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W16a



Prepared August 10, 2010 (for August 11, 2010 hearing)

To: Commissioners and Interested Persons

From: Dan Carl, District Manager Katie Morange, Coastal Planner

Subject: STAFF REPORT ADDENDUM for W16a CDP Application Number 3-09-025 (Pebble Beach Company Beach Club Seawall)

The purpose of this addendum is to modify the staff recommendation for the above-referenced item. In the time since the staff report was distributed, several issues warranting additional discussion have been raised, and staff has also identified some minor changes to the recommendation to best address site specific issues with the proposed project. Thus, the staff report is modified as shown below (where applicable, text in <u>underline</u> format indicates text to be added, and text in strikethrough format indicates text to be deleted):

1. Pebble Beach Lodge Public Access Overlook Deed Restriction

It has come to staff's attention that the recommended permit condition related to the required Pebble Beach Lodge Public Access Overlook could be unclear with respect to the required deed restriction (see Special Condition 5(f) on staff report page 34). In particular, the deed restriction portion of the condition text as written may not be sufficiently clear in terms of the manner in which the rest of the condition is to be reflected in the deed restriction. To ensure that this portion of the condition is clear, Special Condition 5(f) on staff report page 34 is modified as follows:

Deed Restriction. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT,

the Permittee shall submit for Executive Director review and approval documentation demonstrating that the Permittee has executed and recorded a deed restriction in a form and content acceptable to the Executive Director, restricting use and enjoyment of APN 008-411-018. The recorded document(s) described above shall reflect: 1) an unobstructed extension of the existing pathway along the west side of the Sloat Building over the existing driveway to the new overlook location; 2) an overlook constructed of natural materials (e.g., wood, stone, etc.) on the seaward side of the existing paved driveway/parking area south of the Sloat Building of adequate width (at least extending from the upcoast edge of the fencing at the parking lot to a point seaward of the tree well in the parking lot) and depth (at least 10 feet), with built-in seating, trash and recycling receptacles, bicycle parking area, and railings that are limited to the maximum degree feasible (including using landscape areas to avoid the need for railings where feasible) and are as see-through as possible; 3) signage at the beginning of the pathway that identifies and directs that the pathway is available for general public use and that it leads to the overlook that provides views of Stillwater Cove and Stillwater Cove beach (including information about



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how to reach the beach), all of which is adequately sized and placed to be easily read by users; 4) that the pathway and overlook are limited to pedestrian and bicycle use only and will be available for general public use in perpetuity and not obstructed in any way, except to be temporarily closed during periods of major golf events at the PBGL consistent with the 17 Mile Drive Public Use Agreement between Monterey County and the Pebble Beach Company or as identified in future amendments to the LCP and/or through CDP approvals, whichever provides for more public recreational access; 5) that maintenance of the improvements in a structurally sound manner and in their approved state is required in perpetuity; 6) a prohibition on development in the pathway or overlook and within 10 feet of the pathway and overlook, other than appropriately permitted construction activities associated with construction, maintenance, and/or repair of the pathway or overlook, landscaping, irrigation, and associated structures shown on the approved Pathway and Overlook Plan; development authorized by an amendment to coastal development permit 3-09-025 (such as minor additional protective structures, directional and interpretive signage, etc.); and standard golf course maintenance, improvement, and repair measures, provided it does not obstruct general public access use of the pathway or overlook, except for temporary closure pursuant to the public use parameters described above. the requirements identified in this condition. The deed restriction shall include a legal description and graphic depiction of the entire parcel restricted by this condition and the area of the parcel restricted for public access. The restriction shall be recorded free of prior liens and encumbrances that the Executive Director determines may affect the enforceability of the restriction. The deed restriction shall run with the land, binding all successors and assigns. This deed restriction shall not be removed or changed without a Commission amendment to this coastal development permit.

2. 20-year Approval

Staff's recommended Special Condition 4 authorizes the seawall project for 20 years (see staff report page 31). The intent of this condition is address the uncertainty associated with shoreline armoring projects such as this, particularly the changing physical circumstances at this site over time. The Commission has recently conditioned other armoring projects with a similar condition requiring rereview after a certain time (e.g., CDP 6-07-133, Li (20 years); CDP 6-08-073, DiNoto (30 years); CDP 6-08-122, Winkler (30 years); CDP 6-03-033-A5, Surfsong Condominiums (20 years); CDP 6-08-068, Hamilton (20 years); CDP 6-07-134, Brehmer, Matchinske, and Caccavo (22 years)). The appropriate length of the time period for such reevaluation in any particular case is a matter of professional judgment based on the facts at issue. In this case staff, including the Commission's senior coastal engineer, believes that 20 years represents an appropriately conservative approach to addressing Coastal Act requirements, including in light of how long such structures tend to last without major maintenance and/or modification, and particularly in light of changing climatic conditions and their effect on coastal erosion and retreat. The staff report, however, inadvertently omitted certain text relevant to this discussion. Thus, the staff report is modified as follows:



a. Modify the third paragraph on staff report page 3 as follows:

To ensure that this project does not prejudice future shoreline planning options, including with respect to changing and uncertain circumstances that may ultimately change policy and other coastal development decisions (including <u>not only climate change and sea level rise</u>, <u>but also</u> due to legislative change, judicial determinations, etc.), staff recommends that this approval be conditioned for a twenty-year period. Despite applicant projections much further out than that, it has been staff's experience that shoreline armoring, particularly in such a significantly high-hazard area as this project, tends to be augmented, replaced, and/or substantially changed within about twenty years. The intent of the twenty-year authorization is to recognize this time-frame reality, and also to allow for an appropriate reassessment of continued armoring at that time in light of what may be differing circumstances than are present today. Of course it is possible that <u>physical circumstances as well as</u> local and/or statewide policies and priorities regarding shoreline armoring are significantly unchanged from today, but it is perhaps more likely that the baseline context for considering armoring will be different – much as the Commission's direction on armoring has changed over the past twenty years as more information and better understanding has been gained regarding such projects, including their affect on the California coastline.

b. Modify the text starting with the second paragraph on staff report page 15 as follows:

Such passive erosion impacts can be calculated over the time the proposed armoring is expected to last. In this case, the Applicant indicates that the proposed seawall will have a 50-year lifetime over which time such impacts will be in effect. However, it has been the Commission's experience that the actual expected lifespan of shoreline armoring projects is often substantially less than 50 years due to the need for major maintenance or modifications, or entire redevelopment of an armoring structure within a much shorter timeframe. In this case, the proposed seawall can be expected to be subject to heavy wave and storm action on a fairly regular basis. This wave action can only be expected to be exacerbated by sea level rise over time, with resultant impacts to the strength and integrity of the seawall. Although this project was analyzed based on a still water level of 7.3 feet MSL and 12.1 feet MSL (the latter based on an estimated 4.8-foot rise in sea level) and these still water levels include extreme high water conditions, elevated water due to El Niños, atmospheric forcing and some rise in sea level, there are still great uncertainties now, as discussed above, in the amount of future sea level rise that should be considered for project design. Even in this case and with the estimated 4.8-foot rise, the Applicant's engineers anticipate increased overtopping during storms that occur during high water conditions. In other words, and despite the Applicant's 50-year projection, it has been Commission's experience that shoreline armoring tends to be augmented, replaced, and/or substantially changed within about twenty years. Rising sea levels and attendant consequences will tend to further delimit such time period in the future, potentially dramatically depending on how far sea level actually rises.

The other factor that is appropriate to consider when identifying a particular horizon for a seawall in an approval is the changing and somewhat uncertain nature of the context affecting coastal



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development decisions regarding armoring (including <u>not only climate change and sea level rise, but</u> <u>also</u> due to legislative change, judicial determinations, etc.). A twenty-year period better responds to such potential changes and uncertainties, including to allow for an appropriate reassessment of continued armoring and its effects at that time in light of what may be differing circumstances than are present today, including with respect to its physical condition after twenty years of hard service. In addition, with respect to climatic change and sea level rise specifically, the understanding of these issues should improve in the future, given better understanding of the atmospheric and oceanic linkages and more time to observe the oceanic and glacial responses to increased temperatures, including trends in sea level rise. Such improved understanding will almost certainly affect CDP armoring decisions, including at this location. Of course it is possible that <u>physical circumstances as</u> well as local and/or statewide policies and priorities regarding shoreline armoring are significantly unchanged from today, but it is perhaps more likely that the baseline context for considering armoring will be different – much as the Commission's direction on armoring has changed over the past twenty years as more information and better understanding has been gained regarding such projects, including their affect on the California coastline.



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COASTAL DEVELOPMENT PERMIT APPLICATION

Application number3-09-025, Beach Club Seawall

Applicant.....Pebble Beach Company

- **Project location**Seaward of the Pebble Beach Beach Club at the southern end of Cypress Drive (between hole 17 of the Pebble Beach Golf Links and the Stillwater Cove Pier) fronting Stillwater Cove in the Pebble Beach area of the Del Monte Forest in unincorporated Monterey County (APN 008-411-020).
- **Project description**.......Remove an existing 340-foot long partially grouted rip-rap armor structure and construct a new 480-foot long shoreline protection structure, consisting of both a stone-faced retaining wall with a recurve (upper portion nearest the Beach Club buildings) and an sculpted concrete faced seawall with a recurve (lower portion nearest the ocean).

Staff recommendation ... Approval with Conditions

A.Staff Recommendation

1. Summary of Staff Recommendation

The proposed project site is located along the bluffs at Stillwater Cove in the Pebble Beach area of the Del Monte Forest in unincorporated Monterey County. The majority of the relative low (+-20 feet) bluff on the project site is currently armored with a mix of partially grouted rip-rap, grouted rip-rap, concrete cubes, and vertical bare concrete and rock and mortar (cobblestone) walls, approximately 340 feet in



length, which extend onto the sandy beach and vertically above the beach to the top of the bluff. The existing coastal protection structure on the site has an artificial look of imported rock and rubble that is distinctly out of place with the adjacent natural bluff forms. The upcoast portion of the existing protection structure has been undermined and exposed by erosion.

The blufftop area of the project site is developed with the Beach Club portion of the Pebble Beach Company's Beach and Tennis Club, which was originally constructed around 1916. The Beach Club is a private members-only club with two swimming pools, spa, fitness center, dining room, and meeting facilities. In addition to its private nature, the Beach Club includes public recreational facilities on its downcoast edge (namely public restroom and shower facilities), and provides public access through and around the edge of its parking lot to the Stillwater Cove Pier and the beach. The Applicant has received multiple coastal development permits (CDPs) since 1978 for improvements to and expansion of both the Beach Club and the existing armoring at the site.

The proposed project would involve removal of the existing shoreline armoring at the site and construction of a new two-tier seawall. The new seawall would extend 90 additional lineal feet upcoast beyond the existing shoreline protection to tie into a promontory there, a would run along a total shoreline length of about 480 feet from the promontory to the Stillwater Cove Pier. The upper level tier would be a traditional stone-faced retaining wall, and the lower tier would be sculpted, colored, and textured to visually approximate the natural surrounding bluff face to minimize potential visual impacts. The proposed project should improve public beach access and the public viewshed along this area of coast by removing a significant amount of grouted rip-rap and concrete rubble from the bluff and the beach, and developing a replacement designed to mimic surrounding coastal bluffs. The project as proposed also includes appropriate construction best management practices to protect water quality and public access during construction activities.

Shoreline armoring has a number of impacts on the coast, including but not limited to impacts from encroachment, fixing the back of the beach, and preventing the natural erosion of coastal bluffs that provide sandy material to the nearby beaches. As a result, the Coastal Act is premised on both hazard and shoreline armoring avoidance. The majority of the bluff here has been armored for many years, and thus these impacts already exist to a large degree. The project involves removal of approximately 3,355 square feet of rip rap and rubble from the beach, thereby uncovering sandy beach area that is currently unavailable. Despite this, the project would continue to cover a portion of the beach and impact sand supply in the vicinity of the site over the life of the seawall. To mitigate for these impacts, staff recommends conditions of approval to ensure the removal of all project area rip-rap and related armoring being replaced, and to require the construction of a new public accessway and overlook nearby at the Pebble Beach Lodge. The accessway and overlook would provide the public with sweeping views of Stillwater Cove and allow for a water's edge experience in a location with no sandy beach. The accessway and overlook represent a new low-cost recreational amenity in an area with limited public shoreline access points, and together with the armoring removal represents an appropriate and proportional offsetting mitigation for the impacts from the proposed project, including with respect to the manner in which the project will affect beach loss over time.



Thus, in this case and in this context, approval consistent with the Coastal Act is possible. That said, regarding the more general issue of how best to address existing and augmented shoreline armoring more generally, such as is proposed here, the Commission is faced with a complex issue that is not easily simplified or addressed in a general way independent of site specific considerations. In addition, the prospects of climate change and accelerated sea level rise are bringing these issues to the fore in a manner that requires the Commission to consider both individual and cumulative impacts at perhaps a broader scale than ever before. Absent a more comprehensive strategy, including relevant updates to the County's LCP, the larger planning and cumulative impact questions related to shoreline erosion and armoring are not readily addressed through an individual project. Rather, projects such as the one proposed are probably best shaped to provide the best possible Coastal Act outcome for a site, including providing impact mitigation, as is the case here. Such an outcome does not preclude or prevent potential future efforts to address California's beaches and shoreline more globally or within specific regions. On the contrary, it is expected that this site, along with other armored sites like it, must be part of any overall solution, and this project does not change that premise.

To ensure that this project does not prejudice future shoreline planning options, including with respect to changing and uncertain circumstances that may ultimately change policy and other coastal development decisions (including due to legislative change, judicial determinations, etc.), staff recommends that this approval be conditioned for a twenty-year period. Despite applicant projections much further out than that, it has been staff's experience that shoreline armoring tends to be augmented, replaced, and/or substantially changed within about twenty years. The intent of the twenty-year authorization is to recognize this time-frame reality, and also to allow for an appropriate reassessment of continued armoring at that time in light of what may be differing circumstances than are present today. Of course it is possible that local and/or statewide policies and priorities regarding shoreline armoring are significantly unchanged from today, but it is perhaps more likely that the baseline context for considering armoring will be different – much as the Commission's direction on armoring has changed over the past twenty years as more information and better understanding has been gained regarding such projects, including their affect on the California coastline.

