CALIFORNIA COASTAL COMMISSION
South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

Th13a

Filed:	7/24/2017
180th Day:	1/20/2018
Staff:	M. Vaughn-LB
Staff Report:	10/26/2017
Hearing Date:	11/09/2017

STAFF REPORT: REGULAR CALENDAR

Application No.:	**5-17-0017**
Applicant:	3158 Redhill Landlord, LLC
Agents:	Cynthia Tomlinson Michael Patrick Porter, Architect
Location:	16611 South Pacific Avenue, Sunset Beach, City of Huntington Beach, Orange County (APN 178-522-007)
Project Description:	Demolition of a 1,600 square foot, two-story single-family residence and construction of a 4,621 square foot, three-story, 35-foot high (as measured from centerline of frontage road) single-family residence with an attached 508 square foot, two-car garage on a beachfront lot.
Staff Recommendation:	Approval with conditions

SUMMARY OF STAFF RECOMMENDATION

The applicant is proposing construction of a new beach-fronting single-family residence, with no encroachments onto the adjacent sandy beach. The major issues of this staff report concern beachfront development potential impacts from erosion, flooding, and/or wave uprush during strong storm events.

Staff is recommending APPROVAL of the proposed project with six (6) special conditions regarding: 1) assumption of risk; 2) no future shoreline protective device; 3) conformance with

the submitted drainage plan; 4) storage of construction materials, mechanized equipment and removal of construction debris; 5) future development; and 6) a deed restriction against the property referencing all of the special conditions contained in this staff report.

Section 30600(c) of the Coastal Act provides for the issuance of coastal development permits directly by the Commission in regions where the local government having jurisdiction does not have a certified Local Coastal Program for the relevant area. The Sunset Beach area was annexed to the City of Huntington Beach in 2011. Although the City has a certified LCP, the recently annexed area has not yet been incorporated into certified LCP. Therefore, the Coastal Commission is the permit issuing entity and the standard of review is Chapter 3 of the Coastal Act.

TABLE OF CONTENTS

EXHIBITS

I. MOTION AND RESOLUTION

Motion:

*I move that the Commission **approve** the Coastal Development Permit Application 5-17-0017 in pursuant to the staff recommendation.*

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. **Assumption of Risk, Waiver of Liability and Indemnity.** By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from erosion, flooding, wave uprush, and sea level rise; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

2. **No Future Shoreline Protective Device.** By acceptance of this permit, the applicant agrees, on behalf of itself and all other successors and assigns, that no shoreline protective device(s) shall ever be constructed to protect the development approved pursuant to Coastal Development Permit No. 5-17-0017 including, but not limited to, the residence, garage, foundations, and any future improvements, in the event that the development is threatened with damage or destruction from waves, erosion, storm conditions, sea level rise, or other natural hazards in the future. By acceptance of this permit, the applicant hereby waives, on behalf of itself and all successors and assigns, any rights to construct such devices that may exist under applicable law.

   By acceptance of this permit, the applicant further agrees, on behalf of itself and all successors and assigns, that the landowner(s) shall remove the development authorized by this permit, including the residence, garage, foundations, and hardscape if: (a) any government agency has ordered that the structures are not to be occupied due to coastal hazards, or if any public agency requires the structures to be removed; (b) essential services to the site can no longer feasibly be maintained (e.g., utilities, roads); (c) the development is no longer located on private property due to the migration of the public trust boundary; (d) removal is required pursuant to LCP policies for sea level rise adaptation planning; or (e) the development would require a shoreline protective device to prevent a-d above.

   Prior to removal, the permittee shall submit two copies of a Removal Plan to the Executive Director for the review and written approval. The Removal Plan shall clearly describe the manner in which such development is to be removed and the affected area restored so as to best protect coastal resources, including the Pacific Ocean. In the event that portions of the development fall to the beach or ocean before they are removed, the landowner shall remove all recoverable debris associated with the development from the beach and ocean and lawfully dispose of the material in an approved disposal site. Such removal shall require a coastal development permit.

3. **Drainage Plan.** The applicant shall conform to the site drainage details depicted in the site plan dated 5/10/2017 indicating use of bottomless trench drains at the rear/street side of the lot for on-site percolation of runoff from all impervious areas. Any proposed changes to the approved plan shall be reported to the Executive Director. No changes to the approved plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

4. **Storage of Construction Materials, Mechanized Equipment and Removal of Construction Debris.** The permittee shall comply with the following construction-related requirements:

   (a) No demolition or construction materials, debris, or waste shall be placed or stored on the beach or anywhere it may enter sensitive habitat, receiving waters or a storm drain, or be subject to wave, wind, rain, or tidal erosion and dispersion.
   (b) No demolition or construction equipment, materials, or activity shall be placed in or occur in any location that would result in impacts to environmentally sensitive habitat areas, streams, wetlands or their buffers.
   (c) Any and all debris resulting from demolition or construction activities shall be removed from the project site within 24 hours of completion of the project.
   (d) Demolition or construction debris and sediment shall be removed from work areas each day that demolition or construction occurs to prevent the accumulation of sediment and other debris that may be discharged into coastal waters.
   (e) All trash and debris shall be disposed in the proper trash and recycling receptacles at the end of every construction day.
   (f) The applicant shall provide adequate disposal facilities for solid waste, including excess concrete, produced during demolition or construction.
   (g) Debris shall be disposed of at a legal disposal site or recycled at a recycling facility. If the disposal site is located in the coastal zone, a coastal development permit or an amendment to this permit shall be required before disposal can take place unless the Executive Director determines that no amendment or new permit is legally required.
   (h) All stock piles and construction materials shall be covered, enclosed on all sides, shall be located as far away as possible from drain inlets and any waterway, and shall not be stored in contact with the soil.
   (i) Machinery and equipment shall be maintained and washed in confined areas specifically designed to control runoff. Thinners or solvents shall not be discharged into sanitary or storm sewer systems.
   (j) The discharge of any hazardous materials into any receiving waters shall be prohibited.
   (k) Spill prevention and control measures shall be implemented to ensure the proper handling and storage of petroleum products and other construction materials. Measures shall include a designated fueling and vehicle maintenance area with appropriate berms and protection to prevent any spillage of gasoline or related petroleum products or contact with runoff. The area shall be located as far away from the receiving waters and storm drain inlets as possible.

(l) Best Management Practices (BMPs) and Good Housekeeping Practices (GHPs) designed to prevent spillage and/or runoff of demolition or construction-related materials, and to contain sediment or contaminants associated with demolition or construction activity, shall be implemented prior to the on-set of such activity.

(m) All BMPs shall be maintained in a functional condition throughout the duration of construction activity.

