

CALIFORNIA COASTAL COMMISSION

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F18a

Filed: 03/26/2018
SI Found: 05/11/2018
Staff: A. Spencer -LB
Staff Report: 10/03/2019
Hearing Date: 10/18/2019

STAFF REPORT: APPEAL- DE NOVO

Application No.: A-5-LGB-18-0014

Applicants: Peter Harle and Lori Olvera

Agent: D.P. Reynolds Corp.

Local Government: City of Laguna Beach

Local Decision: Approval with Conditions

Appellant: Sharon Fudge

Location: 31101 S. Coast Highway, Laguna Beach, Orange County
(APN: 056-012-15)

Project Description: Construction of a 50-ft. long, approximately six-foot high retaining wall on the seaward side of an existing ocean-fronting, single-family residence.

Staff Recommendation: Denial

SUMMARY OF STAFF RECOMMENDATION:

The applicants are proposing to construct a 50-foot long, approximately six-foot high retaining wall on the seaward site of a beachfront lot located approximately 100 feet north of Aliso Creek in the South Laguna Beach area. The project site is developed with a single-family residence that was permitted in 1982 by the Coastal Commission (CDP No. 5-82-368; Arciero). In March 2017, the wall that formerly occupied the seaward portion of the property was severely damaged by erosion caused by Aliso Creek when it flowed towards the site during a winter storm. On March 24, 2017, the Commission issued Emergency CDP No. G-5-17-0019 for the temporary placement of a six-foot high, sixty-foot long chain-link fence inland of the oceanfront property line in order to enclose the damaged wall and to protect the beach-going public from being injured by it. The City of Laguna Beach approved local

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CDP No. 17-2097 for construction of the 50-foot long, approximately six-foot high wall on February 22, 2018, which was appealed to the Coastal Commission on March 26, 2018. On May 11, 2018, the Commission found substantial issue with the locally-issued CDP, thereby accepting the appeal for a full de novo review of the CDP application. Following the substantial issue hearing, the applicants submitted revised project plans to reflect a retaining wall supported on shallower footings (the original wall design featured soldier piles that would have been embedded approximately 10 feet into competent bedrock).

The primary issues raised by the project concern the proposed development's consistency with LCP policies regarding the construction of shoreline protective devices and development on an oceanfront site. The proposed retaining wall would be constructed on the sandy beach. Although the wall would be constructed on private property, Open Space Conservation Element policies 1-A and 1-E (contained in the certified LUP) prohibit the construction of man-made structures on the sandy portion of the beach, and further maintain that the open beach should be left in a natural state.

In addition, Policies 7.3.9 and 7.3.13 of the Land Use Element prohibit the use of protective devices to protect accessory development and also limit shoreline protection to those situations where existing primary residences are clearly threatened by erosion. According to a coastal hazards study submitted by the applicant, the residence (considered to be a primary structure) is not in imminent danger of erosion/flooding hazards; however, the wall appears to be designed to hold back an approximately five foot high beach scarp and a mound of sand adjacent to the applicants' existing patio. Although the proposed wall does not appear to be a traditional seawall designed to withstand wave energy, the proposed retaining wall would still serve as a shoreline protective device for the private patio by altering natural sand flow processes, and would not be necessary to protect an existing primary residence in danger from erosion, which is inconsistent with LUE Policies 7.3.9 and 7.3.13.

Finally, retaining walls and other shoreline protective devices raise significant public access and recreation concerns, given the extensive evidence that these types of development interfere with natural shoreline processes necessary to maintain beaches, particularly in light of sea level rise and the expected inland migration of the coastline.

Therefore, the proposed project is inconsistent with certified LCP policies as well as the Chapter 3 Coastal Act policies protecting public access and public recreation. Commission staff recommends that, after the de novo public hearing, the Commission **deny the coastal development permit application.**

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APPENDICES

[Appendix A](#) - Substantive File Documents

EXHIBITS

[Exhibit 1 – Project Location/Vicinity Map](#)

[Exhibit 2 – Project Plans](#)

[Exhibit 3 – Coastal Hazards Analysis](#)

I. MOTION AND RESOLUTION

Motion:

I move that the Commission approve Coastal Development Permit No. A-5-LGB-18-0014 for the development proposed by the applicant.