Therefore, staff recommends that the Commission approve the proposed project, along with mitigations for the impacts of the project, including but not limited to: 1) requirement for the entire wall to resemble a faux bluff with appropriate concrete texturing, surfacing, undulation, and articulation; 2) authorization of the seawall for a period of 20 years; 3) a new shoreline accessway and overlook at the Lodge; 4) a landscaping plan to include low-growing native plants to provide additional visual mitigation; 5) requirements for other agency approvals; 6) assumption of risk, waiver of liability and indemnity agreements for coastal hazards; 7) monitoring and maintenance of the as-built project; and 8) recordation of a deed restriction against the parcel governed by this permit. As conditioned, the project can be found consistent with the Coastal Act. The motion to act on this recommendation is found directly below on the next page.

2. Staff Recommendation on CDP Application



Staff recommends that the Commission, after public hearing, **approve** the proposed project subject to the standard and special conditions below.

Motion: I move that the Commission approve coastal development permit number 3-09-025 pursuant to the staff recommendation. I recommend a yes vote.

Staff Recommendation of Approval: 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 to Approve the Permit: 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. 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.

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B.Findings and Declarations

The Commission finds and declares as follows:

1. Project Location, Background, and Description

A. Project Location

The Pebble Beach Beach Club is located on the edge of a coastal bluff approximately 21 feet above mean sea level (MSL) between the 17th and 4th holes of the Pebble Beach Golf Links at the southern end of Cypress Drive and immediately upcoast of the Stillwater Cove pier in the Pebble Beach area of the Del Monte Forest in unincorporated Monterey County. The Beach Club was originally constructed between 1916 and 1919 as a fishing lodge. In the 1930s, a swimming pool was constructed at the site. Today, the Beach Club is a private members-only club with two swimming pools, spa, fitness center, dining room, and meeting facilities. In addition to its private nature, the Beach Club includes public recreational facilities on its downcoast edge (namely restroom and shower facilities), and provides public access through and around the edge of its parking lot to the Stillwater Cove Pier and the beach.¹

The upcoast portion of the coastal bluff at the site consists of 3 to 7 feet of terrace deposits atop sandstone bedrock. Along the upcoast portion of the project site, the bedrock platform along the base of the coastal bluff has eroded differentially with channels cutting into the shoreline, leaving bedrock platform remnants. Along much of the downcoast portion of the site, sandstone bedrock is not present above beach level because the natural bluff face is covered in this area with previously placed rip-rap.² The majority of the bluff (approximately 340 lineal feet) at the project site is armored with a mix of partially grouted rip-rap, grouted rip-rap, concrete cubes, and vertical bare concrete and rock and mortar (cobblestone) walls ranging in elevation from 19 feet above mean sea level (MSL) to sea level. The existing shoreline protection is degraded and undermined at the upcoast end with a cavity estimated to be 25 feet long and 12 feet deep.

See Exhibit A for a project location map and Exhibit C for photographs of the project site.

B. Site CDP History

According to the Applicant, the original shoreline protection at the site dates to the 1930s when the swimming pool was constructed, prior to permitting requirements. In January 1978, the Commission approved a 658-square foot addition to the Beach Club (CDP A-78-006), and in May 1985 the Commission approved a CDP (3-85-025) for the addition of an east wing to the Beach Club and protection of the undermined footings of the existing clubhouse with 15 tons of poured concrete and 30 tons of rock.

² Including grouted rip-rap fronting the 4th hole of the golf course downcoast of the Pier that was permitted by the Commission under CDP 3-83-197 (through amendment A2).



¹ Pursuant to the requirements of Commission CDPs 3-84-226 (Spanish Bay) and A-3-MCO-97-037 (Casa Palmero).

In 1996, the Commission issued a CDP waiver (3-96-091-DM) for repairs to the existing grouted rip rap revetment using concrete infill between the base of the revetment and bedrock. In 1999, Monterey County approved a remodel and addition to the Beach Club that involved an increase of 4,019 square feet along the east side of the Beach Club. The County approval was appealed to the Commission (A-3-MCO-00-008), and in June 2000 the Commission found no substantial issue with the appeal.

C. Project Description

The proposed project would reconstruct and extend the existing coastal protection structures at the Beach Club for a total of 480 feet of vertical, two-tiered seawalls. All of the existing grouted rip rap, concrete blocks and debris, and cobblestone walls would be removed from the site. The lower tier walls would be sculpted, colored, and textured to visually approximate the natural bluff landform. Detailed surfacing would be created to mimic the sandstone bedrock, the marine terrace deposits, and the topsoil of the adjacent bluffs. The upper tier wall would not have this faux-bluff treatment, and instead would be a more traditional stone-faced retaining wall.

The upper tier would consist of a 167-foot long and 8-foot high stone-faced retaining wall with a wave recurve at its top that would be located immediately fronting the pool deck (from the southeast edge of the dining room to the beach stairs), and would generally be located above the area of the existing grouted rip-rap revetment, and in some locations, in front of the existing upper bluff cobblestone wall. The top of the upper tier wall would be at an elevation of 21 feet NGVD and the bottom would be at 13 feet NGVD. The space (approximately 1,250 square feet) between the new upper bluff wall and the edge of the pool deck would be backfilled and planted.

The lower tier wall can be divided into two segments that are split by the existing beach stairway that leads from the pool deck to the beach. In plan view looking upcoast to downcoast, the first segment would be 310 feet long and would extend from the western end of the beach to the stairs, and the second 170-foot long segment would extend east from the stairs, under Stillwater Cover Pier, to the existing beach access ramp on the east side of the pier.

The first 310-foot long lower tier segment would be a tied back artificial rock-faced vertical wall ranging from 12 to 17 feet NGVD. The western 182 feet of the first wall segment would have a recurve and the eastern 128 feet would not. The mostly flat area between the lower tier wall and the upper tier wall (approximately 1,800 square feet) would be backfilled and covered with artificial rock fascia. The existing 2,500 square feet of rip-rap revetment seaward of the proposed lower tier wall would be removed.

The second 170-foot long lower tier segment would include a 23-foot long and 10 feet high (from elevation 16 feet NGVD to 6 feet NGVD) stucco stone-faced tied back seawall along the existing stairway and a 147-foot long and 13 feet high artificial rock-faced vertical wall (both tied back and soil nail) ranging from 17 feet NGVD to approximately 4 feet NGVD. With the exception of the segment under Stillwater Cove Pier, the 147-foot wall would have wave recurves at its crest. The area between the new wall and the Beach Club would be backfilled and planted. The existing 855 square feet of rip-



rap revetment seaward of this segment of the lower tier wall would be removed.

The Applicant indicates that the proposed seawall project will have a 50-year design life.

See Exhibit B for project plans, Exhibit C for photographs of the project site, and Exhibit D for a photosimulation of the proposed seawall.

2. Coastal Development Permit Determination

The proposed project falls within the Commission's retained jurisdiction and thus the standard of review is the Coastal Act. As relevant, Monterey County's certified LCP can provide non-binding guidance. However, the LCP and Coastal Act policies are very similar as regards allowing shoreline armoring and protecting against its impacts. Thus, the LCP policies do not provide different policy direction in this case, and their usefulness in this review is limited as a result.

A. Geologic Conditions and Hazards

1. Applicable Policies

Coastal Act Section 30235 addresses the use of shoreline protective devices:

30235. 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 structures 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 fish kills should be phased out or upgraded where feasible.

Coastal Act Section 30253 addresses the need to ensure long-term structural integrity, minimize future risk, and to avoid landform altering protective measures in the future. Section 30253 provides, in applicable part:

Section 30253. New development shall do all of the following:

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

2. Consistency Analysis

Coastal Act Section 30235 acknowledges that seawalls, revetments, cliff retaining walls, groins and other such structural or "hard" methods designed to forestall erosion also alter natural landforms and natural shoreline processes. Accordingly, with the exception of new coastal-dependent uses, Section



30235 limits the construction of shoreline protective works to those required to protect existing structures or public beaches in danger from erosion. The Coastal Act provides these limitations because shoreline structures can have a variety of negative impacts on coastal resources including adverse affects 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.

Under Coastal Act Section 30235, a shoreline structure must be approved if: (1) there is an existing structure; (2) the existing structure is in danger from erosion; (3) shoreline-altering construction is required to protect the existing threatened structure; and (4) the required protection is designed to eliminate or mitigate its adverse impacts on shoreline sand supply. The first three questions relate to whether the proposed armoring is necessary, while the fourth question applies to mitigating some of the impacts from it.

A. Existing Structure to be Protected

For the purposes of shoreline protective structures, the Coastal Act distinguishes between development that is allowed shoreline armoring, and development that is not. Under Section 30253, new development is to be designed, sited, and built to allow the natural process of erosion to occur without creating a need for a shoreline protective device. Coastal development permittees for new shorefront development are thus making a commitment to the public (through the approved action of the Commission, and its local government counterparts) that, in return for building their project, the public will not lose public beach access, offshore recreational access, sand supply, visual resources, and natural landforms, and that the public will not be held responsible for any future stability problems.

In addition, the Commission has generally interpreted Section 30235 to apply only to existing principal structures. The Commission must always consider the specifics of each individual project, but has generally found that accessory structures (such as patios, decks, gazebos, stairways, etc.) are not required to be protected under Section 30235, or can be protected from erosion by relocation or other means that do not involve shoreline armoring. The Commission has generally historically permitted at grade structures within geologic setback areas recognizing that they are expendable and capable of being removed rather than requiring a protective device that would alter natural landforms and processes along bluffs, cliffs, and beaches.

Coastal Act 30235 allows for shoreline protection in certain circumstances (if warranted and otherwise consistent with Coastal Act policies) for "existing" structures. One class of "existing structures" refers to those structures in place prior to the effective date of the Coastal Act. Coastal zone development approved and constructed prior to the Coastal Act went into effect was not subject to Section 30253 requirements. Although some local hazard policies may have been in effect prior to the Coastal Act, these pre-Coastal Act structures have not necessarily been built in such a way as to avoid the future need for shoreline protection (in contrast to those evaluated pursuant to Section 30253).

A second class of existing structures refers to those structures that have been permitted since the effective date of the Coastal Act. There has long been discussion that these structures should not constitute "existing structures" for purposes of Section 30235 because they were developed pursuant to



30253 (and/or similar LCP) standards so as not to require shoreline armoring in the future. However, the Commission has generally interpreted "existing" to mean structures existing at the time the armoring proposal is being considered, whether these structures were originally constructed before or after the Coastal Act, and has not limited consideration of armoring only to those structures constructed prior to the Coastal Act.

And finally, in a limited number of cases, the Commission has required Applicants for blufftop structures to waive any right to a seawall that may exist pursuant to Section 30235; in other words to stipulate that they are not existing structures for 30235 purposes because the structures have been sited and designed to not need shoreline armoring in the future (pursuant to Section 30253 and LCP counterpart policies).

In this case, the structure for which protective armoring is being considered is the Beach Club complex. The existing Beach Club, including the pools, is clearly seen in a photograph taken from offshore in 1972 (see Exhibit C). The Coastal Commission permitted additions to the Beach Club in 1978 (CDP A-78-006) and 1985 (CDP 3-85-025), and Monterey County permitted additions in 1999 that were appealed to the Commission, but the Commission found no substantial issue (Appeal A-3-MCO-00-008). The Commission has also required public recreational access improvements (public restrooms and showers built into the downcoast portion of the Beach Club) and access through the Beach Club parking lot for the public (CDPs 3-84-226 and A-3-MCO-97-037). Thus, the original structure predates the coastal permitting requirements of both 1972's Proposition 20 (the Coastal Initiative)³ and the 1976 Coastal Act, and all additions to the Beach Club since 1972 have been legally permitted through either the Coastal Commission or Monterey County. As such, the Beach Club qualifies as an existing structure for the purposes of Section 30235.

B. Danger from Erosion

The Coastal Act allows shoreline armoring to protect existing structures in danger from erosion, but it does not define the term "in danger." There is a certain amount of risk involved in maintaining development along a California coastline that is actively eroding and can be directly subject to violent storms, large waves, flooding, earthquakes, and other geologic hazards. These risks can be exacerbated by such factors as sea level rise and localized geography that can focus storm energy at particular stretches of coastline. As a result, some would say that all development along the immediate California coastline is in a certain amount of "danger." It is a matter of the degree of threat that distinguishes between danger that represents an ordinary and acceptable risk, and danger that requires shoreline armoring per 30235. Lacking Coastal Act definition, the Commission's long practice has been to evaluate the immediacy of any threat in order to make a determination as to whether an existing structure is "in danger." While each case is evaluated based upon its own particular set of facts, the Commission has generally interpreted "in danger" to mean that an existing structure would be unsafe to occupy within the next two or three storm season cycles (generally, the next few years) if nothing were to be done (i.e., in the no project alternative).

³ Coastal permit requirements associated with Prop. 20 began in 1973.



The Beach Club is located on the edge of a near vertical blufftop that is comprised of oversteepened terrace deposits. The terrace deposits consist of gravels, sands, silts and clays with varying cohesion and cementation. There has been ongoing recession of the toe of the bluff from wave action erosion, and the slope face in the terrace deposits at the bluff top has not weathered back to a long term stable slope gradient. In addition, the terrace deposits are subject to erosion from rainfall as well as shallow slump sliding due to weathering and saturation of the exposed bluff face soil materials. Furthermore, the existing shoreline protection at the site is in disrepair, and the upcoast end is undermined with a cavity estimated to be 25 feet long and 12 feet deep. The Commission's geologist evaluated the project and the project's underlying threat evaluation, and concluded that the existing structures are "in danger" as that term is understood in a Coastal Act context. The Commission concludes that the Beach Club qualifies as an existing structure in danger from erosion for purposes of Section 30235.

C. Feasible Protection Alternatives to a Shoreline Structure

The third Section 30235 test that must be met is that the proposed armoring must be "required" to protect the existing threatened structure. In other words, shoreline armoring can be permitted if it is the only feasible alternative capable of protecting the structure.⁴ When read in tandem with other applicable Coastal Act policies cited in these findings, this Coastal Act Section 30235 evaluation is often conceptualized as a search for the least environmentally damaging feasible alternative that can serve to protect existing endangered structures. Other alternatives typically considered include: the "no project" alternative; abandonment of threatened structures; relocation of threatened structures; sand replenishment programs; drainage and vegetation measures on the blufftop; and combinations of each.

