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Th17a

Prepared August 14, 2013 for August 15, 2013 Hearing

To: Commissioners and Interested Persons

From: Dan Carl, North Central Coast District Director
Karen Geisler, North Central Coast Coastal Planner

Subject: STAFF REPORT ADDENDUM for Th17a
Application 2-10-039 (Land's End)

The purpose of this addendum is to modify the staff recommendation for the above-referenced item in several ways, including to modify the duration of the recommended seawall authorization term to tie it to the life of the endangered existing structures being protected by the seawall in this case, and to respond to the Applicant's recent response to the staff report (dated August 9, 2013; see copy in the North Central Coast District Deputy Director's Report, Item 13 on the Commission's August 15, 2013 agenda) which raises a series of issues, including with respect to: a twenty-year authorization term; claims of a regulatory takings; future changes to the blufftop public access path; and rock and debris removal requirements. Thus, the staff report dated August 1, 2013 is modified as shown below (where applicable, text in underline format indicates text to be added, and text in ~~strikethrough~~ format indicates text to be deleted):

1. **Add the Applicant's August 9, 2013 correspondence to the staff report as Exhibit 13 (and titled "Applicant's August 9, 2013 Correspondence").**

2. **Replace in its entirety the section entitled "Time Period for Authorization of the Shore Protection" on pages 37-38 of the staff report with the following:**

   Duration of Armoring Approval
   The Applicant has requested that the Commission not limit the length of their development authorization to a period of twenty years, in part because a San Diego Superior Court judge has overturned a similar twenty-year limitation in another case, finding that the Commission lacked the authority to impose such a condition because it constituted a regulatory taking. The Applicant further states that the twenty-year authorization period condition impermissibly requires removal of its armoring, and that such condition should not be imposed in a situation, as here, wherein the armoring provides structural support for highly valued public access improvements, which are already required to be provided in perpetuity. See the Applicant's August 9, 2013 correspondence in Exhibit 13.

   The Commission first rejects the Applicant's assertions because the trial court decision referenced by the Applicant is on appeal and cannot be relied upon as legal precedent, and

in any case, the court's findings are limited to the facts of that specific case. The Commission also rejects the Applicant's assertions because: (1) Section 30235 only authorizes seawalls when required to protect an existing structure in danger of erosion, so, to ensure consistency with the Coastal Act, the seawall can no longer be authorized after the existing structure it is required to protect is redeveloped, no longer exists or no longer requires armoring; and (2) the fact that the Applicant is independently required by prior permit authorizations and a recorded public access easement to provide ambulatory public access in perpetuity contravenes the Applicant's regulatory takings claims because the Applicant's ownership does not include the right to exclude others from the public access easement area occupied by the shoreline protective device.

In terms of a fixed armoring authorization term, such as twenty years as contested by the Applicant, the concept is based on addressing certain inherent uncertainties associated with the length of time shoreline protection might exist in any particular case without major repairs or replacement in a dynamic coastal environment, and to address the changing and somewhat uncertain nature of decisions related to shoreline armoring, such as the state of the art for design of such devices, sea level rise and other physical changes, legislative change, or new judicial determinations. For example, with respect to sea level rise and other physical changes, there is a growing body of evidence that there has been an increase in global temperature and that acceleration in the rate of sea level rise can be expected to accompany this increase in temperature (some shoreline experts have indicated that sea level could rise by as much as 4.5 feet to over 6 feet by the year 2100[1]). 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, leading to a faster loss of the beach as the beach is squeezed between the landward migrating ocean and the fixed backshore. This will expose the back bluff or seawall to more frequent wave attack, increasing the rate of erosion of unarmored bluffs.

In certain past cases the Commission has addressed such uncertainties through identifying a twenty-year term for the authorization of armoring projects. There have, however, been concerns raised that a twenty-year term may not be the appropriate way to address such uncertainties, including in relation to both armoring design lifetimes and the lifetimes of development being protected by the armoring, as well as concerns that this condition could cause significant investments of staff and permittee time and resources to process additional authorizations when the twenty years is over.

In this case, the Commission does not impose a twenty-year term, but instead (a) ties the length of armoring authorization to the life of the existing endangered structures the armoring is required to protect; (b) requires the Applicant to submit a complete application for a permit amendment to remove the armoring when the existing structures warranting armoring are redeveloped, no longer present, or no longer require armoring; and (c)

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[1] In 2010, the California Climate Action Team evaluated possible sea level rise for the California coast and, based on several of the Intergovernmental Panel on Climate Change (IPCC) scenarios, projected sea level rise up to 1.4 meters (4.5 feet) by 2100. In 2011, the Ocean Protection Council adopted interim guidance on sea level rise that recommends state agencies consider similar amounts of sea level rise for deliberations on coastal projects (http://opc.ca.gov/webmaster/ftp/pdf/agenda_items/20110311/12. SLR_Resolution/SLR-Guidance-Document.pdf, last consulted April 15, 2012). A 2012 analysis by a National Research Council committee (http://www.nap.edu/catalog.php?record_id=13389) projects sea level for the central California could rise up to 5.5 feet from 2000 to 2100. A 2012 NOAA Technical Report (NOAA Tech Memo OAR CPO-1) projects, with high confidence, that global sea level will rise at least 0.6 feet (0.2 meters) and no more than 6.6 feet (2.0 meters) from 1992 to 2100.

requires the Applicant to submit a complete application for a permit amendment to mitigate for impacts attributable to the armoring beyond the initial 20-year period upon which initial impact mitigation is based (see Mitigation of Shoreline Sand Supply Impacts Section below).