5. **Future Development.** This permit is only for the development described in Coastal Development Permit No. 5-17-0017. Pursuant to Title 14 California Code of Regulations Section 13250(b)(1) and (6), the exemptions otherwise provided in Public Resources Code Section 30610(a) shall not apply to the development governed by Coastal Development Permit No. 5-17-0017. Accordingly, any future improvements to the single family residence authorized by this permit, including but not limited to repair and maintenance identified as requiring a permit in Public Resources Section 30610(d) and Title 14 California Code of Regulations Sections 13252(a)-(b), shall require an amendment to Permit No. 5-17-0017 from the Commission or shall require an additional coastal development permit from the Commission or from the applicable certified local government.

6. **Deed Restriction.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director for review and approval documentation demonstrating that the landowner(s) have executed and recorded against the parcel(s) governed by this permit a deed restriction, in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this permit, the California Coastal Commission has authorized development on the subject property, subject to terms and conditions that restrict the use and enjoyment of that property; and (2) imposing the Special Conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the Property. The deed restriction shall include a legal description of the entire parcel or parcels governed by this permit. The deed restriction shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the terms and conditions of this permit shall continue to restrict the use and enjoyment of the subject property so long as either this permit or the development it authorizes, or any part, modification, or amendment thereof, remains in existence on or with respect to the subject property.

7. **Public Rights.** The approval of this permit shall not constitute a waiver of any public rights that exist or may exist on the property. The permittee shall not use this permit as evidence of a waiver of any public rights that may exist on the property.

IV. FINDINGS AND DECLARATIONS

A. PROJECT DESCRIPTION

The applicant is proposing to demolish a two-story, 1,600 square foot single-family residential structure and to construct a 4,621 square-foot, 35-foot high (as measured from centerline of frontage road South Pacific Avenue), three-story single-family residence on shallow mat foundation with an attached 508 square foot, two-car garage on a roughly 80-foot by 30-foot, approximately 2,388 square foot beach-front lot. No landscaping and only minimal grading for site preparation are proposed. All beach encroachments, including an approximately 20-foot by 30-foot wooden deck, tables, chairs, and planter boxes, that currently exist on the sandy beach seaward of the site are proposed to be removed. All of the proposed new development is located within private property lines on the subject lot. No development beyond the private property lines is proposed under this coastal development permit. Project plans are included as **Exhibit 3**.

The subject site is located at 16611 South Pacific Avenue in the Sunset Beach community of the City of Huntington Beach, Orange County **(Exhibit 1, Vicinity Map)**. The project is located within an existing urban residential area, between 19th and 20th Streets. The subject lot is located between the first public road (South Pacific Avenue) and the sea. The site fronts the wide sandy public beach (ranging from approximately 395 feet wide [typical winter width] to 400+ feet [typical summer width]) located between the subject property and the Pacific Ocean.

Sunset Beach is located in an area that was formerly unincorporated Orange County. Under the County's jurisdiction, Sunset Beach was subject to a certified Local Coastal Program. However, in August 2011, Sunset Beach was annexed by the City of Huntington Beach, resulting in termination of the County's LCP for Sunset Beach. The Sunset Beach area has not yet been incorporated into the City of Huntington Beach LCP. Therefore, the Chapter 3 policies of the Coastal Act are the standard of review. However, the County's previously certified Sunset Beach LCP may be used as guidance.

The City has adopted the same land use designation and zoning for the site as that which existed under the former County LCP. However, the Commission has not yet certified land use designations or zoning for the Sunset Beach area since it was annexed into the City. Nevertheless, it is worth noting that the proposed project is consistent with many of the development standards that would have been applicable to the proposed project under the previously-certified Sunset Beach LCP. The formerly certified County of Orange Sunset Beach Local Coastal Program (LCP) designates the site *Sunset Beach Residential – High Density*. The proposed single-family residence is consistent with this designation and is also consistent with existing surrounding development in the area. The project meets the formerly certified Sunset Beach LCP height restriction of 35 feet for the *Sunset Beach Residential* zone, which is also the City's current height limit. In addition, the height is consistent with existing surrounding development on South Pacific Avenue in Sunset Beach.

The setback standards in the previously certified Sunset Beach LCP, and the project's proposed setbacks, are provided for comparison as follows:

Setback Description	Required	Project Proposal
Minimum Front (street) Setback at 1st Floor	5' – 0"	5'
Minimum Front Setback at Other Floors	0' – 6"	6"
Minimum Rear (beach sand/oceanfront) Setback	None required	0'-0"
Side Setback	3' – 0"	Varies: 3' – 6'2"

Previously, the County had been issuing Encroachment Permits for encroachments (i.e., decks) onto the public beach under a certified LCP regulation which states: *"Permanent above-ground structures on the beach and sand areas shall be prohibited, except for: a) Lifeguard Towers, b) Other facilities necessary for public safety, c) Temporary uses and structures accessory to residential development on contiguous Sunset Beach Residential properties subject to a Coastal Development Permit and a Public Property Encroachment Permit."*. It is unclear whether the existing encroachments in front of the project site were permitted by a County-issued coastal development permit. In any case, the applicant is proposing to remove all beach encroachments, including an approximately 20-foot by 30-foot wooden deck, tables, chairs, and planter boxes, located seaward of the subject site. No new encroachments are proposed.

B. Hazards

Coastal Act Section 30253 states, in pertinent part:

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

Section 30235 of the Coastal Act states:

> *Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal- dependent uses or to protect existing structure or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fishkills should be phased out or upgraded where feasible.*

Coastal Hazards

Due to its oceanfront location, an inherently dynamic and potentially hazardous area, the project site must be examined for the potential for erosion, flooding, wave attack and wave runup hazards, including consideration of potential impacts due to severe storm events. Moreover, these hazards may be exacerbated by expected future sea level rise, which must also be considered. To address questions raised by these issues, the applicant's coastal engineer provided

a Coastal Hazard and Wave Runup Study dated November 9, 2016 by GeoSoils Inc. In addition, the coastal engineer (GeoSoils, Inc.) provided a written response to staff questions regarding the project (Response to California Coastal Commission Letter of Incomplete Application for CDP 5-17-0017, dated 2/27/17), as well as a follow-up email responses (collectively referred to as Study). In this geographic area, the main concerns raised by beach fronting development are impacts to public access and recreation, and whether hazards conditions might eventually create the need for a shoreline protection device to protect the proposed development.