In this case, the "no project" alternative is not viable because the existing coastal protection structure will continue to deteriorate and will fail. During each winter storm season, erosion from wave runup will continue at the toe of the bluff and rainfall will continue to cause additional erosion of the bluff face, resulting in the following potential effects: damage to and undermining of the Beach Club complex; sewage discharge into Stillwater Cove; damage to public access facilities, including Stillwater Cove pier, the public access path to it, and the public restrooms and showers; and damage to marine resources from fugitive rip-rap and grouted concrete scattered by wave action.

Relocation of the threatened structures inland is another alternative typically considered. In this case, the Applicant indicated that relocation away from the bluff edge is not a feasible alternative due to physical limitations and property line constraints. The Beach Club complex is located in one of the most intensely utilized areas of Pebble Beach, and is bound by the Pebble Beach Golf Links 17th fairway immediately upcoast, the 4th tee, fairway, and hole immediately inland and downcoast, Stillwater Cove pier immediately downcoast, and Stillwater Cove on the seaward side. The Applicant further indicates that relocation to an inland site is not feasible because it would preclude continued use of the development as a "beach club." The Beach Club provides a beachfront experience for its members, including access to Stillwater Cove beach and Stillwater Cove pier for recreational purposes, and provides important public access elements for non-members (public restrooms and parking). No other

⁴ Coastal Act Section 30108 defines feasibility as follows: "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.



available beachfront properties exist in Stillwater Cove for the purposes of relocating the Beach Club. In any case, such a project would be better described as a demolition and rebuild project rather than relocation of an existing structure. Although it would be possible to demolish and rebuild the Beach Club in a more inland location, the feasibility of this alternative is suspect due to surrounding development and uses that would necessarily be displaced to accommodate such a reconstruction (parking facilities, golf holes, public pathways, etc.), and the significant costs that would be involved with such an endeavor. In this case, and with this factset, the Commission finds this option infeasible.

Another alternative would be to commence a beach nourishment program to raise and widen the beach, thereby reducing wave impact. In theory, the nourished beach could cause waves to break further from the bluff, resulting in less erosion at the base of the bluff and less wave run-up to the bluff face. Beach nourishment involves importation of sand from off site. The Applicant's geotechnical engineers indicate that the substantial natural onshore/offshore sand and pebble mobility in Stillwater Cover near the Beach Club, coupled with seasonal beach scour, would reduce the effectiveness of any nourishment. The intertidal and nearshore sub-tidal zones in Stillwater Cove also have a rocky substrate with diverse biological marine life, and this zone would be negatively impacted by beach nourishment. The addition of a substantial wedge of sand to the Stillwater Cove beach could also cause shoaling in the area of Stillwater Cove pier, affecting recreational boating. Furthermore, sand in Stillwater Cove is of a unique granodiorite and carmeliorite composition found only at Stillwater Cove, and cannot be easily replaced by sands mined elsewhere without degrading the unique qualities of the existing beach sand. Lastly, although beach nourishment might retard erosion at the base of the coastal bluff, it would not reduce the instability of the upper half of the bluff, and continued deterioration of the existing coastal protection structures would remain problematic. In this case, and with this factset, the Commission finds this option infeasible.

Other options considered include modification of the existing irrigation patterns and surface and subsurface drainage patterns. Because of historical erosion along coastal bluffs at the Pebble Beach Golf Links, irrigation patterns were modified in the 1990s such that no irrigation is directed to the bluffs and irrigation rates are monitored and applied on an as-needed basis to replenish moisture levels in the root zone only for optimum turf conditions. Furthermore, most of the blufftop area of the Beach Club consists of developed structures, and is not irrigated. And the Applicant's geotechnical engineers have observed that surface and subsurface drainage does not play a significant role in coastal bluff landslide and erosion processes at the Beach Club. Thus, drainage and irrigation modifications have already been undertaken and additional measures cannot on their own effectively protect endangered structures at this location.

Another alternative is construction of a new rip-rap revetment and/or a new upper bluff retaining wall. Rip-rap would provide long term protection of the Beach Club and is an effective means of reducing wave runup; however, a permanent rip-rap structure that is flat enough to be stable at this location would require a substantial beach footprint and would continue to impact lateral access along the beach, particularly during the winter. In general, the Commission discourages the use of rip-rap revetments for this reason (as well as others). In order for a rip -rap revetment to be effective at the site, it would need to be combined with an upper bluff retaining wall. An upper bluff retaining wall by itself would be



ineffective as a long term protective measure because the base of the lower bluff is eroding, and it would be impossible to found an upper wall without it being undermined in a short time period. As such, these options are also not feasible nor preferred under the Coastal Act.

Given all the above, the proposed project is "required" to protect the Beach Club and it thus meets the third test of Section 30235 of the Coastal Act.

D. Sand Supply Impacts

The fourth test of Section 30235 (previously cited) that must be met in order to allow Commission approval is that shoreline structures must be designed to eliminate or mitigate adverse impacts to local shoreline sand supply.

Shoreline Processes

Beach sand material comes to the shoreline from inland areas, carried by rivers and streams; from offshore deposits, carried by waves; and from coastal dunes and bluffs, becoming beach material when the bluffs or dunes lose material due to wave attack, landslides, surface erosion, gullying, et cetera. Coastal dunes are almost entirely beach sand, and wind and wave action often provide an ongoing mix and exchange of material between beaches and dunes. Many coastal bluffs are marine terraces - ancient beaches which formed when land and sea levels differed from current conditions. Since the marine terraces were once beaches, much of the material in the terraces is often beach-quality sand or cobble, and is a valuable contribution to the littoral system when it is added to the beach. While beaches can become marine terraces over geologic time, the normal exchange of material between beaches and bluffs is for bluff erosion to provide beach material. Bluff retreat and erosion is a natural process resulting from many different factors such as erosion by wave action causing cave formation, enlargement and eventual collapse of caves, saturation of the bluff soil from groundwater causing the bluff to slough off, and natural bluff deterioration. When the back-beach or bluff is protected by a shoreline protective device, the natural exchange of material either between the beach and dune or from the bluff to the beach will be interrupted and, if the shoreline is eroding, there will be a measurable loss of material to the beach. Since sand and larger grain material are the most important components of most beaches, only the sand portion of the bluff or dune material is quantified as sandy beach material.

These natural shoreline processes affecting the formation and retention of sandy beaches can be significantly altered by the construction of shoreline armoring structures because bluff retreat is one of several ways that beach quality sand is added to the shoreline, and is also one of the critical factors associated with beach creation/retention. Bluff retreat and erosion are natural processes that result from the many different factors described above. Shoreline armoring directly impedes these natural processes.

The Stillwater Cove bluffs are comprised of three geologic formations. The bluffs along the western portion of Stillwater Cove (from Pescadero Point to the upcoast end of the Beach Club) are comprised of a resistant, not easily eroded granodiorite. The bluffs from the Beach Club to approximately the 5th green (which is also the sandy beach area of the cove) are comprised of the easily eroded Carmelo formation (largely sandstone), and the bluffs from the 5th green to Arrowhead Point are comprised of



tertiary volcanics of the Carmeloit formation which are resistant to erosion.⁵ The source of sediment in Stillwater Cove appears to be both the granodiorite and the Carmelo formation along the shoreline, with the largest percentage being the Carmelo formation sandstone, as well as granodiorite-derived sediment from streams that drain the southern part of the Monterey peninsula. Sediment samples show that beach sediment in Stillwater Cove is significantly different that that found in other nearby areas of the Monterey Peninsula, including Carmel Beach, which is immediately downcoast from Arrowhead Point. Arrowhead Point appears to be an effective barrier to southward sediment transport out of Stillwater Cove, and littoral sediment is probably transported offshore and ultimately into the Carmel submarine canyon.⁶ Therefore, unlike beaches located in the middle of a littoral cell, where longshore currents may also provide significant amounts of sand from upcoast sources, the system at this location is fairly 'closed', and thus certain impacts (such as retention of bluff material by shoreline protective devices) are magnified at this location.

Some of the effects of engineered armoring structures on the beach (such as scour, end effects and modification to the beach profile) are temporary or are difficult to distinguish from all the other actions that modify the shoreline. Others are more qualitative (e.g., impacts to the character of the shoreline and visual quality). Some of the effects that a shoreline structure may have on natural shoreline processes can be quantified, however, including: (1) the loss of the beach area on which the structure is located; (2) the long-term loss of beach that will result when the back-beach location is fixed on an eroding shoreline; and (3) the amount of material that would have been supplied to the beach if the back-beach or bluff were to erode naturally.⁷

Encroachment on the Beach

Shoreline protective devices are all physical structures that occupy space. When a shoreline protective device is placed on a beach area, the underlying beach area cannot be used as beach. This generally results in a loss of public access as well as a loss of sand and/or areas from which sand generating materials can be derived. The area where the structure is placed will be altered from the time the protective device is constructed, and the extent or area occupied by the device will remain the same over time, until the structure is removed or moved from its initial location, or in the case of a revetment, as it spreads seaward over time. The beach area located beneath a shoreline protective device, referred to as the encroachment area, is the area of the structure's footprint.

Using the Commission's long-standing methodology, the proposed project would cover an area of sandstone and beach area that would otherwise contribute to the local sand supply during winter beach conditions, and/or that would otherwise be occupied by beach sand part of the year. In this case, approximately 6,425 square feet of the beach in front of the Beach Club is covered with an existing

⁷ The sand supply impact refers to the way in which the project impacts creation and maintenance of beach sand. Although this ultimately translates into beach impacts in this case, the discussion here is focused on the first part of the equation and the way in which the proposed project would impact sand supply processes.



⁵ Storlazzi, C.D., and Field, M.E. 2000. Sediment distribution and transport along a rocky embayed coast: Monterey Peninsula and Carmel Bay, California. Marine Geology: V170 (2000) pp. 289-316.

⁶ Id (Storlazzi and Field 2000).

shoreline protection structure that is 340 feet long and an average of 18.9 feet wide. The project involves removal of approximately 3,355 square feet of the existing shoreline protection that is currently on the beach. The proposed project would cover approximately 3,792 square feet of sandy beach (480 feet long by an average of 7.9 feet wide), which comprises a portion of the sandy beach area presently covered by the existing riprap revetment.

The loss of a square foot of beach area can be roughly converted to the volume of sand that would be required to nourish an equivalent area of beach. There is a rough rule of thumb that it takes between 1 to 1.5 cubic yards of sand to establish 1 square foot of dry beach through nourishment.⁸ The Commission has not been able to establish an actual conversion factor for the Stillwater Cove vicinity. If a 1.0 conversion factor is used that assumes that the active range of sand transport is at the lower limit of the expected range (i.e., the low end of the spectrum of values typically assumed by coastal engineers), a conservative estimate of the cubic yard equivalent of 3,792 square feet of beach sand can be calculated. Using the conversion factor described above, the sand volume equivalent for the direct loss of beach due to encroachment by the proposed project would be 3,792 cubic yards of beach-quality sand.⁹

Fixing the back beach

Experts generally agree that where the shoreline is eroding and armoring is installed the armoring will eventually define the boundary between the sea and the upland. On an eroding shoreline, a beach will exist between the shoreline/waterline and the bluff as long as sand is available to form a beach. As bluff erosion proceeds, the profile of the beach also retreats and the beach area migrates inland with the bluff. This process stops, however, when the backshore is fronted by a hard protective structure such as a revetment or a seawall. While the shoreline on either side of the armor continues to retreat, shoreline in front of the armor eventually stops at the armoring. The beach area will narrow, being squeezed between the shoreline will be fixed at the base of the structure. In the case of an eroding shoreline, this represents the loss of a beach as a direct result of the armor.

In addition, sea level has been rising slightly for many years. Also, 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 4.5 to 6 feet by the year 2100^{10}). Mean water level affects shoreline erosion several

¹⁰ The California Climate Action Team has 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. These



⁸ This conversion value is based on the regional beach and nearshore profiles, and overall characteristics. When there is not regional data to better quantify this value, it is often assumed to be between 1 and 1.5, the basis being that to build a beach seaward one foot, there must be enough sand to provide a one-foot wedge of sand through the entire region of onshore-offshore transport. If the range of reversible sediment movement is from -30 feet msl to +10 feet msl, then a one-foot beach addition must be added for the full range from -30 to +10 feet, or 40 feet total. This 40-foot by 1-foot square parallelogram could be built with 1.5 cubic yards of sand (40 cubic feet divided by 27 cubic feet per cubic yard). If the range of reversible sediment transport is 27 feet, it will take 1 cubic yard of sand to rebuild one square foot of beach; if the range of reversible sediment transport is larger than 40 feet, it will take more than 1.5 cubic yards of sand to rebuild one square-foot of beach.

 ⁹ Per the Commission's methodology, this is calculated as a one-time encroachment impact as opposed to a yearly impact.

ways, and an increase in the average sea level will exacerbate all these conditions. 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. This, too, leads to loss of the beach as a direct result of the armor as the beach is squeezed between the landward migrating ocean and the fixed backshore.

Such passive erosion impacts can be calculated over the time the proposed armoring is expected to last. In this case, the Applicant indicates that the proposed seawall project will have a 50-year lifetime over which time such impacts will be in effect. However, it has been the Commission's experience that the accurate expected lifespan of shoreline armoring projects is often substantially less than 50 years due to the need for major maintenance or modifications, or entire redevelopment of an armoring structure within a much shorter timeframe. In this case, the proposed seawall can be expected to be subject to heavy wave and storm action on a fairly regular basis. This wave action can only be expect to be exacerbated by sea level rise over time, with resultant impacts to the strength and integrity of the seawall. In other words, despite the Applicant's 50-year projection, it has been Commission's experience that shoreline armoring tends to be augmented, replaced, and/or substantially changed within about twenty years.

The other factor that is appropriate to consider when identifying a particular horizon for a seawall in an approval is the changing and somewhat uncertain nature of the context affecting coastal development decisions regarding armoring (including due to legislative change, judicial determinations, etc.). A twenty-year period better responds to such potential changes and uncertainties, including to allow for an appropriate reassessment of continued armoring and its effects at that time in light of what may be differing circumstances than are present today, including withy respect to its physical condition after twenty years of hard service. Of course it is possible that local and/or statewide policies and priorities regarding shoreline armoring are significantly unchanged from today, but it is perhaps more likely that the baseline context for considering armoring will be different – much as it the Commission's direction on armoring has changed over the past twenty years as more information and better understanding has been gained regarding such projects, including their affect on the California coastline.

For these reasons, the Commission uses a design life of 20 years for the proposed seawall in these findings, and implements the 20-year period through conditions (see Special Condition 4).

