet NAVD88 is determined for the 50 year recurrence water elevation . If 5.5 feet is added to this +8.10 feet NAVD88 elevation a future design maximum sea level of + 13.6 feet NAVD88 is determined for the 100 year recurrence water elevation.

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The most critical design wave is the wave that breaks at the toe of the beach when the beach is eroded back to near the proposed structure. The design wave is a "depth limited" wave. If the toe of the beach is at about elevation +2.0 feet NAVD88 then the design water depth for the 50 year recurrence is 8.3 feet and for the 100 year recurrence it is 11.6 feet. The design wave will break at the toe when the ratio of the breaker height to water depth is 0.78. Therefore the design wave heights are 6.5 feet and 9.0 feet for the two recurrence intervals. The wave period for both case is 14 seconds which is typical of wave period for extreme wave events in the area.

The nearshore slope at the site is 1/180 (from Google Earth), vertical to horizontal, and the beach berm slope is about 1/12. The elevation used in the overtopping calculation was +14.0 feet NAVD88 which represents a condition the elevation of the typical top of beach berm. The overtopping rate is given as the flow rate per unit length of beach. The ACES printouts for the 50 year and 100 year recurrence are provided in the following tables.

ACES	Mode: Single Case	Funct	unctional Area: Wave - Structure Interaction					
Application: Wave Runup and Overtopping on Impermeable Structures								
Item			Unit	Value	Smooth Slope			
Incident Wave Height Hi:			ft	6.500	Overtopping			
Wave Period T: COTAN of Nearshore Slove COT(Ø):			SEC	14.000 180.000	3285 & 3289			
Water Depth at Structure Toe ds:			ft	8.300	Ócean Dr			
Structure Height Above Toe hs:			ft	12.000	2.2 foot			
Wave F	Յաոսք	R:	ft	6.744	SLR			
Onshor	e Wind Velocity	U:	ft/sec	50.634				
Deepwa	ter Wave Height	HO:	ft	4.332	30 knot			
Relative Height ds/HO:				1.916	anshare			
Wave Steepness H0/(g1 2):				0.000687				
Uvertopping Coefficient &:				0.070000				
Overto	opping Coefficient Us	stary:	£+^2/0_£+	2 672				
overto	ipping nace	ų.	IL J/S-IL	2.073				

### **TABLE I**

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### TABLE II

ACES	Mode: Single Case	Funct	nctional Area: Wave - Structure Interaction				
Applic	cation: Wave Runup an	d Overtoj	pping on Impe	ermeable Stru	ictures		
Item			Unit	Value	Smooth Slope		
Incident Wave Height Hi:		ft	9.000	0vertopping			
Wave Period T:		sec	14.000				
COTAN of Nearshore Slope COT(\$):				180.000	3285 & 3289		
Water Depth at Structure Toe ds:			ft	11.600	Ocean Drive		
Structure Height Abour Toe had			£+	12.000			
JUINC	ture height hoove for	, 113 (	10	12.000	5.5 reet		
Wave Runup R:		ft	7.935	SLR			
Onshore Wind Velocity U:		ft/sec	50.634				
Deepwater Wave Height HO:		ft	6.488	30 knot			
Relative Height ds/HO:				1.788	onshore		
Wave Steepness H0/(gT <sup>2</sup> ):				0.001029			
Overtopping Coefficient a:				0.070000			
Overto	opping Coefficient	Qstar0:		0.070000			
Overto	opping Rate	Q:	ft^3/s-ft	21.385	- 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10		

For the calculated overtopping rate (Q=q), the height of water and the velocity of this water can be calculated using the following empirical formulas provided by the USACOE (Protection Alternatives for Levees and Floodwalls in Southeast Louisiana, May 2006, equations 3.1 and 3.6).

$$q = 0.5443\sqrt{g}, h_1^{3/2}$$
$$v_c = \sqrt{\frac{2}{3}gh_1}$$

For the 50 year recurrence rate the water depth is 0.7 feet and the velocity is 4 ft/sec. For the 100 year recurrence the water depth is 3.6 feet and the velocity is 8.8 ft/sec. The runup water is not a sustained flow, but rather just a pulse of water. The Coastal Engineering

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Manual states that for every 25 feet that wave overtopping travels across the beach the height of the runup bore is reduced by 1 foot height. Therefore, the velocity would also decrease as the runup bore travels across the beach and towards the site.

## COASTAL HAZARD DISCUSSION

There are three different potential oceanographic hazards identified at this site; shoreline erosion, flooding, and waves. For ease of review each of these hazards will be analyzed and discussed separately followed by a summary of the analysis including conclusions and recommendations, as necessary.