The Coastal Act discourages shoreline protection devices because, generally, they constrain the ability of the shoreline to respond to dynamic coastal processes. This is expected to be exacerbated with future sea level rise. Adverse impacts associated with shoreline protection devices include: as a sandy beach erodes, the shoreline will generally migrate landward, toward the structure, resulting in reduction and/or loss of public beach area while the landward extent of the beach does not increase; oftentimes the protective structure is placed on public land rather than on the private property it is intended to protect, resulting in physical loss of beach area formerly available to the general public; the shoreline protection device may actually increase the rate of loss of beach due to wave deflection and/or scouring (this is site-specific and varies depending on local factors); shoreline protection devices are generally not attractive and can detract from a natural beach experience, adversely impacting public views; and, shoreline protection devices can lead to loss of ecosystem services, loss of habitat, and reduction in biodiversity compared to natural beaches.[1]

Shoreline protective devices, by their very nature, tend to conflict with various LCP and Chapter 3 policies because shoreline structures can have a variety of adverse impacts on coastal resources, including adverse effects on sand supply, public access, coastal views, natural landforms, and overall shoreline beach dynamics on and off site, ultimately resulting in the loss of beach.

Because shoreline protection devices, such as seawalls, revetments, and groins, can create adverse impacts on coastal processes, Coastal Act Section 30253 specifically prohibits development that could *"…create [or] 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."* However, Section 30235 of the Coastal Act recognizes that "***existing***" development may be protected by such devices.

Notwithstanding this limited allowance for pre-Coastal Act development, in order to avoid the adverse impacts of shoreline protection devices (described above), it is important to assure that new development (such as demolition of an existing structure and construction of a new structure, as is being proposed here) not be permitted if it relies on future shoreline protection over the span of its expected life (generally 75 years) to the extent such shoreline protection would be inconsistent with Coastal Act Chapter 3 coastal resource policies. If it is known that the development may need shoreline protection in the future, it would be unlikely that such development could be found to be consistent with Section 30253 of the Coastal Act which, as stated above, requires that new development not *create nor contribute significantly to erosion,*

[1] Summarized from http://www.beachapedia.org/Seawalls

geologic instability, or destruction of the site or surrounding area given the well-known coastal resource impacts that shoreline protection typically causes. This limitation is particularly important when considering new development, such as in this case, because, in contrast, Section 30235 of the Coastal Act, provides, among other things, that structures such as shoreline protective devices be allowed when required to protect ***existing*** (but not new) structures in danger from erosion.

Sea Level Rise

In addition, sea level has been rising slightly for many years. Several different approaches have been used to analyze the global tide gauge records in order to accommodate the spatial and temporal variations, and these efforts have yielded sea-level rise rates ranging from about 1.2 mm/year to 1.7 mm/year (about 0.5 to 0.7 inches/decade) for the 20th century, but since 1990 the rate has more than doubled, and the rise continues to accelerate. Since the advent of satellite altimetry in 1993, measurements of absolute sea level from space indicate an average global rate of sea-level rise of 3.4 mm/year or 1.3 inches/decade – more than twice the average rate over the 20th century and greater than any time over the past thousand years.[2] Recent observations of sea level along parts of the California coast have shown some anomalous trends, however; there is a growing body of evidence that there has been a slight increase in global temperature and that an accelerated rate of sea level rise can be expected to accompany this increase in temperature. Sea level rise is expected to increase significantly throughout the 21st century. The National Research Council (NRC) report, Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past Present and Future indicates that sea level rise of 1.5 to 5.5 ft. could occur by the year 2100[3]. The NRC report was adopted by the Ocean Protection Council and recognized by the Coastal Commission's Sea Level Rise Policy Guidance as the current best available science on sea level rise in California. However, although this represents the best current estimate of sea level rise, there is uncertainty in sea level rise science, particularly regarding ice-sheet dynamics and future greenhouse gas emissions. In particular, it is possible that future research will conclude that sea levels will rise at an even more accelerated rate than currently predicted, resulting both in earlier impacts to coastal sites as well as more significant impacts over time.

On the California coast the effect of a rise in sea level will be the landward migration of the intersection of the ocean with the shore. On a relatively flat beach, with a slope of 40:1, a simple geometric model of the coast indicated that every centimeter of sea level rise will result in a 40 cm. landward movement of the ocean/beach interface. For fixed structures on the shoreline, such as a seawall, an increase in sea level will increase the inundation of the structure. More of the structure will be inundated or underwater than is inundated now and the portions of the structure that are now underwater part of the time will be underwater more frequently. Accompanying this rise in sea level will be an increase in wave heights and wave energy. Along much of the California coast, the bottom depth controls the nearshore wave heights, with bigger waves occurring in deeper water. Since wave energy increases with the square of the wave height, a small increase in wave height can cause a significant increase in wave energy and wave damage. Combined with the physical increase in water elevation, a small rise in sea level can expose previously protected back shore development to increased wave action, and those areas that are

[2] http://www.opc.ca.gov/webmaster/ftp/pdf/docs/rising-seas-in-california-an-update-on-sea-level-rise-science.pdf

[3] National Research Council (NRC). 2012. Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future. Report by the Committee on Sea Level Rise in California, Oregon, and Washington. National Academies Press, Washington, DC. 250 pp. http://www.nap.edu/catalog/13389/sea-level-rise-for-the-coasts-of-california-oregonand-washington.

already exposed to wave action will be exposed more frequently, with higher wave forces. Structures that are adequate for current storm conditions may not provide as much protection in the future.

Site Specific Evaluation

In order to evaluate whether the proposed development would be consistent with Coastal Act Section 30253, the applicant has submitted the Coastal Hazard and Wave Runup Study dated November 9, 2016 by GeoSoils Inc., the coastal engineer's (GeoSoils, Inc.) written response to staff questions regarding the project (Response to California Coastal Commission Letter of Incomplete Application for CDP 5-17-0017, dated 2/27/17), as well as follow-up email responses (collectively, Study). The Study concludes that coastal hazards are not expected to impact the proposed development over the next 75 years, including hazards from erosion, flooding, wave attack, or wave runup, even when considering impacts due to severe storm events and taking into consideration expected future sea level rise. Moreover, the coastal engineering consultant concludes that a shoreline protection device is not expected to be necessary over the 75 year life of the proposed development. Regarding erosion in the project area generally and at the project site specifically the GeoSoils Study (11/9/16) states:

> *"If we assume a very high, long term, erosion rate (not a seasonal rate) of 1.5 ft./yr, the shoreline may narrow about 112 feet of the 75 year life of the structure. This is still over 280 feet (presently* [the beach width is] *over 400 feet) from the project and* [provides] *sufficient beach width to prevent wave attack from reaching the site. The beach can migrate about 250 feet landward/inland in the future and still NOT result in inundation of the site. Because of the beach width and the stabilization by beach nourishment, which will continue in the future, the site is reasonably safe from erosion hazards over the project 75 year life."*

Because the above language appeared to imply that the site's safety from future erosion relies on the on-going U.S. Army Corps of Engineer's beach nourishment project[4], Commission staff requested additional information as follows:

> *"The Hazards Assessment's conclusions and recommendations rely on[5] the on-going, periodic U.S. Army Corps of Engineers-led beach nourishment/erosion control efforts*

[4] The Sunset Beach area and the beach fronting Surfside Colony to the north (located in the City of Seal Beach) have been subject to severe erosion as a result of the wave reflection off of the Anaheim Bay Harbor east jetty, particularly during severe storm events. The reflection effect is strongest nearer the jetty. Sunset Beach and Surfside are part of a federally authorized Orange County Beach Erosion Control Project. The replenishment program places sand on the Surfside beach. Once placed, natural littoral transport carries the sand downcoast as far as the Newport Pier on the Balboa Peninsula in the City of Newport Beach. The US Army Corps of Engineers has maintained the beach in this area through beach sand nourishment projects as part of a federally authorized project since the early 1960s. Other beach nourishment activities have occurred since 1935. This replenishment program is officially known as the San Gabriel River to Newport Bay Beach Erosion Control Project ('Project') and is undertaken by the U.S. Army Corps of Engineers, in conjunction with local government partners, to periodically add sand to the system. The project was authorized by the U.S. Congress in 1962 (Public Law 87-874 and House Document No. 602, 87th Congress, Second Session). The project is defined by Congress as a 'Continuing Authority Project' meaning that it can occur in multiple phases without reauthorization, i.e. non sunset clause, but does require individual phase funding approval.

[5] For example, The Hazards Assessment states, on page 3: "Because the beach in front of the site is maintained at a width of at least 350 feet, it is highly improbable that the shoreline will erode back to the site even with future sea level rise (SLR)." The Hazards Assessment, on page 6, further states: "Because of the beach width and the stabilization by beach nourishment, which will continue in the future, the site is reasonably safe from erosion over the project 75 year life." In addition, on page 14 under *Conclusions and Recommendations,* the Hazards Assessment states: "In conclusion, coastal hazards will likely not impact the proposed development property over the next 75 years." [Footnote from CCC staff letter to applicant, 2/2/17.]

(Orange County Beach Erosion Control Project (USACOE, 1995)). However, it does not appear that the Hazards Assessment considered the hazard/risk factors in the event the USACOE nourishment efforts were to be reduced or cease. Although it appears at this time that there are no plans to change the current nourishment program, it cannot be known whether the beach nourishment program, upon which the hazard/risk conclusions are based, will continue for the expected life of the project (75 years). Therefore, it is necessary that the Hazards Assessment consider at least one scenario of long-term erosion that assumes that one or more USACOE replenishment cycles are missed, such that there is a minimum 15-year period between nourishment projects. This scenario must be applied to the conditions described in the CCC Sea Level Rise Policy guidance document (which is referenced in the study submitted). This scenario must be considered both with expected sea level rise and without, including consideration of the beach profile that would exist, over time, in the absence of the beach nourishment (this assessment must consider seasonally eroded beach profiles). That is, the evaluation of coastal hazards at the site must consider both the loss of sand at the site without the USAOCE nourishment as well as the increase in sea level."

To the above, the following response from the project coastal engineer was received:

'We respectfully disagree with this comment. The report uses data from the USGS on page 5[6] that considers shoreline change prior to the nourishment program. The report considers that the beach can erode up to 1.5 ft./yr on page 6. This is a very high erosion rate which would only occur if the nourishment program was not in place for many decades. The wave runup analysis considers the severely eroded beach conditions to determine how wave runup would impact the site. The provided report is consistent with the CCC SLR policy guidance and the conclusions do not rely on the ongoing nourishment efforts."

Language in the 11/9/16 Study also appeared to rely on the City's annual construction of a seasonal berm on the beach seaward of the subject site for protection of the subject site from erosion. Responding to this concern, the coastal engineer states:

"We respectfully disagree with this comment. The comment in the study concerning the construction of temporary berms is just a statement of fact. The report mentions that the berms are formed periodically but does not use them in the wave runup calculation or shoreline erosion analysis. The wave runup analysis considers the severely eroded beach conditions, with no berm, to determine how wave runup would impact the site. The provided report is consistent with the CCC SLR policy guidance and the conclusions do not rely on the formation of berms or the ongoing nourishment efforts."

Finally, in an email response to CCC staff (9/7/17), the project coastal engineer states:

[6] The coastal engineer's response cited above refers to this passage from the 11/9/17 GeoSoil Coastal Hazard Analysis: "*In 2006, the U.S. Geologic Survey (USGS) published a comprehensive report about shoreline change for the coast of California (USGS, 2006). This report uses date from the late 1800s to the early 2000s, and covers the section of shoreline fronting the subject site.*"

> *"The beach width, regardless of the nourishment, is what protects the site. The beach width is what it is now* [generally over 400 feet]. *With no nourishment going forward over 75 years and using a very high erosion rate the beach width is NOT reduce [sic] to less than 200 feet."*

Regarding ocean flooding in the project area and at the project site the GeoSoils Study (11/9/16) states:

> *"Water level is dependent upon several factors including the tide, storm surge, wind set up, inverse barometer, and climatic events (El Niño). For this location, the maximum recorded water level is about +7.2 feet NAVD88 on January 27, 1983. This water level takes into account El Nino conditions and storm surge. Added to this maximum observed water level is the expected rise in sea level over the next 75 years, the predicted lifetime of the proposed development."*

and,

> *"The proposed project has a typical design life of about 75 years. Using the CCC SLR estimate over the project design life that range in the year ~2092 is between 1.25 feet and 4.75 feet. These SLR estimates are the sea level rise range for the proposed project. The maximum historical water elevation in the Surfside area is elevation ~+7.2 feet NAVD88 on January 27, 2083. This actual high water record period includes the 1982-83 severe El Niño and the 1997 El Niño events, and is therefore, consistent with the methodology outlined in the CCC Sea-Level Rise Policy Guidance document. Per the Guidance, this elevation includes all short-term oceanographic effects on sea level, but not the long-term sea level rise prediction. If 1.25 and 4.75 feet are added to this 7.2 feet NAVD88 elevation, then future design maximum water levels of 8.45 feet NAVD88 and ~12.0 feet NAVD88 are determined"*

> *"The beach fronting the site is over 400 feet wide, and at or above elevation +13 feet NAVD88. The sand dune fronting the site is at elevation +17 feet NAVD88. The flow line of South Pacific Avenue is at elevation +10.3 feet NAVD88. These grades seaward of property are above any potential flood elevation from storm surge or extreme tides (maximum future still water elevation of 8.45 feet NAVD88 and ~12 feet NAVD88)."*

Regarding flooding from the inland side of the project, for example in the event that Huntington Harbour (less than 1,000 feet inland of the subject site) overtops its bulkheads and floods (as happens now in some areas with extreme high tides and/or heavy rainfall), the GeoSoils Study (11/9/16) states:

> *"Flooding of the site is controlled by the drainage pathway along South Pacific Avenue at about elevation ~+10.3 feet NAVD88. The proposed finished first floor elevation is at or above +13.25 feet NAVD88. Due the elevation of the structure and grades adjacent to the proposed structure above the ocean and above South Pacific Avenue, the proposed development will be reasonably safe from sustained flooding. It should be noted that the*

> *garage floor of the proposed development may be low enough for potential short-term flooding in the future by surface water runoff."*

In addition, the GeoSoils Study (2/27/17) states:

> *"The immediate area of the subject site has not been subject to flooding from king tides* (~+8.4 feet NAVD88) and Huntington Harbour waters as described in the CCC comment. Flooding has occurred along Pacific Coast Highway (PCH) about one mile away from the site. The elevation of PCH is higher near the site than the elevations of PCH and public streets that have been flooded. It should also be noted that the proposed finished floor is well above the elevation of PCH. The project is designed to prevent flooding from future SLR of at least 6 feet in the future."

Regarding wave attack and wave runup in the project area and at the project site, the GeoSoils Study (11/9/16) states:

> *"Currently the site is over 400 feet from the shoreline. The overtopping waters over the next 75 years will likely not reach the seaward side of the of the subject site. If any water reaches the sand dunes fronting the site, it will not have sufficient velocity to cause erosion or damage."*

The project coastal engineer concludes, in the 11/9/16 Study:

> *"In conclusion, coastal hazards will likely not impact the proposed development property over the next 75 years. The proposed development will neither create nor contribute to erosion, geologic instability, or destruction of the site or adjacent area. There are no recommendations necessary for wave runup protection. The proposed project minimizes risks from flooding. However, the property is relatively low-lying and proper site drainage and drainage control will be necessary."*

Based upon the information provided by the applicant's coastal engineer in the Coastal Hazard and Wave Runup Study dated November 9, 2016 by GeoSoils Inc., the coastal engineer's (GeoSoils, Inc.) written response to staff questions regarding the project (Response to California Coastal Commission Letter of Incomplete Application for CDP 5-17-0017, dated 2/27/17), as well as a follow-up email responses (collectively, Study), the subject site with the proposed development is not expected to be threatened by erosion, flooding, or wave attack/wave runup over the 75-year life of the structure, even during severe storms and when expected future sea level rise is considered. Therefore, based upon the assertions contained in the Study, no future shoreline protection device is expected to be needed over the 75-year life of the proposed development. However, ocean fronting properties are inherently dynamic, and future conditions cannot be known with certainty. Further, COSMOS, the best available regional sea level rise modeling tool, shows that the area around the site may be significantly impacted by future sea level rise (see Exhibit 2).

Public Costs/Loss of Public Beach

The Sunset Beach community, where the subject site is located, has historically been subject to flooding and damage resulting from wave action during storm conditions. Past occurrences have

resulted in public costs for public service (including the USACE led periodic beach replenishment program that is on-going for the last approximately 50 years; annual construction of a seasonal berm across the beach, originally constructed by the County, and now by the City of Huntington Beach) in the millions of dollars. Specifically, the El Nino storms of 1982/83 caused significant damage in both Sunset Beach and neighboring Surfside. Indeed, it was the damage resulting from this storm that resulted in annual construction of the seasonal berm across Sunset Beach. Flooding of areas along Pacific Coast Highway from Huntington Harbor occurs in Sunset Beach now with extreme high tides, even without storm activity. Moreover, COSMOS, the best available regional sea level rise modeling tool, shows that the area around the site may be significantly impacted by future sea level rise (see Exhibit 2) and related flooding. Public costs are incurred with each incident, including for pumping flooded areas, clearing blocked storm drains, and clean up.

In addition, from a public perspective, a major concern is the threat of lost public beach area. As the beach retreats, it retreats landward, toward developed areas. Shoreline protection devices also directly interfere with public access to tidelands by impeding the ambulatory nature of the boundary between public and private lands. The impact of a shoreline protection device on public access is most evident on a beach where wave run-up and the mean high tide line are frequently observed in an extreme landward position during the winter season. As the shoreline retreats landward due to the natural process of erosion, the boundary between public and private land also retreats landward. Construction of shoreline protection such as rock revetments and seawalls to protect private property prevents any current or future migration of the shoreline landward, thus eliminating the distance between the high water mark and low water mark. As the distance between the high water mark and low water mark narrows or disappears, the seawall effectively eliminates lateral access opportunities along the beach as the entire area below the fixed high tideline is inundated. The ultimate result of a fixed tideline boundary (which would otherwise normally migrate and retreat landward, while maintaining a passable distance between the high water mark and low water mark overtime) is a reduction or elimination of the area of sandy beach available for public access and recreation.

Interference by shoreline protection devices can result in a number of adverse effects on the dynamic shoreline system and the public's ability to access the beach. First, changes in the shoreline profile, particularly changes in the slope of the profile which results from a reduced beach berm width, alter the usable beach area. A beach that rests either temporarily or permanently at a steeper angle than under natural conditions will have less horizontal distance between the mean low water and mean high water lines. This narrows the beach area available for public access. The second effect on access is through a progressive loss of sand as shore material is not available to nourish the nearshore sand bar. The lack of an effective bar can allow such high wave energy on the shoreline that materials may be lost far offshore where it is no longer available to nourish the beach. This affects public access again through a loss of beach area. Third, shoreline protection devices such as revetments, seawalls, and bulkheads cumulatively affect shoreline sand supply and public access by causing accelerated and increased erosion on adjacent public beaches. This effect may not become clear until such devices are constructed individually along a shoreline and they reach a public beach. In addition, if a seasonal eroded beach condition occurs with greater frequency due to the placement of a shoreline protection device on the subject site, then the subject beach would also accrete at a

slower rate. Fourth, if not sited landward in a location that ensures that the seawall is only acted upon during severe storm events, beach scour during the winter season will be accelerated because there is less beach area to dissipate the wave's energy.