Staff recommends a NO vote. Failure of this motion will result in denial of the permit and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby denies a coastal development permit for the proposed development on the ground that the development will not conform with the policies of the certified Local Coastal Program or the public access and/or recreation policies of Chapter 3 of the Coastal Act. Approval of the permit would not comply with the California Environmental Quality Act because there are feasible mitigation measures or alternatives that would substantially lessen the significant adverse impacts of the development on the environment.

II. FINDINGS AND DECLARATIONS:

A. PROJECT LOCATION & DESCRIPTION

The applicants are proposing to construct a 50-foot long, approximately six-foot high retaining wall seaward of an existing ocean-fronting single-family residence located in Laguna Beach. The proposed wall is intended to replace a former wall that was destroyed during winter storms in 2017. The new retaining wall would be supported with pile foundations that would be embedded approximately one foot under the sandy beach. The wall would be supported by approximately 18-inch diameter concrete footings buried a foot under the sandy beach, in an area where a large (approx. 5-foot high) scarp has formed. The wall is also engineered with drainage outlets which would deposit groundwater under the wall onto the sandy beach. The retaining wall would be topped with a 3 foot, 6 inch glass structure¹, and would be set back five feet from the seaward property line ([Exhibit 2](#)).

The project site is a 5,984 square foot lot located approximately 100 feet north of the mouth of Aliso Creek ([Exhibit 1](#)). The lot is developed with a single-family residence, a hardscape patio, and a damaged, approximately three-foot high wall located on the beach at the applicants' oceanfront property line. The single-family residence was permitted in 1982 by the Coastal Commission (CDP No. 5-82-368; Arciero). A five foot, 6 inch tall cinderblock and wrought iron wall was permitted to be constructed on the seaward side of the property in 1987 by County of Orange Local CDP No. 86-74Z (Arciero). As stated in the record of County of Orange Local CDP No. 86-74Z, the former wall was not permitted as a shoreline protective device, or as a retaining wall; the wall was described as an "accessory use to an existing single-family residence" (it was likely approved as a privacy barrier).

¹ The 3 foot, 6 inch glass structure would bring the height of the proposed retaining wall up to 9 feet, 6 inches.

The former wall was destroyed during a March 2017 winter storm, during which Aliso Creek flooded, temporarily changed direction, and flowed northwest toward the project site. The beach sand in front of the property eroded, causing the collapse of the former wall and subsequent damage to the applicants' hardscaped patio landward of the wall. On March 24, 2017, the applicants obtained Emergency Coastal Development Permit G-5-17-0019 from the Coastal Commission for a temporary chain link fence to close off the damaged wall for public safety purposes. The applicants applied to the City of Laguna Beach for a local CDP to construct a replacement wall because the property is within the City's LCP permitting jurisdiction.

The City of Laguna Beach approved local CDP No. 17-2097 on February 22, 2018, which was appealed to the Coastal Commission on March 26, 2018. On May 11, 2018, the Commission found substantial issue with the locally-issued CDP, and accepted the appeal for a full de novo review of the CDP application. Following the substantial issue hearing, the applicants submitted revised project plans to reflect a retaining wall supported on shallower footings (the original wall design featured soldier piles that would have been embedded approximately 10 feet into competent bedrock).

B. STANDARD OF REVIEW

Section 30604 of the Coastal Act states, in relevant part:

(b) After certification of the local coastal program, a coastal development shall be issued if the issuing agency or the commission on appeal finds that the proposed development is in conformity with the certified local coastal program.

(c) Every coastal development permit issued for any development between the nearest public road and the sea or the shoreline of any body of water located within the coastal zone shall include a specific finding that the development is in conformity with the public access and public recreation policies of Chapter 3 (commencing with Section 30200).