### **Erosion Hazard**

The beach and shoreline fronting the subject site has been essentially stabilized by the Channel Island Harbor jetty to the southeast and the periodic placement of sand on the nearby beaches from channel dredging. The jetty helps to hold the beach in place. In addition the breakwater for the harbor entrance shelters the shoreline from incoming ocean swells. The periodic beach nourishment prevents any long term erosion of the site as a result of sand moving into the harbor channel or down the coast. However, the beach fronting the proposed residence may be subject to short term, temporary, erosion. The beach width (over 500 feet to MHT on August 30, 2015) is sufficient to allow for significant short term erosion without eroding to the point where the residence will be subject to wave or wave runup attack. The proposed project is reasonably safe from shoreline erosion because of the long term stability of the beach and the set back of the residence from the shoreline.

### Future Shoreline Erosion Hazard

Analysis of historical aerial photographs contained in the California Coastal Records Project web site, Google Earth, and from the Aerial Fotobank, show relatively wide beach widths over the last six decades. No photos show that wave runup has come within 300 feet of the site. There is little photographic evidence of an actual long term shoreline erosion in front of the site. As stated in the August 2015 CCC Sea-Level Rise Policy Guidance document, "predictions of future beach, bluff, and dune erosion are complicated by the uncertainty associated with future waves, storms and sediment supply. As a result there is no accepted method for predicating future beach erosion." If we assume a very high, long term, erosion rate (not a seasonal rate) of 1.0 ft/yr, the shoreline may narrow about 75 to 100 feet over the 75 to 100 year life of the structure. This is still over 450 feet (presently about 580 feet wide) from the project. The beach can migrate about 100 feet

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landward/inland in the future and still NOT result in any inundation of the site. The potential for future shoreline erosion to impact the site is mitigated by the long term stability of the beach and the set back of the residence from the shoreline.

### **Flooding Hazard**

The proposed residential duplex structure will likely NOT be subject to short term flooding from wave runup attack. The finished first floor is over 18 inches above the adjacent street drainage flow line elevation and will likely not be subject to flooding from rain runoff. The proposed project is reasonably safe from flooding because of the very wide beach and the existing drainage paths away from the structure.

### Wave Attack & Wave Runup

The proposed structure is safe from direct breaking wave attack due to its set back from the shoreline even under future eroded shoreline conditions. Wave runup will not reach the site but may travel over the beach towards the site. The US Army Corps of Engineers Coastal Engineering Manual states that for every 25 feet wave overtopping travels across a beach it reduces in height by ~1 foot. Due to its location and elevation the proposed residence is safe from wave attack and wave runup.

#### CONCLUSIONS AND RECOMMENDATIONS

Prediction of runup and overtopping on a beach during extreme storm events is a very complex problem. The flow rate presented here represents what is defined as flow which is sustained by continuous volume flow, even though it will actually occur with the cycle of the waves. Therefore, this analysis can be considered conservative and over estimates the actual wave runup and overtopping. The calculations made herein use industry standard methods, yet they are based on several simplifying assumptions (see Chapter 7 of SPM). There are several facts that indicate that wave runup and overtopping should not adversely impact the structure over the life of the structure.

- There is a wide (> 500 feet) sandy beach in front of the site 99.99% of the time.
- A review of aerial photographs over the last five decades shows no overall shoreline retreat in general and a wide sand beach in front of the site even at times when the beach is seasonally at its narrowest.

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- The existing development has not been subject to any wave runup and overtopping . attack in the past.
- The presence of the Channel Islands Harbor jetties provides significant structural stability to the beach at the subject site. The breakwater also shelters the beach in front of the site from ocean swell.
- The mean high tide line is over 580 feet from the site and it is unlikely that over the life of the structure that the mean high tide line will reach the property.

In conclusion, wave runup and overtopping will not significantly impact the proposed development over the life of the improvement. The proposed development will neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or adjacent area. There are no other recommendations necessary for wave runup protection or for shore protection over the life of the proposed development. The proposed project minimizes risks from flooding

## LIMITATIONS

Coastal engineering is characterized by uncertainty. Professional judgements presented herein are based partly on our evaluation of the technical information gathered, partly on our understanding of the proposed construction, and partly on our general experience. Our engineering work and judgements have been prepared in accordance with current accepted standards of engineering practice; we do not guarantee the performance of the project in any respect. This warranty is in lieu of all other warranties expressed or implied.

Respectfully Submitted

Dulw Shilly

David W. Skelly MS, PE RCE#47857

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No. HCE 47857



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