Section 30235 Override
Section 30235 only authorizes shoreline protection devices when necessary to protect an existing structure in danger of erosion, and shoreline protective devices are no longer authorized by Section 30235 after the existing structures they protect are redeveloped, no longer present, or no longer require armoring.

The Applicant believes that it is permissible for the proposed armoring system (consisting of the proposed seawall, riprap toe protection, riprap wedges at the ends of the seawall, and the grade beam and buried wall system) to stay in place for as long as it mitigates for any impacts beyond the twenty-year period of development authorization, and the Applicant asserts that a twenty-year term would constitute a regulatory taking, in part based on the assumption that the Commission does not have a basis to deny the proposed armoring. However, this position ignores that there currently is no feasible alternative to the armoring that could both protect the endangered apartment buildings and remain consistent with all applicable provisions of the Coastal Act. The armoring in this case is actually being authorized using the "override" provisions of 30235 of the Coastal Act because it could not be found consistent with all other applicable provisions of the Coastal Act, so the armoring authorization is tied to its compliance with the provisions of 30235.

Specifically, this armoring impedes public access to and along the shoreline, destroys beaches and related habitats, increases erosion on adjacent properties, and visually impairs coastal areas. Most of the proposed project, and all of the proposed seawall, is also located within the portion of the property subject to public access easement (the 2006 Public Access Easement; see also Public Access and Recreation section below). The proposed armoring is inconsistent with several Chapter 3 policies of the Coastal Act and, as detailed herein, will cause impermissible adverse impacts to coastal resources that are protected by the Coastal Act, including but not limited to substantial alteration and destruction of natural landforms inconsistent with the requirements of Sections 30251 and 30253. Additionally, although design modifications and in-lieu mitigation fees can help mitigate sand supply and beach access impacts, including by allowing for the purchase of comparable recreational opportunities, these impacts can never be entirely eliminated or mitigated because as stated elsewhere in this report, the existing beach cannot be maintained, new beach cannot be created, and there is no private beach available to acquire. The proposed armoring is nevertheless being approved by the Commission, however, based on the "override" provision of Section 30235 that instructs the Commission to approve a shoreline protective device to protect an existing structure if specified criteria are satisfied.

In such a circumstance, the only applicable basis for the Commission to approve proposed armoring such as this that is otherwise inconsistent with the Coastal Act in these ways is when it is required to protect an existing structure in danger from erosion. If there was no existing structure in danger from erosion and the armoring was not required to protect it, the seawall would be denied. That the project satisfies the tests of the Section 30235 "override," and thereby must be authorized despite its other impacts that cannot be fully mitigated,

therefore presumes the existence of a legally authorized existing structure that the armoring is required to protect.

Accordingly, one reason to limit the length of a shoreline protective device's development authorization is to ensure that the armoring being authorized by Section 30235 is only being authorized as long as it is required to protect a legally authorized existing structure. If an applicant must seek reauthorization of the armoring before the structure that it was constructed to protect is demolished or redeveloped, then Section 30235 instructs the Commission to approve the shoreline protective device if it is still required to protect an existing structure in danger of erosion. However, once the existing structure that the armoring is required to protect is demolished or redeveloped, the armoring is no longer authorized by the override provisions contained in Section 30235 of the Coastal Act. Accordingly, if there is no existing structure in danger from erosion, then the Commission cannot approve an otherwise inconsistent shoreline protective device relying on the provisions of Section 30235 of the Coastal Act.

Another reason to limit the authorization of shoreline protective devices is to ensure that the Commission can properly implement Coastal Act Section 30253 together with Section 30235. If a landowner is seeking new development on a blufftop lot, Section 30253 requires that such development be sited and designed such that it will not require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. Sections 30235 and 30253 prohibit such armoring devices for new development and require new development to be sited and designed so that it does not require the construction of such armoring devices. These sections do not permit landowners to rely on such armoring devices when siting new structures on blufftops and/or along shorelines. If a shoreline protective device exists in front of a lot, but is no longer required to protect the existing structure it was authorized to protect, it cannot accommodate future redevelopment of the site in the same location relying on the override provisions of 30235. Otherwise, if a new structure is able to rely on shoreline armoring which is no longer required to protect an existing structure, then the new structure can be sited without a sufficient setback, perpetuating an unending reconstruction/redevelopment loop that prevents proper siting and design of new development, as required by Section 30253. By limiting the length of development authorization of a new shoreline protective device to the existing structure it is required to protect, the Commission can more effectively apply Section 30253 when new development is proposed.