The standard of review for projects heard on appeal by the Coastal Commission that are located between the first public road and the sea, like this one, is the City's certified Local Coastal Program and the public access and public recreation policies of the Coastal Act. The City of Laguna Beach Local Coastal Program was certified by the Commission on January 13, 1993 (except for the areas of deferred certification: Three Arch Bay, Hobo Canyon, and Irvine Cove). The project site is located within the City's certified LCP jurisdiction. The City's LCP Land Use Plan portion is comprised of a variety of planning documents including the Land Use Element (LUE), Open Space/Conservation Element (OSC), and the Coastal Technical Appendix. The Implementation Plan (IP) portion of the LCP is comprised of a number of documents including Title 25 Zoning Code.

Both the Coastal Act and the City's certified IP define development as follows:

[t]he placement or erection of any solid material or structure on land or in or under water; the discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; the grading, removing, dredging, mining, or extraction of any materials, a change in the density or intensity of use of land including, but not limited to, the subdivision of land pursuant to the Subdivision Map Act (commencing

with Section 66410 of the Government Code) and any other division of land, including lot splits; change in the intensity of use of water, or access, thereto; the construction, reconstruction, demolition or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes; and kelp harvesting.

The proposed project involves the construction of a retaining wall on land located within the coastal zone. Therefore, the project constitutes development and requires a coastal development permit².

C. COASTAL HAZARDS

The certified Laguna Beach Local Coastal Program contains policies related to development in hazardous areas which carry out the provisions of Coastal Act Section 30253.

Land Use Element Policy 7.3.2 states:

***Action 7.3.2** Review all applications for new development to determine potential threats from coastal and other hazards.*

Land Use Element Policy 7.3.3 states:

***Action 7.3.3** Design and site new development to avoid hazardous areas and minimize risks to life and property from coastal and other hazards.*

Land Use Element Policy 7.3.9 states:

***Action 7.3.9** Ensure that new development, major remodels and additions to existing structures on oceanfront and oceanfront bluff sites do not rely on existing or future bluff/shoreline protection devices to establish geologic stability or protection from coastal hazards. A condition of the permit for all such new development on bluff property shall expressly require waiver of any such rights to a new bluff/shoreline protection device in the future and recording of said waiver on the title of the property as a deed restriction.*

Land Use Element Policy 7.3.11 states:

***Action 7.3.11** Require all coastal development permit applications for new development on an oceanfront or on an oceanfront bluff property subject to wave action to assess the potential for flooding or damage from waves, storm surge, or seiches, through a wave uprush and impact report prepared by a licensed civil engineer with expertise in coastal processes. The conditions that shall be considered in a wave uprush study are: a seasonally eroded beach combined with long-term (75 years) erosion; high tide conditions, combined with long-term (75 year) projections for sea level rise; storm waves from a 100-year event or a storm that compares to the 1982/83 El Nino event.*

² Commission staff finds that the proposed development would *not* be exempt under Section 30610(g) (replacement of a structure destroyed by disaster) because the retaining wall would function as a shoreline protective device (unlike the old wall), the new wall would be more than 10 percent taller than the old wall (which was 5.5 feet tall), and the new wall would be sited five feet further landward from the old wall.

Land Use Element Policy 7.3.13 states:

***Action 7.3.13** Limit the use of shoreline/bluff protective devices to the minimum required to protect existing development in danger from erosion. Site and design any such protective devices as far landward as possible. "Existing development" for purposes of this policy shall consist only of a principle structure, e.g. residential dwelling, required garage, or second residential unit, and shall not include accessory or ancillary structures such as decks, patios, pools, tennis courts, cabanas, stairs, landscaping etc. No shoreline/bluff protective device shall be allowed for the sole purpose of protecting an accessory structure.*

OSCE Policy 1-F states:

Shoreline protective devices which may adversely affect the sand supply or cause an adverse impact to shoreline processes shall not be approved unless the situation is one in which there is clear evidence that the existing structure(s) are in danger from erosion and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply and unless all feasible alternatives have been explored.