The Commission has established a methodology for calculating passive erosion, or the long-term loss of beach due to fixing the back beach. This impact is equivalent to the footprint of the bluff area that would have become beach due to erosion and is equal to the long-term erosion rate multiplied by the width of property that has been fixed by a resistant shoreline protective device.¹¹ In this case, the proposed seawall will extend out over Carmelo sandstone bedrock as well as sandy beach. For purposes of

¹¹ The area of beach lost due to long-term erosion (Aw) is equal to the long-term average annual erosion rate (R) times the number of years that the back-beach or bluff will be fixed (L) times the width of the property that will be protected (W). This can be expressed by the following equation: $Aw = R \times L \times W$. The annual loss of beach area can be expressed as $Aw' = R \times W$.



projections are in line with 2007 projections by Stefan Rahmstorf ("A Semi-Empirical Approach to Projecting Future Sea-Level Rise", *Science*; Vol 315, 368 – 370. Research by Pfeffer et al. ("Kinematic Constraints on Glacier Contributions to 21st-Century Sea-Level Rise", *Science*, Vol, 321, 1340 – 1343) projects up to 2 meters of sea level rise by 2100.

determining the impacts from fixing the back beach, it is assumed that new beach area would result from landward retreat of the bluff. The area affected by passive erosion can be approximated as a 480-footlong curvilinear bluff. The Applicant's geotechnical consultant estimated the average bluff recession for this site at 0.4 feet (4.8 inches) per year. Therefore the average impacts from fixing the back beach will be the annual loss of 192 square feet of beach. Over the 20-year permit horizon, this would result in a loss of 3,840 square feet of beach that would have been created if the back beach had not been fixed by the proposed seawall. Using the beach-area to beach-volume conversion discussed above, this would be equivalent to an annual loss of 192 cubic yards of beach quality sand, and a loss over twenty years of 3,840 cubic yards of beach quality sand, that can be attributed to fixing of the back beach.

Retention of Potential Beach Material

If natural erosion were allowed to continue (absent the proposed armoring), some amount of beach material would be added from the bluffs to the beach at this location, as well as the larger Stillwater Cove sand supply system. The volume of total material that would have gone into the sand supply system over the lifetime of the shoreline structure would be the volume of material between (a) the likely future bluff face location with shoreline protection; and (b) the likely future bluff location without shoreline protection. Since the main concern is with the sand component of this bluff material, the total material lost must be multiplied by the percentage of bluff material which is beach sand, giving the total amount of sand which would have been supplied to the littoral system for beach deposition if the proposed device were not installed. The Commission has established a methodology for identifying this impact.¹² The Commission's senior engineer indicates that this impact would be roughly 49 cubic yards of sand per year for the proposed seawall project. Over the course of the identified 20-year horizon, this equates to a retention impact of 980 cubic yards of beach quality sand.

Beach and Sand Supply Impacts Conclusion

The proposed project would result in quantifiable shoreline sand supply impacts. There would be beach sand loss due to: 1) placement of a seawall onto approximately 3,792 square feet of sandy beach that otherwise would be available for public use (equating to 3,792 cubic yards when converted for volume); 2) fixing of the back beach location, resulting in the loss of 3,840 square feet of sandy beach that would have been created over the 20-year life of the structure (192 square feet of loss annually, equating to 192

¹² The equation is Vb = (S x W x L) x [(R x hs) + (1/2hu x (R + (Rcu - Rcs)))]/27. Where: Vb is the volume of beach material that would have been supplied to the beach if natural erosion continued (this is equivalent to the long-term reduction in the supply of bluff material to the beach resulting from the structure); S is the fraction of beach quality material in the bluff material; W is the width of property to be armored; L is the design life of structure (50 years assumed per ACOE, though its lifetime can also be considered indefinite) or, if assumed a value of 1, an annual amount is calculated; R is the long term average annual erosion rate; hs is the height of the shoreline structure; hu is the height of the unprotected upper bluff; Rcu is the predicted rate of retreat of the crest of the bluff during the period that the shoreline structure would be in place, assuming no seawall were installed (this value can be assumed to be the same as R unless the Applicant provides site-specific geotechnical information supporting a different value); Rcs is the predicted rate of retreat of the crest of the bluff, during the period that the seawall would be in place, assuming the seawall has been installed (this value will be assumed to be zero unless the Applicant provides site-specific geotechnical information supporting a different value); and divide by 27 (since the dimensions and retreat rates are given in feet and volume of sand is usually given in cubic yards, the total volume of sand must be divided by 27 to provide this volume in cubic yards, rather than cubic feet).



cubic yards annually, and 3,840 cubic yards over 20 years when converted for volume), and; 3) retention of 980 cubic yards of sand over the 20-year life of the proposed project (49 cubic yards of sand per year). If these impacts were to be mitigated through a beach nourishment effort, the impacts would be comparable to the deposition of 3,792 cubic yards of beach quality sand at the start of the project (or roughly 380 large truck loads), and about 240 cubic yards (or roughly 24 large truck loads) of beach-quality sand yearly. Over twenty years, these impacts would equate to a total of over 8,600 cubic yards of sand.¹³

It has proven difficult over the years to identify appropriate mitigation for such impacts. Partly this is because creating an offsetting beach area is not an easy task, and finding appropriate properties that could be set aside to become beach area over time (through natural processes, including erosion) is difficult both due to a lack of such readily available properties and the cost of such coastal real estate more broadly. As a proxy, other types of mitigation typically required by the Commission for such direct sand supply impacts have been in-lieu fees and/or beach nourishment, and in some cases compensatory beach access improvements. With regards to beach nourishment, a formal sand replenishment strategy can introduce an equivalent amount of sandy material back into the system over time to mitigate the loss of sand that would be caused by a protective device over its lifetime. Obviously, such an introduction of sand, if properly planned, can feed into the Stillwater Cove system to mitigate the impact of the project. However, as opposed to other areas with established programs (e.g., SANDAG in San Diego) there are not currently any existing beach nourishment programs directed at this beach area. Absent a comprehensive program that provides a means to coordinate and maximize the benefits of mitigation efforts in the area now and in the future, the success of piecemeal mitigation efforts, such as an Applicant-only project to drop equivalent amounts of sand over time at this location, is questionable. In addition, as described previously, because of continued sea level rise and potential impacts to sensitive marine habitats immediately offshore, as well as the unique mineralogical composition and 'closed system' attributes of Stillwater Cove sand and uncertainty about the effectiveness and availability of appropriate sand sources, beach renourishment at Stillwater Cove is not considered to be a feasible mitigation measure at this time.

As an alternative mitigation mechanism, the Commission oftentimes uses an in-lieu fee when in-kind mitigation of impacts is not available.¹⁴ In situations where ongoing sand replenishment or other appropriate mitigation programs are not yet in place, the in-lieu mitigation fee is deposited into an account until such time as an appropriate program is developed, and the fees can then be used to offset the designated impacts. When mitigation funds are pooled in this way for multiple projects in a certain area, the cumulative impacts can also be better addressed inasmuch as the pooled resources can sometimes provide for a greater mitigation impact than a series of smaller mitigations based on individual impacts and fees. Based on an estimated range of costs for Stillwater Cove beach quality sand ranging from \$50 to \$100 per cubic yard delivered (or possibly more, including if an appropriate sand source can even be identified), an in-lieu fee in this case would range from about \$430,000 to \$860,000

¹⁴ See, for example, CDP A-3-SCO-06-006 (Willmott), CDP A-3-SLO-01-040 (Brett), CDP 3-98-102 (Panattoni) and CDP 3-97-065 (Motroni-Bardwell).



¹³ That is, 3,792 cubic yards from encroachment, 3,840 cubic yards from passive erosion, and 980 cubic yards from retention of materials.

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or more.¹⁵

With respect to using beach access improvements to offset impacts, such mitigation is typically applied by the Commission to public agencies that are in the beach management business when they have applied for armoring projects.¹⁶ Although the Pebble Beach Company is not a public agency, they manage all of the beaches and shoreline public access points in the Del Monte Forest, and opportunities exist within their landholdings to develop new public access improvements.

The project's shoreline sand supply impacts translate directly into degradation of public access to and along the beach. As such, shoreline sand supply mitigations targeted toward these access impacts is appropriate in this case. And fortunately, this case offers appropriate mitigation alternatives both at the seawall itself and directly adjacent to the seawall location (and under the control of the Applicant) that can effectively address these impacts. With respect to the former, the proposed project involves removal of approximately 3,355 square feet of existing grouted rip rap and concrete rubble from the beach, which will help to offset the sand supply impact by freeing up sand and beach area under the to-beremoved rock/concrete.

With respect to the latter, public access to the shoreline within the Del Monte Forest is limited by a variety of factors, including a private gated roadway system, and private residential and golf development along most of the immediate shoreline. Although a number of public access facilities and amenities have been developed by virtue of LCP and Commission requirements associated with the Spanish Bay CDP, additional publicly available access facilities would certainly better maximize public access in the Del Monte Forest. Just upcoast of the seawall site is an ocean overlook area which is available to the public (by virtue of Commission CDP requirements related to the Casa Palmero approval (CDP A-3-MCO-97-037).¹⁷ However, this overlook is currently primarily a private parking lot area which does not include any defined area for public access and does not include any public access amenities. In other words, it is available to the public, but its utility in this respect is limited. This site is located in the heart of Pebble Beach, close to the main commercial node of Del Monte Forest (with shops, a market, parking, etc. that are available to the public) and immediately adjacent to the worldfamous 18th green of the Pebble Beach Golf Links, and it represents what is a fairly rare opportunity for a developed public access facility in this exclusive area, as well as a rare opportunity overall in terms of the Del Monte Forest as a whole. It also represents an appropriate target mitigation site to offset impacts from the proposed project.

Thus, this approval is conditioned to improve the overlook as a formal public access facility (see Special Condition 5). The intent is that the area nearest the ocean along the Sloat Building parking lot would be improved with a developed and defined overlook with benches, interpretive signs and related public access amenities designed to maximize the utility of this area for public uses. In addition, pathway

¹⁷ The overlook seaward of what is known as the Sloat Building.



¹⁵ Based on 8,612 cubic yards of such sand purchased today for \$50 per cubic yard (\$430,600) or \$100 per cubic yard (\$861,200).

¹⁶ For example, as recently required with respect to recreational access improvements along the Pleasure Point shoreline area of Santa Cruz County as part of the Commission's approval of a seawall fronting East Cliff Drive (CDPs A-3-SCO-07-015 and 3-07-019, approved December 13, 2007).

improvements would be necessary to provide connectivity from the publicly available path system in and around the Lodge area.¹⁸ The accessway would need to be of adequate width and depth (at least extending from the upcoast edge of fencing at the parking lot to a point seaward of the tree well in the parking lot, and potentially along the entire bluff extent of the parking lot), and would need to clearly be available for the public. The Applicant has indicated that they are in agreement with this condition. Taken together, the removal of rip-rap and materials to free publicly available beach space and the development of the new access overlook facility will adequately mitigate for the sand supply impacts of the project (see also Public Access and Recreation finding below for further discussion).

Thus, as conditioned, the project satisfies the Coastal Act Section 30235 requirements regarding mitigation for sand supply impacts, and thus also meets all Section 30235 tests for allowing such armoring.

E. Long-Term Stability, Maintenance, and Risk

Coastal Act Section 30253 requires the project to assure long-term stability and structural integrity, minimize future risk, and avoid additional, more substantial protective measures in the future. For the proposed project, the main Section 30253 concern is assuring long-term stability. This is particularly critical given the dynamic shoreline environment within which the proposed project would be placed. Also critical to the task of ensuring long-term stability, as required by Section 30253, is a formal longterm monitoring and maintenance program. If the seawall were damaged in the future (e.g. as a result of flooding, landsliding, wave action, storms, etc.) it would lead to a degraded public access condition. In addition, such damages could adversely affect nearby beaches by resulting in debris on the beaches and/or creating a hazard to the public using the beaches. Therefore, in order to find the proposed project consistent with Coastal Act Section 30253, the proposed project must be maintained in its approved state. Further, in order to ensure that the Applicant and the Commission know when repairs or maintenance are required, the Applicant must regularly monitor the condition of the subject armoring, particularly after major storm events. Such monitoring will ensure that the Permittee and the Commission are aware of any damage to or weathering of the armoring and can determine whether repairs or other actions are necessary to maintain the seawall structure in its approved state before such repairs or actions are undertaken. To assist in such an effort, monitoring plans should provide vertical and horizontal reference distances from armoring structures to surveyed benchmarks for use in future monitoring efforts.

To ensure that the proposed project is properly maintained to ensure its long-term structural stability, Special Condition 8 requires a monitoring and maintenance program. Such a program shall provide for evaluation of the condition and performance of the proposed project and overall bluff stability, and shall provide for necessary maintenance, repair, changes or modifications. Special Condition 9 allows the Applicant to maintain the project in its approved state, subject to the terms and conditions identified by the special conditions. Such future monitoring and maintenance activities must be understood in relation to clear as-built plans. Therefore, Special Condition 7 of this approval requires the submittal of as-built

¹⁸ Id (per Casa Palmero CDP requirements).



plans to define the footprint and profile of the permitted development.

In terms of recognizing and assuming the hazard risks for shoreline development, the Commission's experience in evaluating proposed developments in areas subject to hazards has been that development has continued to occur despite periodic episodes of heavy storm damage and other such occurrences. Development in such dynamic environments is susceptible to damage due to such long-term and episodic processes. Past occurrences statewide have resulted in public costs (through low interest loans, grants, subsidies, direct assistance, etc.) in the millions of dollars. As a means of allowing continued development in areas subject to these hazards while avoiding placing the economic burden for damages onto the people of the State of California, Applicants are regularly required to acknowledge site hazards and agree to waive any claims of liability on the part of the Commission for allowing the development to proceed. Accordingly, this approval is conditioned for the Applicant to assume all risks for developing at this location (see Special Condition 10).

To ensure that future property owners are properly informed regarding the terms and conditions of this approval, this approval is also conditioned for a deed restriction to be recorded against the properties involved in the application (see Special Condition 11).

F. Geologic Conditions and Hazards Conclusion

The existing Beach Club is in danger from erosion, and this existing structure requires hard armoring to be protected. Conditions are included to ensure that the project will appropriately offset its sand supply impact, and to ensure long term stability. As conditioned, the Commission finds the project consistent with Coastal Act Sections 30235 and 30253.