Therefore, as an alternative to limiting the length of development authorization to a specific timeframe, such as twenty years, the Commission here authorizes the proposed armoring in this case coincident with the existing structures it is authorized to protect, and requires removal of the armoring when the structures it was authorized to protect are demolished or redeveloped. In this manner, new development will not be able to rely on armoring that no longer meets the override provisions of Section 30235 of the Coastal Act.

In terms of impact mitigation for the approved project, and as discussed further below, the in-lieu fees designed to mitigate for the impacts associated with the proposed shoreline protection system have used a 20-year time period to calculate passive erosion and sand retention impacts, both of which are tied to the future rates of erosion and are time dependent. These impacts will continue to occur, though, for the full time that the approved

armoring system is in place, including beyond twenty years if it continues to be necessary to protect the existing endangered structures identified.

Using a twenty-year period for initial impact mitigation is appropriate in this case. Such initial twenty-year mitigation framework uses available information on historic trends for the projection of future erosion. In siting new development, proposed setbacks attempt to anticipate future acceleration of erosion through using the highest historic erosion rate or by developing relationships between erosion and sea level. And, on an eroding coastline, if the proposed erosion rate is higher than the actual rate, the result is only that the development will be safe from erosion for a longer time period that initially assumed. However, for shoreline armoring mitigation, the Commission has often based the fee calculations upon average or moderate historic erosion rates so that the mitigation is unlikely to cover unanticipated impacts over the mitigation period (e.g., associated with higher actual erosion rates and associated problems than anticipated and applied in a mitigation context). While the erosion rates used for mitigation calculations in this case can be expected to provide a reasonable estimate of future erosion for the coming one or two decades, projections much farther into the future are far more uncertain. And, the uncertainty concerning future erosion only increases with time. Using a time period of twenty years for the mitigation calculations ensures that the mitigation will cover the likely initial impacts from the seawall, and then allows a recalculation of the impacts based on better knowledge of future erosion rates and associated impacts accruing to the armoring when the twenty years is up. Efforts to mitigate for longer time periods would require the use of much higher erosion rates and would bring a higher amount of uncertainty into a situation where a single, long-term mitigation effort is not necessary to be effective.

Therefore, Special Condition 9 ties the length of development authorization to the timeframe of the structure being protected and requires the Applicant to submit an application for a permit amendment to remove the armoring when the currently existing structures warranting armoring are redeveloped, are no longer present, or no longer require armoring. However, since the in-lieu mitigation fees are calculated based on the first twenty years of impact (again see Mitigation of Shoreline Sand Supply Impacts Section below), Special Condition 9 also requires the Applicant to submit an application for a permit amendment prior to the expiration of the twenty-year period proposing mitigation to address the impacts of the armoring beyond the twenty-year period.

<u>Regulatory Takings Claim</u>
In terms of the Applicant's regulatory takings claim, the fact that the Applicant was required by prior permit authorizations and recorded access easements to dedicate ambulatory public access in perpetuity contravenes the Applicant's regulatory takings claim because the Applicant's ownership does not include the right to exclude others from the public access easement areas upon which the shoreline protective device sits.

The Applicant is already required to provide access in perpetuity. That is a requirement of prior permits and recorded access easements (again, see also Public Access and Recreation section below). It is not a new requirement of this permit authorization. The proposed armoring in this case is required to protect the existing apartment buildings independent of the public access on the site, and although the proposed armoring does incidentally protect the public access, it is not required to protect the public access which is ambulatory and can

be relocated by permit amendment pursuant to the terms of the underlying public access easements.

Thus, the Applicant's title to the property occupied by the armoring does not include the right to exclude the public because the area is burdened by recorded public access easements that were required by prior permits. Further, when the Applicant obtained emergency permits to construct shoreline armoring, the emergency permits expressly stated that the authorization was only temporary and that the landowner may need to remove the shoreline protection in its entirety. The Applicants undertook construction in full knowledge of both the existing ambulatory easement obligations and the limitations on the permanency of the armoring allowed by the emergency permits. As beachfront property owners, they were also fully aware of the potential for changes in the location and extent of the public easement they had dedicated based on the advances and retreats of the sea.

The proposed project, as conditioned, is the least environmentally damaging feasible alternative to both protect the existing apartment buildings and remain consistent with all applicable provisions of the Coastal Act. However, because it cannot be found consistent with all applicable provisions of the Coastal Act, the armoring is being authorized here using the override provisions of Section 30235 of the Coastal Act. Since the approval is therefore consistent with the Coastal Act only so long as it is required to protect existing structures in danger of erosion, the armoring can only be authorized for as long as the existing endangered structures continue to exist. Special Condition 9 thus serves the same purposes as a refusal to issue the permit if the protective device "had not been required to protect an existing structure in danger of erosion."