Private development on public beaches generally conflicts with both the public access and recreation policies of the Coastal Act. Thus, the Commission's action on this project must consider the effects on public access in the event that the shoreline in front of the subject site were to erode inland, up to or past the subject site. Because the hazards analysis provided by the applicant's coastal engineering consultant maintains that even with expected future sea level rise, the proposed development is not expected to be threatened by coastal hazards and so is not expected to need shoreline protection over the life of the development, the Commission finds that the project can be found to conform with the hazards policies of the Coastal Act. However, future site conditions cannot be known with certainty. The project can be found consistent with Coastal Act policies based upon the site specific hazard evaluation. However, in the event that future conditions are not consistent with the current expectations expressed in the hazards analysis, the applicant and future owners must be made aware that loss of public beach, due to migration of the mean high tide line, may threaten the development; and that construction of a device to protect the development from shoreline hazards cannot be found to be consistent with the hazards, public access, and public recreation policies of the Coastal Act. Therefore the Commission imposes **Special Condition 2** which requires that if any of the proposed development becomes threatened by coastal hazards in the future, even though information available today finds that it is not expected, that the threatened development must be removed rather than protected. This condition recognizes that the applicant's consultant has found that the site is expected to be safe, while also recognizing that predictions of the future cannot be certain. In addition, the Commission imposes **Special Condition 6**, which requires the applicant to record a deed restriction on the property, acknowledging the risks inherent in undertaking development in this dynamic area and acknowledging that the degree of future risk cannot be known with certainty today. In addition, the deed restriction will assure that future owners will be aware of the potential hazards at the site and of the restrictions in place upon the development.

Were it not for the project coastal engineer's detailed explanation that no shoreline protection device is expected to be needed over the life (75 years) of the proposed residential development, the project likely could not be found consistent with the public access and hazards policies of the Coastal Act. However, development adjacent to the ocean is inherently hazardous, and such predictions cannot be known with certainty into the future. Future certainty is further complicated by the unknown extent of future sea level rise. If, in the future it turns out that the development is not structurally stable due to increased future wave action, sea level rise, storm and tidal events, **Special Condition 2** has been required to acknowledge that no future shoreline protective device will be constructed on site to protect the proposed development, requiring the landowner to remove the development if (a) any government agency has ordered that the structures are not to be occupied due to coastal hazards, or if any public agency requires the structures to be removed; (b) essential services to the site can no longer feasibly be maintained (e.g., utilities, roads); (c) the development is no longer located on private property due to the migration of the public trust boundary; (d) removal is required pursuant to LCP policies for sea level rise adaptation planning; or (e) the development would require a shoreline protective device to prevent a-d above. Additionally, **Special Condition 7** clarifies that the Commission's

approval of this permit does not constitute a waiver of any public rights that may exist on the property and prohibits the applicant from using the permit as evidence of a waiver of any public rights that may exist on the property now or in the future. **Special Condition 7** also clarifies that the permit does not authorize the development to physically interfere with any public access rights that may exist at any future date.

The Commission finds that due to the possibility of storm waves, surges, flooding and erosion the applicant shall assume these risks as a condition of approval. Because this risk of harm cannot be completely eliminated, the Commission requires the applicant to waive any claim of liability against the Commission for damage to life or property which may occur as a result of the permitted development. The applicant's Assumption of Risk, Waiver of Liability and Indemnity, as required by **Special Condition 1**, will show that the applicant is aware of and understands the nature of the hazards which exist on the site, and that may adversely affect the stability or safety of the subject development, and will effectuate the necessary assumption of those risks by the applicant. Additionally, **Special Condition 6** requires the applicant to record a deed restriction that imposes the terms and conditions of this permit as restrictions on use and enjoyment of the property and provides any prospective purchaser and any future owners of the site with recorded notice that the restrictions are imposed on the subject property. Therefore, the Commission finds that the proposed project, as conditioned, is consistent with the hazards and shoreline development policies of the Coastal Act.

Geotechnical

A Geotechnical Investigation Report was prepared for the proposed development by ZS Engineering, dated 5/24/2017. ZS Engineering also provided documents titled *Responses to Comments from California Coastal Commission CDP Application #5-17-0017,* dated 7/9/2017 and *Grading and Foundation Plans Review for a Custom Build Home 16611 S. Pacific Avenue, Huntington Beach*, dated 7/9/2017 (these documents collectively are referred to herein as Report). The Report indicates that shallow ground water and liquefaction are potential issues for development in the project vicinity. Sea level rise is expected to increase groundwater levels, exacerbating the hazard. Regarding groundwater, the Report finds:

> *"Groundwater was encountered at a depth 7 feet below the pavement level (on S. Pacific Avenue) during our field exploration at the site on April 10, 2016. Historic shallow groundwater level for the general area of this project site is 3 feet as documented in the state's Seismic Hazard Zone Report 020 for the Seal Beach 7.5-Minute Quadrangle. In order not to reach below this historic shallow groundwater level, total depth of mat foundation embedment below the existing grade and remedial grading below the mat foundation bottom shall not exceed 3 feet.*
>
> *Mat foundation shall be embedded 18 inches below the lowest grade, which will be the pavement surface level (along S. Pacific Avenue) in front of the property. Finish surface elevations of existing asphalt paving on S. Pacific Avenue are survey shot at 10.77 to 10.98 feet in front of the property. Accordingly, bottom elevation of the mat foundation shall be 9.27 feet. Overexcavation underneath the building footprint area shall extend 18 inches below the bottom of the mat foundation. Bottom of remedial grading and the soil-cement layer will be 3 feet (instead of 3.5 feet), which will not be below the historic*

shallow groundwater level. Laterally, overexcavation shall extend minimum 2 feet beyond the outer edges of the mat foundation, wherever not constrained by the property limit."

Regarding liquefaction, the Report states:

"Our evaluations for liquefaction potential indicated a potentially liquefiable soil layer, about 4 feet thick, at a depth 29 feet below the lowest grade. Surface manifestation (such as sand boiling, ground fissure, etc.) causing loss of bearing capacity of the foundation subgrade soils is not likely to happen in the event of a major earthquake due to the following factors: a thick non-liquefiable zone below the existing grade; ground improvements involving a foundation subgrade made of soil-cement mix; depth and thickness of the potentially liquefiable layer as discussed above. Maximum dynamic settlement at this site is estimated on the order of 0.63 inch.

In order to diminish the potential of differential settlement, proposed new building foundations are recommended to be a minimum 24 inches thick concrete mat bearing on a compacted subgrade made of soil-cement mix, minimum 18 inches thick below the foundation bottom. Bottom [sic] the soil-cement layer underneath the mat foundation will be at 3 feet below the lowest grade of asphalt paving (elevation 10.77 feet) in front of the property; this will stay above groundwater in the event groundwater level rises to the historic shallow level. Structural integrity of the proposed new three-story residential buildings will remain intact during a major seismic event provided the geotechnical parameters and grading recommendations in this report are properly implemented in the design and during construction of this project."

The Geotechnical Report concludes:

"Based on our geotechnical investigation findings, it is our opinion that the subsurface soils are suitable to support the proposed new buildings provided the geotechnical design parameters and recommendations in this report are taken into account during design and construction of this project."

The recommendations described above have been incorporated into the proposed project's foundation (see **Exhibit 2** page 9, Foundation Plan) and the Geotechnical consultant has reviewed and approved the proposed project's grading and foundation plans (Grading and Foundation Plans Review, by ZS Engineering, dated 7/9/2017).