B. Public Access and Recreation

1. Applicable Policies

Coastal Act Section 30604(c) requires that every coastal development permit issued for any development between the nearest public road and the sea "shall include a specific finding that the development is in conformity with the public access and public recreation policies of [Coastal Act] Chapter 3." The proposed project is located seaward of the first through public road (Highway 68). Coastal Act Sections 30210 through 30214 and 30220 through 30224 specifically protect public access and recreation. In particular:

30210. 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 resource areas from overuse.

30211. Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.



30213. Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. ...

30221. 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.

30223. Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

Coastal Act Section 30240(b) also protects parks and recreation areas, such as the adjacent beach area. Section 30240(b) states:

30240(b). Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

These overlapping policies clearly protect the beach (and access to and along it) and offshore waters for public access and recreation purposes, particularly free and low cost access.

2. Analysis

The Pebble Beach area provides numerous public access and recreational opportunities of regional and statewide significance. Within Del Monte Forest, Pebble Beach is the main commercial enclave with shops, restaurants, and other amenities available to the general public and casual visitor (i.e., non-resort guest). The Equestrian Center is located here, as is the 9-hole Peter Hay Golf Course that provides low cost golfing use for the general public (approximately \$30 per round).

The Pebble Beach Golf Links (PBGL), which is rated one of the top publicly available courses in the world, provides for public recreational use along much of the Pebble Beach coastal area. However, current rates for daily use of the course are about \$500, so access in these areas is limited to those able to afford such prices. The Applicant does allow public pedestrian access on cart paths (at walkers' own risk of getting hit by a golf ball), but such access can be dangerous, and such access has historically been somewhat limited. Stillwater Cove beach, including that fronting the site and the area extending downcoast past the Pier and toward Arrowhead Point, is available for public use once an entry fee of \$9.50 is paid for vehicular entry on 17 Mile Drive (pedestrian and bicycle access on 17 Mile Drive is free). Access to 17-Mile Drive, and thus to Stillwater Cove, is also sometimes restricted during large temporary events (e.g., during the AT&T Golf Tournament) as is allowed under the LCP.

Public access to the shoreline at Stillwater Cove, as well as most of the low-cost coastal access in Del Monte Forest, was formalized through the Coastal Commission's approval of the Spanish Bay Resort



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(CDP 3-84-226; approved March 1985).¹⁹ The Spanish Bay Resort is located north of the PBGL course, and is also owned and operated by the Pebble Beach Company. The Stillwater Cove public access area is used for day beach use, as well as for diving and boating, and includes public parking in the lots near the 17th fairway and Beach Club, an equipment and passenger drop-off zone near the pier, a ramp/stairway for access to the shoreline, and public restrooms that include showers for divers.

As discussed in the finding above, shoreline structures can have a variety of negative impacts on coastal resources including adverse affects on beaches and sand supply, which ultimately result in the loss of the beach and associated impacts to public access. The proposed project's impact to sand supply, and ultimately to public access, would result from the placement of the seawall onto approximately 3,378 square feet of beach area that otherwise would be available for public use (although the project would involve the removal of 3,355 square feet of grouted rip rap that is currently covering the beach as partial mitigation), by bluff retention of 49 cubic yards of sand per year for the lifetime of the proposed project, and by fixing of the back beach location, resulting in the annual loss of 192 square feet of sandy beach. Ultimately, this and related seawall impacts mean that the beach will disappear in front of the seawall and will result in the loss of the public's ability to use the beach upcoast of Stillwater Cove pier. The impacts of hardening the shoreline in this area are thus both direct and indirect, leading to significant negative public access impacts (e.g., loss of sand to the system overall, loss of beach space over time at the site as well as downcoast of the site, loss of lateral access along the beach, loss of low-cost recreation in an otherwise generally high-cost area, loss of beach ambience, and loss of aesthetics during construction). Therefore, if the proposed project is to be approved, mitigation for this beach loss, and the related loss of low-cost public recreational opportunities and coastal access, is necessary. Such mitigation needs to be related and proportional to the public access impacts.

As described previously, because of continued sea level rise and potential impacts to sensitive marine habitats immediately offshore, as well as the unique mineralogical composition of Stillwater Cove sand and uncertainty about the effectiveness and availability of appropriate sand sources, beach renourishment at Stillwater Cove is not considered to be a feasible mitigation measure at this time. Since it may be impossible to replace the beach lost at the site itself, an alternative would be to obtain access to some currently inaccessible or under-utilized beach area within the vicinity of the project. However, no currently unavailable beach areas exist in the vicinity of the project that could be opened to the public, and offsite recreational land (i.e., not in the project vicinity) would not adequately mitigate for the loss of recreational land at the Beach Club.

All of the twelve Del Monte Forest LUP Shoreline Access points originally identified in the early 1980s have been developed. However, there is a location in the vicinity of the project that, if improved as a public accessway and shoreline overlook, would provide a vantage point of Stillwater Cove and the Pebble Beach Golf Links (including the world-famous 18th green) that is currently less than optimum for public use. Since this site is located in Stillwater Cove, and would provide additional low-cost recreational beach access to an area of the coastline that is currently underutilized and not easily

¹⁹ The Commission also required public access enhancement at Stillwater Cove and the surrounding Lodge area (via a public lodge area path and parking system) in its approval of the Casa Palmero project in 1997 (CDP A-3-MCO-97-037).



accessible, completion of this access could serve as mitigation for the loss of public recreational opportunities due to the seawall over time at the Beach Club.

This improved access facility would be located approximately 1,800 feet upcoast from the Beach Club at the Pebble Beach Lodge, at the western end of Stillwater Cove (see Exhibit E). More specifically, the overlook would be located between the Lodge complex's Sloat Building and the ocean. The Sloat Building is the seaward-most building of the Lodge buildings. Although the public is currently allowed access to this area as an overlook (by virtue of the Casa Palmero CDP), it is currently primarily a private parking lot area which does not include any defined area for public access and does not include any public access amenities. In other words, it is available to the public, but its utility in this respect is limited. Currently, no improved blufftop access for the general public exists in the vicinity of the Lodge (except from the golf course itself), and there is no sandy beach in the vicinity of the Lodge. As shown in the Del Monte Forest Land Use Plan shoreline access map (Exhibit E), the trail and overlook would fill a shoreline access gap that exists between the improved access points at Pescadero Point and Stillwater Cove. Access to the overlook would begin at the heavily-visited Lodge and extend seaward along an existing walkway located on the west side of the Lodge. At the end of the existing walkway (at the Sloat building), a new pathway would be demarcated over the existing paving to the new overlook on the bluff edge. The overlook would include built-in seating and Stillwater Cove interpretive signage and related access amenities designed to maximize the utility of this area for public uses. The walkway and overlook would provide new, defined access to the shoreline, and because of its west-facing orientation, provide the public with sweeping views of Stillwater Cove. The accessway would also be a new developed spur off of 17 Mile Drive and the Lodge area pathways system, both of which are components of the California Coastal Trail (CCT) through the Del Monte Forest, and thus also a new developed access facility as part of the CCT. Thus, in order to mitigate for lost beach and low-cost recreational use at Stillwater Cove, the Beach Club seawall project is conditioned to provide a public accessway from the Pebble Beach Lodge complex to a developed shoreline overlook between the Sloat Building and the ocean (see Special Condition 5). Special Condition 5 also requires a revised Del Monte Forest gate handout that identifies this and all other public access amenities in the Forest. The Applicant has indicated that they are in agreement with this condition. Taken together, the removal of rip-rap and materials to free publicly available beach space and the development of the new access overlook facility will adequately mitigate for the sand supply impacts of the project.

In addition, as detailed in the preceding finding, this approval is valid for 20-years, and this time frame ensures that the public access context, including potential changes and uncertainties associated with it over time, can be appropriately reassessed at that time (see Special Condition 4).

Finally, with respect to construction impacts, this project will: require the movement of large equipment, workers, materials, and supplies in and around the beach area and public access points; include large equipment operations in these areas; result in the loss of recreational beach and other public access use areas to a construction zone (at the immediate project area); encroach on State Lands and Sanctuary waters; and generally intrude and negatively impact the aesthetics, ambiance, serenity, and safety of the recreational experience at this location. These public recreational use impacts have been (through the Applicant's proposed BMPs, which are extensive) and can be (by condition to implement the



Applicant's BMPs and include those typically applied by the Commission in the manner the Commission typically applies them to cases like this one) contained through construction parameters that limit the area of construction, limit the times when work can take place (to avoid both weekends and peak summer use months when recreational use is highest), clearly fence off the minimum construction area necessary, keep equipment out of coastal waters, require off-beach equipment and material storage during non-construction times, clearly delineate and avoid to the maximum extent feasible public use areas, and restore all affected public access areas at the conclusion of construction. A construction plan is required for this purpose (see Special Condition 2). In addition, to provide maximum information to the beach-going public during all construction, the Applicant must maintain copies of the CDP and approved plans available for public review at the construction site, as well as provide a construction coordinator whose contact information is posted at the site to respond to any problems and/or inquiries that might arise (see Special Condition 3). Although the required construction conditions can minimize the impacts of this project on the public, the conditions cannot completely compensate for the unavoidable degradation of the usual public recreational experience available at this location, including the overall diminution of aesthetics and ambiance, due to the proposed project. Mitigation is necessary to offset these impacts to public recreational uses. Fortunately, the mitigation package described above can adequately address these remaining temporary construction impacts as well.

In conclusion, provided the overlook facility is appropriately maintained in its approved state and made available to the maximum degree for public access (including trough directive signage, new gate handouts, etc.), all rip-rap and related existing armor materials are removed from the beach and this area freed for public beach access as much as possible, and the approval includes a twenty-year horizon, these mitigations can appropriately offset the public recreational access impacts associated with the proposed project. As conditioned, the project is consistent with the Coastal Act access and recreation policies cited above.

C. Visual Resources

1. Applicable Policies

Coastal Act Section 30251 states:

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

Coastal Act Section 30240(b), previously cited, also protects the aesthetics of beach recreation areas such as those of the 38th Avenue beach and the "Hook" accessway located directly adjacent to the



project site. Section 30240(b) states:

Section 30240(b): Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

2. Analysis

Stillwater Cove contains a mix of armored and unarmored bluffs. The armored portions include a range of shoreline protection types of varying ages, including grouted rip rap, stucco stone faced walls, faux rock walls, and old rock and mortar walls. The eastern end of the cove, from the eastern end of the beach to Arrowhead Point, is the largest unarmored portion. The proposed removal of existing grouted rip rap and concrete rubble on the project site would be a visual improvement at the project site and in the public viewshed (see a photograph of the existing site condition in Exhibit C). The proposed lower tier wall would include texturing, contouring, and coloring to mimic a natural bluff face, and the proposed upper tier wall would be a straight retaining wall. Despite the proposed faux bluff treatment of the lower tier wall, project plans depict a linear, angular appearance that would not adequately mimic the natural undulations or shape of the surrounding bluffs and would reduce the effectiveness of the intended faux bluff look. To truly mimic the surrounding bluffs, the wall would need to undulate and have slightly varying heights and indentations, including a seamless, natural-looking connection to the upper tier wall that includes variation in elevation (instead of the proposed vertical cross section of the lower wall and the proposed flat landing area between the two tiers). In addition, the upper tier wall would need to be constructed with the same faux bluff treatment as the lower tier in order for the structure to adequately mimic the surrounding bluffs and minimize the seawall's visual impact to the maximum degree feasible. Otherwise, the massing, including the very vertical cross-sections proposed, would inappropriately loom over the public beach area, and would detract from the camouflaging effect of the proposed faux bluff details, both leading to inappropriate public viewshed impacts. Accordingly, this approval is conditioned to ensure that the entire seaward face of the proposed project is sculpted, colored, and textured to approximate natural bluffs, including to mimic the sandstone bedrock, the marine terrace deposits, and the topsoil of the adjacent bluffs (see Special Condition 1).

In addition, the project also includes wave returns (or recurves) that extend seaward at the tops of both seawall tiers to protect the Beach Club from runup during heavy wave action. Oceanfront bluffs do not naturally have protrusions such as this, and they can give away an otherwise well-camouflaged faux bluff seawall. As depicted in the project plans, the recurves would be angular and linear, resulting in an unnatural appearance and reducing the effectiveness of the intended faux bluff look. Special Condition 1 requires the recurves to be designed and contoured with some variation in elevation and appearance, including with some random articulation and indentations, to more adequately resemble a natural bluff landform.

The walls also include drain pipes, or weep holes, through which water collected in the area behind the seawall would drain. These drain outlets are shown in the project plans in several linear lines along the face of the wall. Even in successfully camouflaged walls, drain pipes and weep holes detract from the



illusion and lessen the value of the camouflage mitigation. In addition, over time, as drainage from the weep holes begins to stain the concrete at the outlets in a similar equidistant pattern, such unnatural appearance is only heightened. Such impacts would be inconsistent with the Coastal Act visual resource policies cited above. However, there are several ways of addressing these issues that could be used to achieve Coastal Act consistency. Special Condition 1 requires that the weep holes be randomly placed, and the weep holes and drain pipe outlets camouflaged to offset their visual impact.

Landscaping designed to cascade over the top of the seawall, which would screen the top of the seawall at least partially from view and provide a more natural edge to the top of the wall as seen from above and below, can also help to camouflage the wall and soften its appearance (Special Condition 1). Overall, as conditioned, the proposed project will improve the public viewshed as seen from the adjacent beach, from Stillwater Cove pier, and from where it is visible on the Pebble Beach Golf Links. As conditioned, the Commission finds the project consistent with the above-cited Coastal Act public viewshed policies.

D. Marine Resources

The Coastal Act protects the marine resources and habitat offshore of this site. Coastal Act Sections 30230 and 30231 provide:

Section 30230. 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. The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

As proposed by the Applicant, the project would include construction work on the beach as well as from the Beach Club itself. The removal of the existing rip rap and concrete rubble and construction of the keyways will occur during very low tide conditions. According to correspondence from the State Lands Commission (SLC), a portion of the proposed project appears to encroach into State waters. The SLC is currently conducting a more detailed review to confirm this, and the project is conditioned to require review and approval (if necessary) from the SLC (Special Condition 8). The project is also conditioned to require review and approval (if necessary) from the Monterey Bay National Marine Sanctuary (Special Condition 8).