In addition, Special Condition 9, does not limit the discretion of a future Commission to determine that armoring can remain in place, even if the existing structure in danger of erosion is demolished or redeveloped. The Applicant or its successor in interest could apply to maintain this armoring at the time that its authorization expires under the terms of this permit. A future Commission would then have the opportunity to determine whether armoring would be required to avoid an unconstitutional "taking" of the Applicant's property, or otherwise could be approved consistent with the Coastal Act, or whether the existing armoring should be removed.

Further, the Commission is not limited to conditions which mitigate the armoring's impacts on shoreline sand supply. For example, the Ocean Harbor House armoring case,[2] confirms the Commission's broad authority to condition permits: "[T]he Commission has broad discretion to adopt measures designed to mitigate all significant impacts that construction of a seawall may have," finding "The language of 30235 is permissive, not exclusive. It allows seawalls under certain conditions…The statute does not purport to preempt other sections of the Act that require the Commission to consider other factors in granting coastal development permits." Special Condition 9 is thus imposed consistent with the Coastal Act and the controlling appellate court decision.

100-year Design Life

[2] *Ocean Harbor House Homeowner's Association v. California Coastal Commission (2008) 163 Cal. App.4th 215.*

The Applicant claims that Commission staff requested that they build the proposed armoring system with a design life of 100 years, and that this should be countenanced in terms of any authorization duration. However, the Commission disputes this assertion. The design conditions that would be expected for a regular permit action (i.e., use of the 100-year storm event as the design condition and consideration of sea level rise) were used, and as such, the proposed design is consistent with the normal shore protection designs brought before the Commission. However, the 100-year storm event is a design condition. It is an event with a 1% probability of occurrence during any year. Thus, each year, there is a 1% probability that the shore protection could experience a design event 100-year storm. This probability of occurrence increases as the time period increases, so that over 30 years, there is a 25% probability that the armoring may experience a 100-year storm. The design condition to be safe from a 100-year storm is thus not a requirement to be designed for a 100-year time period. Likewise, the use of a sea-level rise estimate that is projected to occur by 2100, does not, in itself, require the entire armoring system to be designed to last for 90 years. It is a precautionary step and was used as one element for establishing the height of the proposed armoring.

The Applicant has further asserted that the seawall has been built with 24-inch thick, Type V concrete, 4-inch epoxy coated reinforcing bar, all covered with a 4-inch thick architectural finish for visual quality and there is no reason it cannot have a life expectancy of 100 years if issues of flanking and maintenance are addressed. The Applicant also asserts that millions of dollars have been spent to ensure this 100-year life expectancy. However, the costs for the 100-year design storm are integral to most seawalls and would not be part of the "100-year life expectancy costs". The proposed seawall with toe protection does not exhibit unique characteristics that would differentiate it from other shore protection that has been installed recently along the California coast and nothing suggests that millions of dollars of extra expense were incurred to provide for a 100-year life of structure.

Through years of experience, much has been learned about the failures of shore protection. Seawalls fail by a variety of mechanisms, including loss of backfill, settlement, scouring beneath foundations, and out-flanking. The Commission has had only relatively recent experience with tied-back concrete near-vertical walls such as the one at Land's End. There are walls that have performed well for at least ten years, and according to the Commission's coastal engineer, coastal engineers in the San Diego area, where such walls are relatively common, have informed the Commission staff that their design life is approximately 20-25 years.

There are also reasons to believe that this seawall will have a shorter than average life unless it is carefully maintained. Unlike most coastal bluffs, this high bluff consists of easily erodible marine terrace deposits throughout its entire height. It is founded in earth materials of similar low strength. The rock wedges and toestone are designed to limit outflanking and scouring beneath the foundation, but they could be compromised by settlement, outflanking and scouring of themselves, or upper bluff failures that compromise their integrity. Also, regarding the buried grade beam and caisson wall, the series of caissons connected by grade beams could be exposed earlier than anticipated because the steep upper bluff will continue to erode until the unprotected upper bluff reaches an equilibrium angle of repose (which in these materials is likely to be 35-45 degrees). Since portions of the caisson-grade beam

system are as close as 20 feet to the edge of the bluff, the Commission's senior geologist has opined that they can begin to be exposed in less than the 45 years asserted by the Applicant.

3. Modify Special Condition 9 on pages 17 and 18 as follows:

9. ~~Twenty-Year~~ Duration of Armoring Approval.

a. Authorization Expiration. This CDP authorizes the armoring (consisting of the seawall, riprap toe protection, riprap wedges (at the upcoast and downcoast edges of the seawall), and the grade beam and caisson buried wall system)~~for twenty years from the date of this CDP approval (i.e., until August 15, 2033) or~~ until the time when the currently existing structures ~~warranting~~ requiring armoring are: (i) redeveloped as that term is defined in Special Condition 11; (ii) no longer present~~ and/~~; or (iii) no longer require armoring ~~for such protection~~, whichever occurs first. When the currently existing structures requiring armoring are: (i) redeveloped as that term is defined in Special Condition 11; (ii) no longer present; or (iii) no longer require armoring, the Permittee shall submit a complete CDP amendment application to the Coastal Commission to remove the armoring.