Based upon the technical information provided by both the project geotechnical consultant and the project coastal engineer, the proposed development can be found to be consistent with Section 30253 of the Coastal Act which requires that risks to life and property be minimized, that stability and structural integrity are assured, and that proposed development neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area.

Development inconsistent with Section 30253 of the Coastal Act could not be approved. Likewise, development that will become inconsistent with Section 30253 of the Coastal Act cannot be approved. Technical consultants have demonstrated that the proposed development will be safe from coastal hazards even with expected sea level rise over the life of the project. Consequently, no future shoreline protection device is expected to be needed to protect the proposed development. Were it not for these justifications, the Commission could not find the proposed development consistent with Section 30253 of the Coastal Act. Development adjacent to the ocean is inherently hazardous. Development which may require a protective device in the future cannot be allowed to the extent that such a device will have adverse impacts upon, among other things, public access, visual resources and shoreline processes. Based on the project coastal engineer's explanation that no shoreline protection is expected to be needed over the life (75 years) of the structure, the project can be found to be consistent with 30253 of the Coastal Act. However, development adjacent to the ocean is inherently hazardous, and such predictions cannot be known with certainty into the future. Future certainty is further complicated by the unknown extent of future sea level rise, which will cause increased flooding, erosion and groundwater levels. Therefore the Commission imposes Special Condition 2, which prohibits future shoreline protection, and requires that if, in the future, any part of the development approved by this permit becomes threatened by erosion and/or if any government agency has ordered that the structure is not to be occupied due to coastal hazards, the development shall be removed.

To further minimize the project's impact on shoreline processes, and to further minimize risks to life and property, the development has been conditioned to require that the landowner and any successor-in-interest assume the risk of undertaking the development (Special Condition 1). As conditioned, the Commission finds that the development is consistent with the requirements of Sections 30253 of the Coastal Act regarding minimizing risks to life and property and assuring stability and structural integrity.

C. PUBLIC ACCESS

Section 30210 of the Coastal Act states:

> *In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resources areas from overuse.*

Section 30211 of the Coastal Act states:

> *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.*

Section 30212 of the Coastal Act states:

> *(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or (3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.*
> *(b) For purposes of this section, "new development" does not include:*
> > *(1) Replacement of any structure pursuant to the provisions of subdivision (g) of Section 30610.*
> > *(2) The demolition and reconstruction of a single-family residence; provided, that the reconstructed residence shall not exceed either the floor area, height or bulk of the former structure by more than 10 percent, and that the reconstructed residence shall be sited in the same location on the affected property as the former structure.*
> > *(3) Improvements to any structure which do not change the intensity of its use, which do not increase either the floor area, height, or bulk of the structure by more than 10 percent, which do not block or impede public access, and which do not result in a seaward encroachment by the structure.*
> > *(4) The reconstruction or repair of any seawall; provided, however, that the reconstructed or repaired seawall is not seaward of the location of the former structure.*
> > *(5) Any repair or maintenance activity for which the commission has determined, pursuant to Section 30610, that a coastal development permit will be required unless the commission determines that the activity will have an adverse impact on lateral public access along the beach.*
> > *As used in this subdivision, "bulk" means total interior cubic volume as measured from the exterior surface of the structure.*
> *(c) Nothing in this division shall restrict public access nor shall it excuse the performance of duties and responsibilities of public agencies which are required by Sections 66478.1 to 66478.14, inclusive, of the Government Code and by Section 4 of Article X of the California Constitution.*

Section 30212 of the Coastal Act states:

> *Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.*

Section 30213 of the Coastal Act states:

> *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. The commission shall not: (1) require that overnight room rentals be fixed at an amount certain for any privately owned and operated hotel, motel, or other similar*

visitor-serving facility located on either public or private lands; or (2) establish or approve any method for the identification of low or moderate income persons for the purpose of determining eligibility for overnight room rentals in any such facilities.

Section 30214 of the Coastal Act states:

(a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:

(1) Topographic and geologic site characteristics.

(2) The capacity of the site to sustain use and at what level of intensity.

(3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.

(4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.

(b) It is the intent of the Legislature that the public access policies of this article be carried out in a reasonable manner that considers the equities and that balances the rights of the individual property owner with the public's constitutional right of access pursuant to Section 4 of Article X of the California Constitution. Nothing in this section or any amendment thereto shall be construed as a limitation on the rights guaranteed to the public under Section 4 of Article X of the California Constitution.

(c) In carrying out the public access policies of this article, the commission and any other responsible public agency shall consider and encourage the utilization of innovative access management techniques, including, but not limited to, agreements with private organizations which would minimize management costs and encourage the use of volunteer programs.

Section 30220 of the Coastal Act states:

Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Section 30221 of the Coastal Act states:

Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

Section 30221 of the Coastal Act states:

The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over

private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.

Section 30222 of the Coastal Act states:

Oceanfront land that is suitable for coastal dependent aquaculture shall be protected for that use, and proposals for aquaculture facilities located on those sites shall be given priority, except over other coastal dependent developments or uses.

Section 30222 of the Coastal Act states:

Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

Section 30222 of the Coastal Act states:

Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.

Section 30252 of the Coastal Act states:

The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.

The Coastal Act requires that public access and recreation be maximized. The subject site is located adjacent to a wide, sandy, public beach. Vertical public access to the public beach in front of the site is available approximately 100 feet southeast (downcoast) of the subject site at the end of 19th Street and approximately 270 feet northwest (upcoast) of the site, at the end of 20th Street. Lateral public access along the wide sandy beach is available seaward of the oceanfront property line at the subject site. (**Exhibit 1**, Vicinity Map and Aerial Photo). All existing encroachments seaward of the property line will be removed with the proposed development. The proposed development will not affect the public's ability to gain access to, and/or to use the coast and nearby recreational facilities. Therefore, as proposed the

development, as conditioned, conforms to Sections 30210 through 30214, Sections 30220 through 30224, and 30252 of the Coastal Act. As required by Section 30604(c) of the Coastal Act, the Commission hereby finds that the proposed development is in conformity with the public access and public recreation policies of Chapter 3 of the Coastal Act.