The proposed project plans and the special conditions include construction methods typically required by the Commission to protect water quality and marine resources during armoring construction, including maintaining good construction site housekeeping controls and procedures, the use of appropriate erosion and sediment controls, a prohibition on equipment washing, refueling, or servicing on the beach, etc. (see Exhibit B for the complete list of construction methods, and see Special Condition 2). To further protect marine resources and offshore habitat, Special Condition 3 requires construction documents to be kept at the site for inspection, and also requires a construction coordinator to be available to respond to any inquiries that arise during construction. As conditioned, the project is consistent with Coastal Act Sections 30230 and 30231 regarding protection of marine resources and offshore habitat.

3. Conditions of Approval

A. 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.

B. Special Conditions

1. Revised Final Plans. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Permittee shall submit two sets of Revised Final Plans to the Executive Director for review and approval. The Revised Final Plans shall be substantially in conformance with the plans submitted to the Coastal Commission (titled "Beach Club Seawall Reconstruction and Extension, 17 Mile Drive, Pebble Beach, California" prepared by Haro, Kasunich and Associates, dated July 24, 2009) but shall show the following changes and clarifications to the project:



- (a) Concrete Surfacing. All seawall (including upper and lower tier) and stairway surfaces (other than stair treads) shall be faced with a sculpted concrete surface that mimics natural undulating bluff landforms in the vicinity in terms of integral mottled color, texture, and undulation. The seawall shall be set constructed as close to the natural bluff topography as possible to maximize the appearance of a continuous coastal bluff along the site itself as well as up- and downcoast of the Beach Club. The lower tier wall and the bench area between the lower and upper tier walls shall be constructed with some variation in elevation so as to resemble the natural bedrock platforms in the vicinity. Any protruding concrete elements (e.g., corners, edges, etc.), including the stairway, shall be contoured in a non-linear manner designed to evoke natural bluff undulations. Surfaces shall be of similar or better visual quality in this respect to the best examples in the project area (e.g., at the 5th green). The color, texture, and undulations of the seawall surface shall be maintained throughout the life of the structure. PRIOR TO COMMENCEMENT OF FINISH CONCRETE SURFACING, the Permittee shall submit to the Executive Director for review and approval the qualifications of the contractor who will perform the finish concrete work, including photos of similar completed projects. Finish concrete work shall not commence until the Executive Director has approved of the finish concrete contractor. The Permittee shall undertake development in accordance with the approved plan.
- (b) **Recurves.** The seawall recurves shall be designed and contoured with variation in elevation and appearance, including with random articulation and indentations, to more adequately resemble a natural bluff landform.
- (c) **Drainage.** All drainage and related elements within the sculpted concrete shall be camouflaged (e.g., randomly spaced, hidden with overhanging or otherwise protruding sculpted concrete, etc.) so as to be hidden from view and/or inconspicuous as seen from the top of the bluffs and the beach.
- (d) Landscaping. All landscaping in the project area shall be non-invasive native (to the Stillwater Cove bluff area) species, where bluff species capable of trailing vegetation that can screen the top of the seawall as seen from the beach and Stillwater Cove (e.g., Carmel creeper, *Ceanothus griseus* var. *horizontalis*) shall be included to provide as much screening as possible. All invasive and non-native species in the project area, including iceplant, shall be removed and shall not be allowed to persist. The plans shall include certification from a licensed landscape professional experienced with native species indicating that all plant species to be used are native and non-invasive. A permanent irrigation system shall be included. All plants shall be replaced as necessary to maintain the approved vegetation over the life of the project. The landscaping plan shall be implemented immediately following completion of the seawall, and all plantings shall be kept in good growing condition and replaced as necessary to maintain some visual screening of the wall over the life of the project.

All requirements above and all requirements of the approved Revised Final Plans shall be enforceable components of this coastal development permit. The Permittee shall undertake development in accordance with the approved Revised Final Plans.



- **2.** Construction Plan. PRIOR TO COMMENCEMENT OF CONSTRUCTION the Permittee shall submit two sets of a Construction Plan to the Executive Director for review and approval. The Construction Plan shall, at a minimum, include the following:
 - (a) Construction Areas. The Construction Plan shall identify the specific location of all construction areas, all staging areas, all storage areas, all construction access corridors (to the construction site and staging areas), and all public pedestrian access corridors. All such areas within which construction activities and/or staging are to take place shall be minimized to the maximum extent feasible in order to minimize construction encroachment on all publicly available pathways, Stillwater Cove Pier, the beach, and all beach access points, and to have the least impact on public access.
 - (b) Construction Methods and Timing. The Construction Plan shall specify the construction methods to be used, including all methods to be used to keep the construction areas separated from public recreational use areas (including using the space available on the blufftop portions of the Permittee's properties for staging, storage, and construction activities to the maximum extent feasible, and including using unobtrusive fencing (or equivalent measures) to delineate construction areas). All erosion control/water quality best management practices to be implemented during construction and their location shall be noted.
 - (c) **Property Owner Consent.** The Construction Plan shall be submitted with written evidence indicating that the owners of any properties on which construction activities are to take place, including properties to be crossed in accessing the site, consent to such use of their properties.
 - (d) Construction Requirements. The Construction Plan shall include the following construction requirements specified by written notes on the Construction Plan. Minor adjustments to the following construction requirements may be allowed by the Executive Director if such adjustments: (1) are deemed reasonable and necessary; and (2) do not adversely impact coastal resources.
 - All work shall take place during daylight hours and lighting of the beach area is prohibited.
 - Construction work or equipment operations shall not be conducted below the mean high tide line unless tidal waters have receded from the authorized work areas.
 - Grading of intertidal areas is prohibited.
 - Only rubber-tired construction vehicles are allowed on the beach, except track vehicles may be used if the Executive Director agrees that they are required to safely carry out construction. When transiting on the beach, all such vehicles shall remain as high on the upper beach as possible and avoid contact with ocean waters and intertidal areas.
 - All construction materials and equipment placed on the beach during daylight construction hours shall be stored beyond the reach of tidal waters. All construction materials and



equipment shall be removed in their entirety from the beach area by sunset each day that work occurs. The only other exceptions shall be for erosion and sediment controls and/or construction area boundary fencing where such controls and/or fencing are placed as close to the toe of the seawall/bluff as possible, and are minimized in their extent.

- Construction (including but not limited to construction activities, and materials and/or equipment storage) is prohibited outside of the defined construction, staging, and storage areas.
- No work shall occur during weekends and/or the summer peak months (i.e., from the Saturday of Memorial Day weekend through Labor Day, inclusive) unless, due to extenuating circumstances (such as tidal issues or other environmental concerns), the Executive Director authorizes such work.
- Equipment washing, servicing, and refueling shall not take place on the beach, and shall only be allowed at a designated inland location as noted on the Plan. Appropriate best management practices shall be used to ensure that no spills of petroleum products or other chemicals take place during these activities.
- The construction site shall maintain good construction site housekeeping controls and procedures (e.g., clean up all leaks, drips, and other spills immediately; keep materials covered and out of the rain, including covering exposed piles of soil and wastes; dispose of all wastes properly, place trash receptacles on site for that purpose, and cover open trash receptacles during wet weather; remove all construction debris from the beach; etc.).
- All erosion and sediment controls shall be in place prior to the commencement of construction as well as at the end of each workday. At a minimum, silt fences, or equivalent apparatus, shall be installed at the perimeter of the construction site to prevent construction-related runoff and/or sediment from entering into the Pacific Ocean.
- All public recreational use areas and all beach access points impacted by construction activities shall be restored to their pre-construction condition or better within three days of completion of construction. Any beach sand impacted shall be filtered as necessary to remove all construction debris from the beach.
- The Permittee shall notify planning staff of the Coastal Commission's Central Coast District Office at least three working days in advance of commencement of construction or maintenance activities, and immediately upon completion of construction or maintenance activities.

All requirements above and all requirements of the approved Construction Plan shall be enforceable components of this coastal development permit. The Permittees shall undertake development in accordance with the approved Construction Plan.

3. Construction Site Documents & Construction Coordinator. DURING ALL CONSTRUCTION:



- (a) Construction Site Documents. Copies of the signed coastal development permit and the approved Construction Plan shall be maintained in a conspicuous location at the construction job site at all times, and such copies shall be available for public review on request. All persons involved with the construction shall be briefed on the content and meaning of the coastal development permit and the approved Construction Plan, and the public review requirements applicable to them, prior to commencement of construction.
- (b) Construction Coordinator. A construction coordinator shall be designated to be contacted during construction should questions arise regarding the construction (in case of both regular inquiries and emergencies), and the coordinator's contact information (i.e., address, phone numbers, etc.) including, at a minimum, a telephone number that will be made available 24 hours a day for the duration of construction, shall be conspicuously posted at the job site where such contact information is readily visible from public viewing areas, along with an indication that the construction coordinator should be contacted in the case of questions regarding the construction (in case of both regular inquiries and emergencies). The construction coordinator shall record the name, phone number, and nature of all complaints received regarding the construction, and shall investigate complaints and take remedial action, if necessary, within 24 hours of receipt of the complaint or inquiry.
- 4. Twenty-Year Approval. This coastal development permit authorizes the seawall for twenty years from the date of approval (i.e., until August 11, 2030). If the Permittee intends to keep the seawall in place after August 11, 2030, then the Permittee shall apply for a new coastal permit authorization to allow the seawall (including, as applicable, any potential modifications to it desired by the Permittee). Provided the application is received before the twenty-year permit expiration, the expiration date shall be automatically extended until the time the Commission acts on the application.
- 5. Pebble Beach Lodge Public Access Overlook.
 - **a. Pathway and Overlook Plan.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Permittee shall submit two sets of a public access path and overlook plan (in both full size and 11" x 17" formats with a graphic scale) to the Executive Director for review and approval. The path and overlook plan shall provide for a signed, unobstructed public access trail for pedestrian use between the Lodge area path system and the new overlook area at the seaward edge of the existing parking area between the Sloat building and the ocean. The path and overlook plan shall, at a minimum, provide for all of the following:
 - 1. **Pathway.** The existing pathway along the west side of the Sloat Building shall be extended over the existing driveway to the new overlook location. The path shall be demarcated through striping, stenciling, or other method to clearly delineate the path where it extends across pavement.
 - 2. Overlook. The overlook shall be located on the seaward side of the existing paved driveway/parking area south of the Sloat building and shall be of adequate width (at least



extending from the upcoast edge of fencing at the parking lot to a point seaward of the tree well in the parking lot, and potentially along the entire bluff extent of the parking lot) and depth (at least 10 feet). The overlook shall include built-in seating that provides an optimal view of Stillwater Cove and maximizes public utility, shall include trash and recycling receptacles, shall include adequate bicycle parking area, and shall be constructed of natural materials (e.g., wood, stone, etc.) so as to seamlessly integrate with the natural bluffs and vegetation in the area and to have the least impact on public views. Any railings shall be minimized to the degree feasible (including using landscape areas to avoid the need for railings where feasible), shall be as see-through as possible.

- **3.** Signage. The Plan shall identify the location, size, design and content of signs used, consistent with the following objectives. An informational and directional sign shall be placed at the beginning of the pathway that clearly indicates that it is available for general public use and that it leads to an overlook that provides views of Stillwater Cove and the PBGL. The signs shall include the following text: "Public Accessway" (or equivalent, subject to review and approval by the Executive Director). Interpretive/educational signage describing Stillwater Cove and Stillwater Cove beach (including information about how to reach the beach) shall be located at the overlook. All signs shall be adequately sized and placed as to allow them to be easily read by users, but not so they distract from the visitor experience by being overly large or degrading views.
- **b.** Other Necessary Permits. PRIOR TO TRAIL CONSTRUCTION, the Permittee shall obtain any other necessary approvals for development (e.g., Monterey County Planning Department).
- c. Pathway and Overlook Construction. WITHIN ONE YEAR OF PERMIT APPROVAL, the Permittee shall complete construction of the accessway and overlook in accordance with the approved Pathway and Overlook Plan. Construction may be accomplished in phases as necessary, provided that all improvements are complete and open to public use within one-year of approval of the project. All requirements of this condition and the approved Pathway and Overlook Plan are enforceable components of this coastal development permit. The Permittee shall undertake development in accordance with the approved Pathway and Overlook Plan. All components of the project shown in the approved Pathway and Overlook Plan shall be reported to the Executive Director. No changes to the approved Pathway and Overlook Plan shall occur without a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is necessary.
- **d.** Maintain Pathway and Overlook Improvements. By acceptance of this permit, the Permittee acknowledges and agrees, on behalf of itself and all successors and assigns as follows:
 - 1. **Public Use.** Pathway and overlook use shall be limited to pedestrian and bicycle use only (i.e., equestrians and motorized vehicles will not be allowed). The pathway and overlook shall be available for general public use in perpetuity, and shall not be obstructed in any way,



except that the Permittee shall have the right to temporarily close the pathway and overlook (using signs and temporary fencing) during periods of major golf events at the Pebble Beach Golf Links (such as the AT&T Pebble Beach National Pro-Am and the U.S. Open Golf Championship) consistent with the 17-Mile Drive Public Use Agreement between Monterey County and the Pebble Beach Company or as identified in future amendments to the LCP and/or through CDP approvals, if applicable to this point, whichever provides for more public recreational access.

- 2. Maintenance. The Permittee shall maintain all of the improvements shown on the approved Pathway and Overlook Plan (and any Coastal Commission amendments thereto) in a structurally sound manner and in their approved state in perpetuity.
- **3.** Other Development Prohibited. Development, as defined in Section 30106 ("Development") of the Coastal Act, shall be prohibited on the pathway or overlook and/or within ten feet of the pathway and overlook other than: (1) appropriately permitted construction activities associated with construction, maintenance, and/or repair of the pathway or overlook, landscaping, irrigation, and associated structures shown on the approved Pathway and Overlook Plan; (2) development authorized by an amendment to this coastal development permit (such as minor additional protective structures, directional and interpretive signage, etc.); and (3) standard golf course maintenance, improvement, and repair measures, provided it does not obstruct general public access use of the pathway or overlook, except for temporary closure pursuant to the public use parameters described above.
- e. Revised Gate Handout. WITHIN SIX MONTHS OF PATHWAY AND OVERLOOK COMPLETION, the Permittee shall submit a revised Del Monte Forest gate handout to the Executive Director for review and approval. The revised gate handout shall be consistent with the requirements of all previous coastal development permits issued the Permittee, and consistent with the Monterey County certified Local Coastal Program. The revised handout shall clearly and accurately identify all public access amenities within Del Monte Forest (including all trails, parking areas, destinations, facilities, etc.), including the pathway and overlook at the Lodge, at a scale and in a design that is easily understood. At the Permittee's discretion, the revised gate handout may be developed and submitted to the Executive Director as a separate public access insert to the gate handout provided it is clear that such insert is to be distributed (with the rest of the gate handout) to all coastal visitors entering Del Monte Forest.
- **f. Deed Restriction.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Permittee shall submit for Executive Director review and approval documentation demonstrating that the Permittee has executed and recorded a deed restriction in a form and content acceptable to the Executive Director, restricting use and enjoyment of APN 008-411-018. The recorded document(s) described above shall reflect the requirements identified in this condition. The deed restriction shall include a legal description and graphic depiction of the entire parcel restricted by this condition. The restriction shall be recorded free of prior liens and



encumbrances that the Executive Director determines may affect the enforceability of the restriction. The deed restriction shall run with the land, binding all successors and assigns. This deed restriction shall not be removed or changed without a Commission amendment to this coastal development permit.