b. Modifications ~~within 20 Years~~. If~~, within the 20-year authorization period,~~ the Permittee applies for a CDP or an amendment to this permit to enlarge the armoring ~~seawall, riprap toe protection, riprap wedges (at the upcoast and downcoast edges of the seawall), and/or the grade beam and caisson buried wall system~~, or to perform repair work affecting more than 50 percent of the armoring~~those approved structures~~, the Permittee shall provide additional mitigation for the ~~effects~~ impacts of the enlarged or reconstructed ~~seawall and/or grade beam and caisson buried wall system~~ armoring on public views, public recreational access, shoreline processes, ~~and recreation~~ and all other affected coastal resources that have not already been mitigated through this permit.

c. Amendment Required Proposing Mitigation for Retention of Armoring Beyond ~~to Retain Past~~ 20 Years. If the Permittee intends to keep the armoring ~~seawall, riprap toe protection, riprap wedges (at the upcoast and downcoast edges of the seawall), and the grade beam and caisson buried wall system~~ in place after August 15, 2033, the Permittee must ~~apply for~~ submit a complete CDP amendment application prior to August 15, 2033 proposing mitigation for the coastal resource impacts associated with retention of the armoring beyond 20 years ~~in order to extend the length of development authorization~~ (including~~, as applicable,~~ in relation to any potential modifications to the approved project desired by the Permittee at that time that may be part of such CDP application). ~~Such amendment application shall, at a minimum, include:~~

~~(1) Alternatives. Information concerning alternatives to shoreline armoring that can eliminate and/or reduce impacts to public views, public recreational access, and shoreline processes, and other coastal resources as applicable. Alternatives evaluated shall include but not be limited to: relocation of all or portions of principle structures that are threatened, structural underpinning, and other remedial measures capable of protecting principal structures and providing~~

~~*reasonable use of the property without shoreline armoring. The information concerning these alternatives must be sufficiently detailed to enable the Coastal Commission to evaluate the feasibility of each alternative, and whether each alternative is capable of protecting existing structures that are in danger from erosion.*~~

~~*(2) Mitigation. Mitigation for the effects of the seawall, riprap toe protection, riprap wedges (at the upcoast and downcoast edges of the seawall), and the grade beam and caisson buried wall system, including as modified if proposed modifications are part of the amendment application, on public access and recreation and other coastal resources for the additional term proposed.*~~

4. Modify Special Condition 11 on page 18 as follows:

11. Future Development. No future development, which is not otherwise exempt from coastal development permit requirements, or redevelopment on the blufftop portion of the subject property, shall rely on the permitted armoring (consisting of the seawall, riprap (at toe and at ends), or grade beam and caisson buried wall system) to establish geologic stability or protection from hazards. Such future development and redevelopment on the site shall be sited and designed to be safe without reliance on shoreline armoring. As used in ~~this~~ these conditions, "redeveloped" or "redevelopment" is defined to include: (1) one or more additions to the currently existing structures requiring armoring that, individually or cumulatively, exceed 50% or more of the square footage of such existing structures; (2) demolition and/or replacement that would result in replacement of 50 percent or more of such existing structures, including but not limited to, alteration of 50 percent or more of structural exterior wall area, structural flooring or structural roofing area or any combination of these areas; or (3) any demolition or replacement of less than 50 percent of such existing structures where multiple proposed demolitions or additions would result in a combined replacement of 50 percent or more of such existing structures (including previous alterations) from their condition as of August 15, 2013. ~~(1) additions, or; (2) expansions, or; (3) demolition and / or replacement that would result in alteration to 50 percent or more of the exterior walls of an existing structure or; (4) demolition and / or replacement of less than 50 percent of the exterior walls of an existing structure where the proposed remodel or addition would result in a combined alteration of 50 percent or more of the structure from its condition as of August 15, 2013, whether the work is done at one time or as the sum of multiple projects.~~ Shoreline armoring intended to protect ancillary improvements (i.e., patios, decks, fences, landscaping, etc.) located between the principal residential structures and the ocean shall be prohibited.

5. Modify the staff report throughout to conform references to a 20-year approval to an approval that: (a) ties the length of armoring authorization to the life of the existing endangered structures the armoring is required to protect; (b) requires the Applicant to submit a complete permit amendment application to remove the armoring when the existing structures warranting armoring are redeveloped, are no longer present, or no longer require armoring; and (c) requires the Applicant to submit a complete permit

amendment application to propose mitigation for impacts attributable to the armoring beyond the 20-year period upon which initial impact mitigation is based.

6. Add the following findings on page 61 just before the Public Access and Recreation Conclusion section:

The Applicant also requests the Commission to preclude now, as a condition of this permit, the potential for placement within 10 feet of private development, any access that is proposed to be relocated by permit amendment in the future (see Applicant's August 9, 2013 correspondence in Exhibit 13). The Commission does not believe it is necessary to make this change now, in advance of any permit amendment application to relocate the access easement by permit amendment in the future. The Applicant's current proposal to relocate the previously required easements does not implicate this issue. If and when the Applicant proposes to relocate access in the future and this issue arises, the Commission can make a determination on this issue then, taking into account the facts as they exist on the ground at the time the future Commission acts.