D. WATER QUALITY

Section 30230 of the Coastal Act states:

> *Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

Section 30231 of the Coastal Act states:

> *The biological productivity and quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

The proposed development has the potential for discharge of polluted runoff from the project site into coastal waters, either directly or into the community's storm drains, which ultimately flow to the sea. The applicant is proposing measures to address these water quality concerns, including directing site drainage to two trench drain and sedimentation basins that are proposed below grade on both sides of the driveway, providing onsite infiltration of site drainage. No landscaping and no irrigation system are proposed. In addition, during construction, the applicant proposes a number of measures to ensure water quality, including, among others, placing sand bags on-site, requiring that all trucks be washed off on-site on a gravel surface prior to leaving the site, installing wind barriers along the perimeter of the site, and covering of on-site construction materials and debris. These measures are intended to prevent silt from entering public streets and storm drains and to prevent dirt and dust from leaving the project site during construction. ZS Engineering reviewed the project's proposed drainage plan and provided the following comments (Geotechnical Investigation Report, prepared by ZS Engineering, dated May 24, 2017):

> *"In response to the above review comments, we reviewed the Precise Drainage Plan (see References) that shows positive drainage for surface runoff away from the structure - 10 percent gradient within 5 feet from the structure, followed by 2 percent gradient toward the centerline of S. Pacific Avenue. Additionally, two (2) trench drain and sedimentation basins will be constructed below grade on both sides of the entry driveway off S. Pacific*

Avenue. Each of these basins will be 3 feet by 2 feet in plan dimension, 2 feet in depth, filled with open graded 1-1/2" gravel, and be wrapped with a filter fabric liner. Bottom of the basins will be 3 feet below the finish floor level of the driveway, which will stay above the historic shallow groundwater level. In our opinion, the above trench drains and basins will provide optimum retention and infiltration of surface runoff prior to release to the storm drain system."

Special Condition 3 requires the project to conform to the site drainage plan as proposed. (**Exhibit 3**, page 8, Drainage Plan). In addition, the Commission imposes Special Condition 4 which identifies construction related measures to be incorporated into the project during construction. By incorporating these water quality protection measures into the proposed development, as proposed and as conditioned, the project minimizes the effect of construction and post-construction activities on the marine environment. Therefore, the Commission finds that the proposed development, as conditioned, conforms to Sections 30230 and 30231 of the Coastal Act regarding the protection of water quality to promote the biological productivity of coastal waters and to protect human health.

E. DEVELOPMENT

The development is located within an existing developed area and is compatible with the character and scale of the surrounding area. However, the proposed project raises concerns that future development of the project site potentially may result in a development which is not consistent with the Chapter 3 policies of the Coastal Act. Section 30610(a) of the Coastal Act provides that certain improvements to existing single-family homes do not require a coastal development permit, subject to Section 13250 of the Commission's regulations, which lists certain improvements to single-family structures that require a coastal development permit because they involve a risk of adverse environmental effect, including those improvements to a structure that is located on a beach (13250(b)(1)). The Commission finds that section 30610 does not apply to the proposed single-family structure because it is located on a beach. Thus, to assure that future improvements are consistent with the Chapter 3 policies of the Coastal Act, the Commission finds that it is necessary to impose Special Condition 5 prohibiting the construction of future improvements to the proposed single-family structure without first obtaining a coastal development permit. Therefore, as conditioned, the development conforms to the Chapter 3 policies of the Coastal Act.

F. DEED RESTRICTION

To ensure that any prospective future owners of the property are made aware of the applicability of the conditions of this permit, the Commission imposes Special Condition 6, requiring that the property owner record a deed restriction against the property, referencing all of the above special conditions of this permit and imposing them as covenants, conditions and restrictions on the use and enjoyment of the property. Thus any prospective future owner will receive actual notice of the restrictions and/or obligations imposed on the use and enjoyment of the land including the risks of the development and/or hazards to which the site is subject, and the Commission's immunity from liability. Therefore, the Commission finds that the proposed development, as conditioned, conforms to the Coastal Act by ensuring that any successors-in-interest have proper actual notice, recorded against the subject parcel, of the proposed development's required mitigation measures that mitigate the development's impacts on coastal resources.

G. LOCAL COASTAL PROGRAM

Coastal Act section 30604(a) states that, prior to certification of a local coastal program ("LCP"), a coastal development permit must be issued upon a finding that the proposed development is in conformity with Chapter 3 of the Act and that the permitted development will not prejudice the ability of the local government to prepare an LCP that is in conformity with Chapter 3. Orange County's LCP for Sunset Beach was effectively certified in 1982 and updated in 1992. However, Sunset Beach was annexed into the City of Huntington Beach effective August 2011. This annexation terminated the County's LCP jurisdiction for the area. The Sunset Beach annexation area has not yet been incorporated into the City of Huntington Beach certified LCP. Thus, there is no certified LCP for Sunset Beach and, therefore, the Chapter 3 policies of the Coastal Act provide the standard of review for coastal development permits in the area. The previously certified Sunset Beach LCP may be used as guidance. As conditioned, the proposed development is consistent with the Chapter 3 policies of the Coastal Act. Approval of the project, as conditioned, will not prejudice the ability of the local government to prepare an LCP that is in conformity with the provisions of Chapter 3 of the Coastal Act.

H. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Section 13096(a) of the Commission's regulations requires Commission approval of Coastal Development Permit applications to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The City of Huntington Beach is the lead agency responsible for CEQA review. As determined by the City, this project is categorically exempt from CEQA pursuant to section 15303(a) of the CEQA Guidelines because the project consists of the construction of one single-family residence located within an urbanized residential zone. As conditioned, there are no additional feasible alternatives or additional feasible mitigation measures available which will substantially lessen any significant adverse impact the activity would have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified possible impacts, is consistent with CEQA and the policies of the Coastal Act.

APPENDIX A

SUBSTANTIVE FILE DOCUMENTS

1) Previously Certified County of Orange Sunset Beach Local Coastal Program.

2) City of Huntington Beach Administrative Permit No. 16-011 (Tomlinson/Warner): Approval in Concept

3) GeoSoils Inc., November 9, 2016, "Coastal Hazard & Wave Runup Study for 16611 South Pacific Avenue, Sunset Beach, County of Orange, California"; and GeoSoils Inc., February 27, 2017, "Response to California Coastal Commission Letter of Incomplete Application for CDP 5-17-0017"; email correspondence between David Skelly of GeoSoils, Inc. and Meg Vaughn Coastal Commission staff, dated 10/23/2017, 10/20/2017; 9/7/17.

4) ZS Engineering, May 24, 2017, "Geotechnical Investigation Report Custom Build Home at a Residential Lot 16611 S. Pacific Avenue, Huntington Beach, CA 90742; ZS Engineering, July 9, 2017, "Grading and Foundation Plans Review for a Custom Build Home 16611 S. Pacific Avenue, Huntington Beach, Orange County, CA 90742 Coastal Development Permit Appl. #5-17-0017 (3158 Redhill Landlord LLC); ZS Engineering, July 9, 2017, "Responses to Review Comments from California Coastal Commission Coastal Development Permit App;. #5-17-0017 (3158 Redhill Landlord LLC) 16611 S. Pacific Avenue, Sunset Beach/Huntington Beach, Orange County, CA.