- 6. MBNMS/SLC Review. PRIOR TO COMMENCEMENT OF CONSTRUCTION, the Permittee shall submit to the Executive Director for review a copy of the Monterey Bay National Marine Sanctuary (Sanctuary) and State Lands Commission (State Lands) authorizations for the approved project, or evidence that no Sanctuary/State Lands authorizations are necessary. Any changes to the approved project required by the Sanctuary or State Lands shall be reported to the Executive Director. No changes to the approved project shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally necessary.
- 7. As-Built Plans. WITHIN THREE MONTHS OF COMPLETION OF CONSTRUCTION, the Permittee shall submit two copies of As-Built Plans showing all development completed pursuant to this coastal development permit; all property lines; and all development inland of the seawall structure. The As-Built Plans shall be substantially consistent with the approved project described in Special Conditions 1 and 5 above, including providing for all of the same requirements specified in those plans, and shall account for all of the parameters of Special Condition 8 (Monitoring and Reporting) and Special Condition 9 (Future Maintenance). The As-Built Plans shall include a graphic scale and all elevation(s) shall be described in relation to National Geodetic Vertical Datum (NGVD). The As-Built Plans shall include color photographs (in hard copy and jpg format) that clearly show all components of the as-built project, and that are accompanied by a site plan that notes the location of each photographic viewpoint and the date and time of each photograph. At a minimum, the photographs shall be from representative upcoast and downcoast viewpoints above the bluff and below the bluff for both the seawall site and the overlook site that provide full photographic coverage of these developments. The As-Built Plans shall be submitted with certification by a licensed civil engineer with experience in coastal structures and processes, acceptable to the Executive Director, verifying that the seawall has been constructed in conformance with the approved final plans.
- 8 Monitoring and Reporting. The Permittee shall ensure that the condition and performance of the approved as-built seawall and overlook are regularly monitored, including that the seawall must be regularly monitored by a licensed civil engineer with experience in coastal structures and processes. Such monitoring evaluation shall at a minimum address whether any significant weathering or damage has occurred that would adversely impact future performance, and identify any structural damage requiring repair to maintain the approved as-built seawall and/or overlook in their approved and/or required states. Monitoring reports prepared by a licensed civil engineer with experience in coastal structures and processes, and covering the above-described evaluations, shall be submitted to the Executive Director for review and approval at five year intervals by May 1st of each fifth year (with the first report due May 1, 2015, and subsequent reports due May 1, 2020, May 1, 2025, and so on) for as long as the seawall and the overlook exist at these locations. The reports shall identify



the existing configuration and condition of the seawall, overlook, and required landscaping, shall recommend actions necessary to maintain these project elements in their approved and/or required state, and shall include photographs taken from each of the same vantage points required in the As-Built Plans with the date and time of the photographs and the location of each photographic viewpoint noted on a site plan. Actions necessary to maintain the approved project in a structurally sound manner and its approved state shall be implemented within 30 days of Executive Director approval, unless a different time frame for implementation is identified by the Executive Director.

- **9. Future Maintenance Authorized.** This coastal development permit authorizes future seawall maintenance and repair subject to the following:
 - (a) Maintenance. "Maintenance," as it is understood in this special condition, means development that would otherwise require a coastal development permit whose purpose is: (1) to maintain the seawall in its approved state; (2) to maintain the required public access path and overlook in its approved state; and (3) to maintain the required landscaping elements in their approved state (see Special Conditions 1, 5, and 7).
 - (b) Other Agency Approvals. The Permittee acknowledges that these maintenance stipulations do not obviate the need to obtain permits from other agencies for any future maintenance and/or repair episodes.
 - (c) Maintenance Notification. At least two weeks prior to commencing any maintenance event, the Permittee shall notify, in writing, planning staff of the Coastal Commission's Central Coast District Office. The notification shall include: a detailed description of the maintenance event proposed; any plans, engineering and/or geology reports describing the event; a construction plan that complies with all aspects of the construction plan included in the approved plans described in Special Condition 2; identification of a construction coordinator and his/her contact information (i.e., address, phone numbers, etc.) as described above; other agency authorizations; and any other supporting documentation (as necessary) describing the maintenance event. The maintenance event shall not commence until the Permittee has been informed by planning staff of the Coastal Commission's Central Coast District Office that the maintenance event complies with this coastal development permit. If the Permittee has not been given a verbal response or sent a written response within 30 days of the notification being received in the Central Coast District Office, the maintenance event shall be authorized as if planning staff affirmatively indicated that the event complies with this coastal development permit. The notification shall clearly indicate that the maintenance event is proposed pursuant to this coastal development permit, and that the lack of a response to the notification within 30 days constitutes approval of it as specified in the permit. In the event of an emergency requiring immediate maintenance, the notification of such emergency episode shall be made as soon as possible, and shall (in addition to the foregoing information) clearly describe the nature of the emergency.
 - (d) Maintenance Coordination. Maintenance events shall, to the degree feasible, be coordinated with other maintenance events proposed in the immediate vicinity with the goal being to limit



coastal resource impacts, including the length of time that construction occurs in and around the beach and bluff area and beach access points. As such, the Permittee shall make reasonable efforts to coordinate the Permittee's maintenance events with other adjacent events, including adjusting maintenance event scheduling as directed by planning staff of the Coastal Commission's Central Coast District Office.

- (e) Construction Site Documents and Construction Coordinator. All requirements set forth in Special Condition 3 above ("Construction Site Documents & Construction Coordinator") shall apply to any maintenance event.
- (f) **Restoration.** The Permittee shall restore all beach and rocky shore platform areas and all access points impacted by construction activities to their pre-construction condition or better. Any beach sand impacted shall be filtered as necessary to remove all construction debris from the beach within three days of completion of construction. The Permittee shall notify planning staff of the Coastal Commission's Central Coast District Office upon completion of beach-area restoration activities to arrange for a site visit to verify that all beach-area restoration activities are complete. If planning staff should identify additional reasonable measures necessary to restore the beach and beach access points, such measures shall be implemented as quickly as reasonably possible.
- (g) Noncompliance Proviso. If the Permittee is not in compliance with the terms and conditions of any Coastal Commission coastal development permits or other coastal authorizations that apply to the subject properties at the time that a maintenance event is proposed, then the maintenance event that might otherwise be allowed by the terms of this future maintenance condition shall not be allowed by this condition until the Permittee is in full compliance with those terms and conditions.
- (h) Emergency. In addition to the emergency provisions set forth in subsection (c) above, nothing in this condition shall serve to waive any Permittee rights that may exist in cases of emergency pursuant to Coastal Act Section 30611, Coastal Act Section 30624, and Subchapter 4 of Chapter 5 of Title 14, Division 5.5, of the California Code of Regulations (Permits for Approval of Emergency Work).
- (i) **Duration of Covered Maintenance.** Future seawall and path maintenance under this coastal development permit is allowed subject to the above terms until December 31, 2020. Maintenance can be carried out beyond December 31, 2020 if the Permittee requests an extension prior to December 31, 2020 and if the Executive Director extends the maintenance term in writing. The intent of this permit is to regularly allow for 10-year extensions of the maintenance term unless there are changed circumstances that may affect the consistency of this seawall and path maintenance authorization with the policies of Chapter 3 of the Coastal Act and thus warrant a re-review of this permit.
- **10. Assumption of Risk, Waiver of Liability, and Indemnity Agreement.** By acceptance of this permit, the Permittee acknowledges and agrees on behalf of itself and all successors and assigns:



- (a) That the site is subject to extreme coastal hazards including but not limited to episodic and long-term shoreline retreat and coastal erosion, high seas, ocean waves, storms, tsunami, coastal flooding, landslides, bluff and geologic instability, and the interaction of same;
- (b) To assume the risks to the Permittee and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development;
- (c) To unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards;
- (d) 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; and,
- (e) That any adverse effects to property caused by the permitted project shall be fully the responsibility of the Permittee.
- **11. Deed Restriction.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Permittee shall submit for Executive Director review and approval documentation demonstrating that the Permittee has executed and recorded against the subject properties governed by this permit (i.e., APN 008-411-020) 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. 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.

4. California Environmental Quality Act (CEQA)

Section 13096 of the California Code of Regulations requires that a specific finding be made in conjunction with coastal development permit applications showing the application to be consistent with any applicable requirements of 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 that the activity may have on the environment.

The Coastal Commission's review and analysis of land use proposals has been certified by the Secretary



CDP Application 3-09-025 Beach Club Seawall Page 38

of Resources as being the functional equivalent of environmental review under CEQA. The preceding coastal development permit findings discuss the relevant coastal resource issues with the proposal, and the permit conditions identify appropriate modifications to avoid and/or lessen any potential for adverse impacts to said resources. All public comments received to date have been addressed in the findings above, which are incorporated herein in their entirety by reference.

As such, there are no additional feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse environmental effects which approval of the proposed project, as conditioned, would have on the environment within the meaning of CEQA. Thus, if so conditioned, the proposed project will not result in any significant environmental effects for which feasible mitigation measures have not been employed consistent with CEQA Section 21080.5(d)(2)(A).





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GENERAL NOTES

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A landscaping plan shall be prepared by others for the project. The landscaping plan shall be in ufficient detail to identify the location, specie, and size of the proposed landscaping meterials.

The applicant shall comply with the Noise Element of the Monterey County General Plan and Chapte (0.60 (Noise Control) of the Monterey County Code:



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GENERAL NOTES BEACH CLUB SEAWALL RECONSTRUCTION & EXTENSION 17 MILE DRIVE, PEBBLE BEACH, CALIFORNIA

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HARO, KASUNICH AND ASSOCIATES, INC CONSULTING CIVIL, GEOTECHNICAL & COASTAL ENGINEERS 116 EAST LAKE AVE. WATSONVILLE, CA 95076 (831) 722-4175

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1"=10 FT 7/24/09









1. Burning the start











Provide the following: Portland Cement: ASTM-A150, type II, 7 sacks/cy, minimum, Pozzolan: may be a maximum of 25% of the 7 sacks/cy, of cement. 3. REINFORCING STEEL shall be ASTM A-615, Grade 60 deformed bars. Bars #4 and smaller may be Grade 40. Where specified, bars shall be epoxy coaled per ASTM M-775. Bars not specified to be epoxy coaled shall be uncealed. Size and spacing of bars shall be as specified in the drawings. Te wire: 16 ga annealed wire. All bar laps and reinforcement for horizontal and vertical steel must be spliced with a minimum overlap of 48 bar diameters, unless otherwise noted, but not less than 24°. All steel shall be folgibly held in place with approved devices prior to pouring concrete. Use plastic rebar chairs and believs with adequate strengths to withstand 300 hbs, concentrated load without permanent deformation or breakege. Concrete shall develop a 28 day minimum Artificial Rock Facia 2,500 psi Structural concrete 4,000 psi Check all dimensions in relation to site conditions prior to starting work. The contractor shall coordinate the work of all trades. All discrepancies starts the called to the attention of the structural engineer and shall be resolved before proceeding with the work. During the construction phase the contractor is rasponsible for the called of construction and personnel. Provide adequate shoring and bracing, in accordance with all national, state 1. <u>ALL DESIGN AND CONSTRUCTION</u> shall conform to the requirements of the 2007 California Building Gode (C.B.C.) and any local code requirements. All details, sections and notes shown on drawings are intended to be typical and shall apply to similar situations elsewhere, unless otherwise noted 4. CONCRETE Hooks bends fabrication and placing shall be in accordance with the "Manual of Standard Pearities for Detailing Reinforced Concrete Studeure" ACI No. 315 Reinforcement as Bedred shall be protected from salt water mist by providing adequate blanket covering. Remove cover just prior to concrete placement. In case of exposure to saft water, wash Remove cover just prior to concrete placement. To concrete placement. Compact backfill behind retaining wells or where called for on the drawings Backfill shall be granular material approved by the soils engineer and shall be brought to the proper moleture content and compacted to a minimum relative density of 90%. FOUNDATION DESIGN is based on a Geotechnical Report prepared by Haro, Kasunict and Associates, Geotechnical Engineers, dated October 2008. STRUCTURAL NOTES & SPECIFICATIONS 2 CONCRETE MIXES STRENGTH: local safety ordinances. ultimate compressive strength as follows equipment placement DOLICIELE

	WALL	ARTIFICIAL ROCK FACIA
STRENGTH	4000 PSI MIN	2500 PSI MIN
SACKS OF CEMENT	7 MIN	7 MIN
INTEGRAL COLOR	NO	YES IN
ACCELERATOR	NOT WITHOUT	NOT
	ENG APPROVAL	WITHOUT
		APPROVAL
AGGREGATE	3/4 MAX	1/2 MAX
DCI/DCI-S	2 GAL/YD	2 GALYD
MAX NATER/CEMENT	0.45 MAX*	0.45 MAX*
NATER REDUCER	OK IF NEEDED	0¥
SEALER REQUIRED	NO	YES
	6 INCH MIN EXCEPT AS NOTED IN DETAILS	6 INCH MIN
LY ASH	15%	15%

* WATER CONTENT OF DCI/DCI-S CORROSION INHIBITOR AS MANUFACTURED BY W.R. GRACE & CO. (600) 753-8622 SHALL BE INCLUDED IN THE WATER-TO-CEMENT RATIO

All concrete shall be in conformance with ASTM C-1116 Type III concrete or shotcrete. Submit concrete mix designs to engineer for approval Concrete shall be machine mixed: transported and placed in accordance with ACI-304.