7. Add the following findings on page 37 just prior to the paragraph that begins "Given all the above…":

The Applicant has asked that they not be required to remove abandoned concrete drain pipe and debris that is seaward of the mean high tide, as well as debris that pre-dates the enactment of the 1976 Coastal Act (see Applicant's August 9, 2013 correspondence in Exhibit 13). The Applicant has also raised questions about whether it is their responsibility to remove rock and debris that they allege was placed by others and/or pre-dated coastal permitting requirements (i.e., prior to February 1973).[3] With respect to rock and or materials that may have been placed prior to February 1973, the Applicant has provided no methodology to determine which materials those are, and the Commission is not aware of a readily available method to make such a determination. The same applies with respect to rock and materials that may have been placed since then and/or by others not associated with this property. The Applicant has identified a method to distinguish between rock placed as part of the 2010 and 2011 emergency work and other rock on the beach prior to that time, but this method does not provide a way of determining the origin of the prior rock, and thus is not pertinent to this question.

Regardless of its origin, the rock and materials are located on the Applicant's property, and it is therefore the Applicant's responsibility to address such rock and materials. The Commission is unaware of coastal permits authorizing such rock and materials, and thus they are considered unpermitted. Moreover, the Applicant is required through the 2006 Public Access Easement to maintain the easement area, which includes the beach area between the mean high tide line and the base of the bluff, and further requires the Applicant to be "solely responsible for all maintenance activities necessary to keep the Easement Area and the improvements within the Easement Area in a serviceable and safe condition for

[3] *Although the Applicant cites the Coastal Act of 1976, coastal permits were required at this location going back to February 1973 based on the requirements of Proposition 20 (The Coastal Initiative).*

public use" (see Exhibit E, page 5).[4] Therefore, the Applicant is required, pursuant to the 2006 Easement, to remove all rocks and debris that could impede public use or lead to unsafe conditions. The Applicant may have recourse to investigate and pursue remedies against potential third-parties that may have been involved in placement of such rock and materials, but that is something that is not between the Applicant and the Commission. For the purposes of this review, the existing rock and debris on the beach on the Applicant's property is the Applicant's responsibility and must be removed, including to meet the requirements of the 2006 Easement. Further, as far as the Commission understands, a portion of the unpermitted rock on the beach is from the earlier stairway that was also the Applicant's responsibility, and at least a portion of other debris is from the storm drain that served their development.

In practical terms, there could be long project delays if the Applicant and/or the Commission were to attempt to refine a methodology to be able to explicitly determine the origin of such rock and materials definitively, and it may not even be practically possible. However, to prevent the Applicant from excessive excavation and disturbance of the beach and intertidal area to find and remove all unpermitted rock, concrete and debris, Special Condition 1(e) limits the removal areas to those immediately adjacent to, within and inland of the trench, and to those rocks, pieces of concrete and debris that are visible from the beach surface, extending seaward from the base of the seawall to the seaward limit of the intertidal zone (i.e., to the seaward edge of the wet beach area that is accessible during low tides). In the future, if additional rocks or debris become exposed and impede public access, the Applicant, or future landowner, would be required to remove them, pursuant to the terms of the Public Access Easement.

8. Modify Special Condition 1(e) on page 18 as follows:

1.e. Rock, Concrete, and Debris Removal. Other than the minimum amount of rock riprap at the upcoast and downcoast edges of the seawall needed to conform the edges of the seawall to the coastal bluff and the rock riprap permitted to be relocated from the trench to the base of the seawall for toe protection, (1) all other rock riprap and concrete debris (e.g., abandoned concrete drain pipe, concrete debris, etc.) located: (i) in the area adjacent to, within, and/or between the trench and the base ~~seaward~~ of the approved seawall, including rock remaining in the trench (after rock has been moved for toe protection) and debris and/or rock that is excavated through the efforts to move and/or remove the rock in the trench; and (ii) in the area extending seaward from the base of the seawall to the seaward limit of the intertidal zone (i.e., to the seaward edge of the wet beach area that is accessible during low tides) and visible from the beach surface;~~located in the area seaward of the approved seawall,~~ and/or (2) placed in the nearby area by the Permittee, shall be removed and properly disposed of at an inland location approved by the Executive Director.

[4] *Pursuant to Special Condition 4, the existing Public Access Easement would be amended to authorize the seawall, but the Amended Easement must require the Easement Area to be maintained by the landowner, consistent with the requirements of the 2006 Easement, including the requirement to keep the area in a serviceable and safe condition for public use.*

9. Modify the findings in the "Danger from Erosion" section beginning in the third paragraph on page 32 as follows:

…Given the relatively low degree of cohesion in the bluff materials, and as indicated by recent erosion events, it is clear that the current apartment building setbacks are insufficient to protect these structures from future erosion, and that they could be in danger from such erosion in the next few years.

The Applicant's geotechnical report indicates that the existing apartment buildings (and the public access walkway and stairway) are in immediate danger from erosion and wave attack, and that the remaining setback area could be lost in one or two storm cycles. The Commission's Senior Engineer and Geologist, having personally observed the site on numerous occasions, concur. However, the Commission finds that the proposed armoring system is required to protect the apartment buildings independent of the public access improvements on the site (see also Armoring Alternatives section below), and although the armoring system here does incidentally protect the public access improvements, the approved armoring system is not necessarily required to protect the public access which is ambulatory and can be relocated by permit amendment according to the terms of the recorded access easement. Therefore, the existing apartment buildings ~~structures~~ are "in danger from erosion" as that term is understood in a Coastal Act context, and thus the project meets the second test of Section 30235 of the Coastal Act.

10. Modify the findings in the "Armoring Alternatives" section beginning in the third paragraph on page 37 as follows:

Given all the above, the proposed project which includes a semi-vertical concrete seawall with toe scour protection and riprap placed at both ends of the wall to prevent outflanking, as conditioned to remove all of the riprap from the trench and restore the trench area, to eliminate the proposed ledge/trench/keyway, and to remove other riprap and concrete debris (e.g., abandoned concrete drain pipe, concrete debris, etc.), is the least environmentally damaging alternative "required" to protect the existing endangered apartment complex,[5] ~~and accessway,~~ and thus meets the third test of Section 30235 of the Coastal Act.

11. Modify the Geologic Conditions and Hazards Conclusion section on page 47 as follows:

In this case and for this site and this fact set, the proposed project, as conditioned, can be found consistent with Coastal Act Sections 30235 and 30253 because it is required to protect an existing structure and designed to eliminate or mitigate impacts on shoreline sand supply. The sand supply in lieu fee helps mitigate~~s~~ for the loss of sand to the littoral cell in this case. Further, as discussed in the Public Access Findings impacts to the beach area itself that would be lost due to encroachment (11,095 square feet) and passive erosion (26,800 square feet) are partially mitigated through an in-lieu fee that is based on the cost of nearby land values. These fees mitigate the identified impacts to the extent feasible, consistent with the requirements of Section 30235.

[5] *As indicated earlier, although the armoring system here does incidentally protect the public access improvements on the site as well, the armoring is not necessarily required to protect the public access which is ambulatory and can be relocated by permit amendment according to the terms of the recorded access easement.*

12. Modify the Public Access and Recreation Conclusion section on page 61 as follows:

The project would cause significant adverse impacts to public access and recreation, including through impacts to local sand supply and the loss of a significant area of sandy beach that is held in a public access easement. However, project conditions minimize these impacts, including by requiring the repair and maintenance of existing public accessways, the removal of unnecessary riprap (including the riprap from within the trench), and payment of in-lieu mitigation fee to offset unavoidable impacts to public access and recreation, As conditioned, the project ~~is consistent~~ complies with the Coastal Act access and recreation policies sited above, to the extent feasible, consistent with the requirements of Section 30235.

13. Modify the Public Views section beginning on page 62 as follows:

~~Although the~~ The proposed subject seawall introduces new massing into the viewshed as compared to the natural bluff face, but it is encapsulated in a faux bluff design that approximates the look of natural bluffs in the vicinity. ~~Provided the~~ The camouflaging treatment is required to reduce the visual impacts of this massive new seawall in this area, although it still presents a significant change from the appearance of a natural bluff ~~appropriately works, the project should not significantly adversely affect the public view~~ (see Exhibit 4: Site Photographs pages 5-8 for site photographs of the finished project). The Applicant proposed to design and construct the wall to mimic, blend and be compatible with the surrounding natural landform to the maximum extent feasible, including in form, inclination, texture, and color to create the concrete facing of the proposed seawall to approximate natural bluffs. When done correctly, such sculpting can help to camouflage large slabs of concrete, although even then, there may be a significant change to the current natural aesthetic; when done poorly, however, it just reinforces the unnatural element present in the back beach area. This approval is conditioned to ensure that the seawall is made to mimic natural undulating bluff landforms in the vicinity in terms of integral mottled color, texture, and undulation to the maximum extent feasible (see Special Condition 1: Revised Project Plans). As shown by the current site photographs (see Exhibit 4: Site Photographs, pages 5-8), the vertical seawall construction is now complete and visually and effectively blends in with the existing natural bluff face, while the encased stairway remains mostly hidden when viewed from the beach. Thus, the semi-vertical seawall is inconsistent with Coastal Act policies that require protection of public views, minimization of alteration of natural landforms and to prevention of impacts to recreational areas. But because the seawall must otherwise be approved under Section 30235 of the Coastal Act, these adverse impacts have been mitigated to the extent feasible, by the conditions requiring that it be designed to mimic the look of natural bluffs.