C.PLACEMENT AND COVERAGE. Ensure that reinforcement and embedded items are not disturbing placement of concrete. Minimum concrete coverage (race of bar to face of concrete) shall be 6° minimum from reinforcing bar to face of structural face of concrete).

D <u>IESTING</u>; Shotrete and concrete materials shall be tasted by a County of Monitery approved Testing Agency. Only tested shotrette shall be used. Special inspection shall be provided for concrete be section 1701.51 of the CSO. Maintain complete records of placed concrete including. Date, Location, Ouanity and Test Samples taken. Concrete lest cylinders take four test cylinders per 50 ou yards of concrete placed each day, and take a minimum of four test cylinders be ach day that concrete is placed

<u>E. PROTECTION</u>: Protect concrete from premature drying, maintaining minimal water to as at a relatively constant temperature for a period necessary for hydration of cement and hardening of concrete in Lase of exposure to salt water, wash the surface to receive shortcrete with potable water just prior to shorcrete

E_SHOT_CREFIE_ORGUNITE: Proportioning, mixing and placement of shorterels or gunte shall comply with ACI GoRG Lapping of the entricity of splexes are permitted if the spacing at the reinforcing is open enough to allow clear, unobstructed access to both sides of the reinforcing. If not, the lapped bass should be spaced at least three times the dameter of the argets bar at the splex.

Contractor shall have a minimum of 5 years experience with proven performance record on similar type of projects, using the same qualified nozzleman, crew and

Forning earth for Shotzrete of Gunite: Compared and tim to line and greate before pleans aborcere to earth will be plot for backforming due to overscassition of vords. Backforming costs shall be included in this Contract Price. Dampen surfaces to receive shotzrete. All rebound concrete material shall be collected and dispated of No concrete material shall be durped into occes matter or if on beach. Cover No concrete material shall be durped into occes matter or if on beach. Cover shotrete wall areas for curing and protection Layers of shotrcete and construction loints to receive shotrete shall be dampened by potable water. In case of exposure to saltwater, wash underlying shotrete surface to receive additional shotrete with potable water just prior to additional shotrete placement.

5. <u>TIEBACK ANCHORS</u> The Contractor shall provide install and test theback anchors Testing shall immediately follow installation. Depending on the results of the testing, the Geotechnical Engineer may at his sole discretion, require additional tebacks to be tested. Firly percent of the theback anchors shall be tested. The Geotechnical Engineer will select the location of tebacks to be tested.

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pages)

REVISIONS

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Dyvidag double corrosion protected thread bar earth anchors as manufactured by Dywirag Systems international USA, inc. shall be used. Anchor installation, grouting and testing shall comply with the Manufacturer's specifications.

Drill 6" diameter holes for all of the Dywidag Grade 150 tieback anchors.

Installation, stressing, testing and grouting operations shall conform to the manufacturer's specifications for permanent Dywidag threadbar earth anchors.

During testing, the teback threadows shall be pulled until the total design load is achieved, then the force shall be reduced to 80% of the static design load and the teback lock nut shall be tightered to maintain that force. All untested tebacks shall be pulled until 80% of the design load is achieved, then the teback lock nut shall be tightened to maintain that force. The minimum teback be airs shall be based on the following: 90% of the ultimate strength of the teback bar shall be greater than the design load. Bar size shall be as specified on the plans

STRUCTURAL NOTES

BEACH CLUB SEAWALL RECONSTRUCTION & EXTENSION

17 MILE DRIVE, PEBBLE BEACH, CALIFORNIA

The design load shall be as specified on the plans.

The Contractor shall place and batter tieback anchors at locations shown on plans

Any tieback which does not test successfully shall be removed and replaced pending Engineer's approval at no additional cost to the Owner. The replaced anchor shall be tested

Corrosion protection shall be provided for the entire tieback assembly and shall be designed to provide a minimum 50 year service life.

Liquid drilling fluid shall not be used without obtaining Engineer's approval of methods to prevent drilling fluid from entering the seawater. Dust from rotary air hammer drilling must be

The Contractor is to notify the project Geotechnical Engineer four working days prior to commencement of drilling operation.

6. INSPECTIONS The Contractor shall be responsible for calling for all inspections required by the Monteeyr Building Oppartment including any required special inspections. Special inspections include structural concrete testing and teback testing.

3.1UCCO STOME VEHICLES shall be manufactured by Coronado Stone Products (800) 447-6663) and shall markh the succor stone on the adjasent 18th Green search (Ergish Rubble pattern) with normal weight aggregate. The following concrete mix and products we received in the normal weight aggregate.

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HARO, KASUNICH AND ASSOCIATES, INC.

CONSULTING CIVIL, GEOTECHNICAL & COASTAL ENGINEERS 116 EAST LAKE AVE., WATSONVILLE, CA 95076 (831) 722-4175

are required in the veneer: Portend cement: ASTM-AS0 type II, 5.5 sacks/cy minimum. Pozzolan: may be a maximum of 25% of the 5.5 sacks/cy minimum. a. Corrosion: Rolucton: None required b. Integral Color: Davis "Mess Buff" \$5.47 at 2 lb /sack of cement, as manufactured by Davis Colors Phone (21) 289-311 c. Integral Seler: Veccal 1311 at a role of 0 1% of dry mix, by weight, as manufactured by Wacker. Phone (900) 521-3598. For application of stucco stone venee on concrete sawall surfaces use these products (or equivalent as approved by the Engineer): Moisture barier cost on concrete wall. Deta DR23-18 A&B. As manufactured by Deta Plastics Co. Phone (299) 535-132. Veneer epoxy paste: Delta DR30-09 A&B. As manufactured by Deta Plastics Co. Phone 1090 535-132.

Joint filler, where required: Fine cement grout with ChemComp II, cement UBC **Eable** 21**B**.

Finish seal coating: Apply Veoceal 1311 upon completion. Use Veoceal 1311 for yearly maintenance. Veoceal is manufactured by Worker. Phone (800) 521-568. Apply materials in conformance with specifications of manufactures. Manufactures specifications for admixtures, moisture barrier, epoxy paste and sealer must be submitted to Engineer and a copy kept on the construction site.

Scale NONE Drawn

7/24/09

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OF 19 SHEETS

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GENERAL NOTES AND SPECIFICATIONS FOR SOIL NAIL WALLS

- ALL DESIGNARD CONSTRUCTION stati uzdami is ine vojamenato of Na 2007 Galerias Balang Dale (2 A.C.) and ne bost uzi-eprimente, sazojet na nodel so niji uni kunzame se rode in one få blav. Al delak socion oci nate posen or draving are sinesist o be tybel and shal spity is sinalor situation ekonomen, unitas oftenetije rodel.

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hed lengths and ber sizes shall he in a there are non-provided according to a second

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under furbunding and to stable slopes above and below the soll neil walls.

DESIGN SOIL PARAMETERS:

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Lean Clay	Tempos & Fili	SaliRaat Type
•	ĸ	(Minute Fridan Auge (Augmus)
800	300	(part)
120	981	(pc)
o	ø	Nol Diameter (Inches)
1.414	471	Albunitis P.Abut Resistance (pounds/li)

SOIL HAIL PARAMETERS.

<u>Binardons</u>. So in anis tata the Maraked compress with all accessories and table by a transmit product of company request in their minimizanse such a Marakes form (signowering Company). This does Chard Carell Associations of company and and copies of the conflicted mitir report of the soft nails basis will welly the file mails contains to transport product product and the soft nails basis will welly the file mails contains to the specification of the specification.

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tread Rebar Scil Nei

GENERAL NOTES AND SPECIFICATIONS FOR SOIL NAIL WALLS (Continued)

finitions shall be a harden and benet washers. ing to ASTM F-436 and AASHTO No. N200. A weather will be used i NUMBER OVER THE PARTY OF

<u>Rading will be used to provide angular eductions</u>. Two breat washine and be caudete of reading signing each other und a Dayler Be bearing surface is obtained for the two m. The breat washine and be manufactured from ASTM A-17 grade be tree or ASTM A-526, grade 100-77-03 duction iron.

<u>Bigging Charge</u> and a national response the source spice has not really and respective of developing. (Offs of the guaranteed there is bracked a strange of response (Charge Charge) and the contrast is strange to respect the interaction of the maximum term and contraring to \$2004. (Chir The country of the Unique remembra water additional contrast: polacition of quoty conting the Unique spice.)

<u>Construction</u> shall be speed (hybrid) it is (h in c.) and second to the Grade X de Threed States as the on its correct structure), using the length of or with the user to the scient due to instructure to difficult and their embedding all correct constructions. The means constructions are to be manufactured from a class 200 ACT M to 241 or heavy day, absolute 40, FM D - hits P-C, and Addref Dale. Ref.

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when required, shall be it to devely polyethytees with a first? wall Subtrate. Crock back of along the length of the soft rate inverse positionery (Rytachie ensure of 1-fitters the bottom be) so that the grout will be pumped from the lowest gravitational point and competently fit the

nsion Protection Materials: In addition to the grout, shell be provided by the coil net manufacturer whe ad by one or more of the following meterials: **During** The sol nai can be

pary Costing: conforming to ASTM A-775, A-884, D-3963, and AASHTO No. M284

<u>a Dip Gebyerzing:</u> conforming in ASTM A-153 and AASHTO No. M232. Note: System concounts auch as her nue, bavel weden suplings, and beating plates can also be spory couled or hor do get-antiald when required.

Specify the last programs to be of real real to prove Margin frame (Constant) Francisci (CO) to the proof directly reason a real real to provide Margin frame and allow the real real to CO of the constant of the constant

DRYATION AND HANDLING PROCEDURES

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General NOTES AND SPECIFICATIONS FOR SOIL NACA (Continued) RECOMMENDED CONSTRUCTION SEQUENCE FOR SOIL NAIL WALL SUPPLEMENTAL RECONVERDATIONS. If indexinable conditions are incountered during conduction, of it be proposed construction will define from their proposed herein, the Geodechrical Engineer and Structural Engineer shall be notified so that supplemental incommendations can be given NSPECTION OF CONSTRUCTION MATERIALS: The owner and his representatives shal have the right to impost any metericit ideals and have the right to report any meterials descend delendive or not conforming to the specific pitces. STRUCTURAL OBSERVATION by the Structurel Engineer shell he provided for well reinforcement; and any other condition delemaned when construction commences 1941 TEST (JAVIS The Constant's wall provide, tavail and test pices. Tasking shall immediately integer traditions. All goes a test the stands to (XXK of the standys mail battery load of XX is. To independent all conjectives shall stand we startly in the standard testing, the Contentriatil Exploses may, at the sole discretion, inclues long-duration had testing for a testing furcher of pices. IOTIFICATION: The powershold engineer should be notified at least but (4) working days prior to installing inelial scree endors and drilling relations and grouting of suf rules, and installation of compacted bedfill, so that arrangements for teating and observation can be made. way plan which does not lest successfully shall be removed and re splacad play shall be rested. NSPECTION by the Onderdiversal Engineer shall be provided for drilling, installation and grouting of soit rade, installation of indical some piece, and satisform of compacting backSI. The weak beak by excessing the bockmonn EEP v 30 violatig 500 holical plans with the instance tracking the laterant of the excession of the develop of the Generative Boggers of a wind interformation take by develop to EEP v 10. Automa verticed developed escensions to bee track a real relationsement carbine. The weak that the formed and cash with concerned or advictment, to EEV v10. The polinewed wall shall be constructed from the bottom up. After shokarete has curind 7 deys, beadiff soil & drei the Geolechnical Engineer. beads hationaid well bern at the max methonement curraity. Nacistre & absorbe the new hat a well hackness (10.1/27), izve, EEX (10, or just bade the lowest and may the bits resulted; to EEEV 55, or just before the native-beenst pair naj wit to be mission. I have a genocomposi dimininge state and PVC connector pages. When all soil naits at all levels have been ketalivel, is provide drainage of the geoccomposite drainage strip-total wait frechness Repett the construction sequence 3.1 finough 3.4 for each subsequent lowest poil neil Drill lowest level and nais yet to be installed, install a and system to approx. 1.0 kpc tension. The following well construction negatives for each 18 shell be complete prior : Geologinalistical Engineer: (2021, PESS, 2014). Its Matterial convert picers instanded on the of incommodation of the Research & Annotation, the Tet Devices Company, for an dial Network in Annotation, Market and Convert Company, for and all Network instantiation, for and the company of the antimation of a deally market instantiation. These is the network instantiation of deally market instantiation of Society is the network instantiation of deally market instantiation. In Society is the network instantiation of deally market instantiation of Society is the network instantiation of deally market instantiation of Society is the network instantiation of deally market instantiation of Society is the network instantiation of the Society and Forth 2. - 1.2 for one of the network instantiation of the Society o arshcial rock (sholicrate) facing. sar renewing well barn for the first inhibitionment cartain, helds PVC connector pipes to and apply shokcees to the front half flackness (10-1/27) of the structured well, for a 21* After solinal pro mpard to 90% approval at no additional cost to the Owner. The anchorage of helical sorew piers and soil nails test menter and the second the lift, at the direction of Exhibit ALL OF X DALL 15 of 19 pages) (page Date SOIL NAIL WALL NOTES & SPECIFICATIONS HARO, KASUNICH AND ASSOCIATES, INC BEACH CLUB SEAWALL RECONSTRUCTION & EXTENSION 17 MILE DRIVE, PEBBLE BEACH, CALIFORNIA

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7/24/09 CONSULTING CIVIL, GEOTECHNICAL & COASTAL ENGINEERS 116 EAST LAKE AVE. WATSONVILLE, CA 95076 1931; 722-4175

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OF 19 SHEETS









1972 California Coastal Records Project Photo #7223003



2008 California Coastal Records Project Photo #200805913

CCC Exhibit _____ (page_l of ____ pages)



Staff photo of Beach Club looking west



Staff photo of Beach Club (from Stillwater Cove Pier) at high tide

CCC Exhibit _____ (page_2 of 3 pages)



Staff photo of Beach Club (from Stillwater Cove Pier) at low tide



Staff photo from Beach Club deck looking east down Stillwater Cove beach

CCC Exhibit _____ (page __3 of __3 pages)



Existing

CCC Exhibit D (page_l_of_2 pages)



Applicant's photosimulation of proposed project

CCC Exhibit _____ (page_____ of ____ pages)

FIGURE 16

SHORELINE ACCESS