The concrete tied-back seawall stands 35 feet high in total, with approximately 20 feet that is currently visible above the summer beach sand elevation (see Exhibit 2: Project Plans, pages 3 and 6). The remaining bluff face rising up to about 100 feet at the top remains exposed and is allowed to erode naturally to help cover and disguise the seawall. This could result in a negative public viewshed impact because the exposure at the upper bluff makes it more obvious that the seawall at the lower bluff is a concrete structure and not a natural bluff face. However, the bluff material, by being allowed to erode naturally, creates piles of talus and

colluvium that will help serve to partially hide the concrete seawall at times. In addition, the seawall is faced with a sculpted concrete surface that mimics natural undulating bluff landforms in the vicinity and is visually cohesive with the other elements of the seawall. Additional design enhancements include drainage areas that have been integrally incorporated into the seawall finish. These measures help to offset the negative viewshed impacts <u>that are otherwise inconsistent with the Coastal Act</u>.

The proposed project is an improvement from the original project proposed under the first emergency permit to construct a larger rock riprap revetment of 45,000 tons that would have meant a greater impact on visual resources. The amount of riprap visible at the ends of the seawall on the Applicant's property is up to 60 tons and adds about 10 feet to the length of each end of the proposed seawall. Both ends of the seawall incorporate riprap rock contoured in a non-linear manner in order to follow the natural lines of the bluff, as opposed to a straight-line that would appear to describe a box-like and unnatural shape. All extraneous riprap and concrete debris adjacent to the seawall, and to the upcoast and downcoast bluffs, is required to be removed (Special Condition 1 A (5)). This ensures the end walls do not cause as much of a significant impact on the viewshed<u>, although they will nevertheless continue to adversely impact the viewshed</u>. Furthermore, the downcoast riprap end wall may be removed in the near future when the neighboring property seeks approval for shoreline armoring, and potentially installs a concrete wall that could connect to this one.

…

The buried upper bluff retaining wall system incorporates 54 concrete pilings (30 feet in diameter) set between 40 and 65 feet deep connected by a concrete grade beam. The upper bluff is designed to erode naturally and over time these pilings will likely become exposed. The Applicant estimates that such exposure will not occur for approximately 45 years. However, given the unstable nature of the bluffs, as described in the Geologic Conditions and Hazards section, above, it is possible that such exposure could occur much sooner. When exposed, the upper bluff retaining wall will have a significant adverse visual impact on views to the site from the public path and staircase and from the beach itself. Instead of natural bluff forms, the massive concrete pilings and grade beam system will be prominent in the view and detract from the natural setting. Therefore, in order to ~~avoid and~~ minimize these future visual impacts, Special Condition 10: Caisson and Grade Beam Exposure, requires the Applicant to apply for a CDP amendment to address such visual impacts as soon as any portion of the upper bluff retaining system becomes exposed. This future CDP amendment would be required to incorporate a plan to cover or camouflage the exposed retaining system so as to ~~avoid and~~ minimize adverse impacts on visual resources, and would be required to provide mitigation for coastal resource impacts otherwise.

…

As <u>discussed above, the proposed project will create significant adverse visual impacts to views to and along the ocean. In addition, it does not protect scenic visual qualities of coastal areas, nor does it minimize alteration of natural landforms. Given that the project must be approved under Coastal Act Section 30235, however, the Commission is requiring the special conditions to mitigate these adverse impacts to the extent feasible consistent with</u>

the requirements of Section 30235~~conditioned, the Commission finds the project consistent with the above-cited Coastal Act visual resource policies~~.

14. Modify the findings beginning at the bottom of page 41 as follows:

…The Applicant indicates (and the Commission's Senior Coastal Engineer concurs) that this impact is roughly equal to 1,725 cubic yards of sand per year for the proposed concrete semi-vertical seawall and riprap end walls (for the proposed project, the assumed sand content of the bluffs is 50% and the average bluff height is 69.5 feet (both provided by the Applicant), thus the annual sand loss is (0.5 x 670' x 2'/yr x 69.5')/27cy/cf = 1,724.6 cy/yr). Over the course of the identified 20-year horizon, this equates to a retention impact of about 34,493 cubic yards of beach quality sand.

15. Modify Special Condition 1.l on staff report page 7 as follows:

l. Schedule. The plans shall be submitted with a schedule for completing those elements shown on the plans that: (1) have not yet been constructed/completed (e.g., riprap toe protection, landscaping, irrigation, drainage measures, rock/concrete/debris removal, trench restoration, drain pipe modifications, public access improvements, etc.); and/or (2) have been constructed/completed but for which modifications are required to meet the terms and conditions of this approval. Such schedule shall be predicated on completion of construction as quickly as possible, with priority given to completion of the public access improvements. All such construction shall be completed as soon as possible following Labor Day 2013 (i.e., September 2, 2013) and in no case later than the first Saturday of the Memorial Day weekend in 2014 (i.e., by May 26, 2014) unless, due to extenuating circumstances (such as tidal issues or other environmental concerns), the Executive Director authorizes completion later than May 26, 2014 .