The project site is located on an oceanfront lot, and is therefore vulnerable to erosion, flooding, wave runoff, and storm hazards. These hazard risks are exacerbated by sea-level rise that is expected to occur over the coming decades. In this geographic area, the main concerns raised by beach fronting development are impacts to public access and recreation, and whether hazardous conditions might eventually lead to a request to build a shoreline protection device to protect the proposed development. In this case, a retaining wall is proposed in association with a single-family residence. The main concern raised by this project is whether or not the proposed retaining wall could function as a shoreline protective device.

The Coastal Act discourages shoreline protection devices because they generally cause adverse impacts to coastal resources and can constrain the ability of the shoreline to respond to dynamic coastal processes. As a sandy beach erodes, the shoreline will generally migrate landward toward the structure, resulting in a reduction and/or loss of public beach area with no increase of the landward extent of the beach. A beach that rests either temporarily or permanently at a steeper angle than under natural conditions will have less horizontal distance between the mean low water and mean high water lines, which narrows the beach area available for public access. Shoreline protective devices also result in a progressive loss of sand because shore material is not available to nourish the nearshore sand bar. The lack of an effective sand bar can allow such high wave energy on the shoreline that materials may be lost offshore, where it is no longer available to nourish the beach. This also affects public access through a loss of beach area. Shoreline protection devices such as revetments, seawalls, and bulkheads cumulatively affect shoreline sand supply and public access by causing accelerated and increased erosion on adjacent public beaches. Such a protective structure is often placed on public land rather than on the private property it is intended to protect, resulting in a physical loss of beach area formerly available to the general public. In general, shoreline protection devices are not attractive, can detract from a natural beach experience, and adversely impact public views. Shoreline protective devices, by their very nature, tend to conflict with various LCP and Chapter 3 policies because shoreline structures can have a variety of adverse impacts on coastal resources, including adverse effects on sand supply, public access, coastal views,

natural landforms, and overall shoreline beach dynamics on and off site, ultimately resulting in the loss of beach.

Sea-level Rise

Sea-level has been rising for many years. Several different approaches have been used to analyze the global tide gauge records in order to assess the spatial and temporal variations, and these efforts have yielded sea-level rise rates ranging from about 1.2 mm/year to 1.7 mm/year (about 0.5 to 0.7 inches/decade) for the 20th century, but since 1990 the rate has more than doubled, and the rate of sea-level rise continues to accelerate. Since the advent of satellite altimetry in 1993, measurements of absolute sea-level from space indicate an average global rate of sea-level rise of 3.4 mm/year or 1.3 inches/decade – more than twice the average rate over the 20th century and greater than any time over the past one thousand years.³ Recent observations of sea-level along parts of the California coast have shown some anomalous trends; however, there is unequivocal evidence that the climate is warming, and such warming is expected to cause sea-levels to rise at an accelerating rate throughout this century.

The State of California has undertaken significant research to understand how much sea-level rise to expect over this century and to anticipate the likely impacts of such sea-level rise. On November 7, 2018, the Commission adopted a science update to its Sea-Level Rise Policy Guidance. This document provides interpretive guidelines to ensure that projects are designed and built in a way that minimizes sea-level rise risks to the development and avoids related impacts to coastal resources, consistent with Coastal Act Section 30253. These guidelines state, “to comply with Coastal Act Section 30253 or the equivalent LCP section, projects will need to be planned, located, designed, and engineered for the changing water levels and associated impacts that might occur over the life of the development.” The most recent projections in the statewide sea-level rise guidance indicate that sea levels in this area may rise between 5.5 and 6.8 ft. by the year 2100, though there is a risk of much more significant sea-level rise depending on various uncertainties, including the dynamics of ice sheet loss.⁴ The projection is given in a range largely because researchers cannot know exactly how much greenhouse gases we will continue to emit over the coming decades – large-scale curtailment of greenhouse gas emissions would keep sea-level rise towards the lower end of the projections, while business as usual emissions scenarios would result in the higher end of the projections. Because the world has continued along the “business as usual” scenario (and data suggests temperatures and sea-level rise are tracking along the higher projections), the Ocean Protection Council and the Natural Resources Agency have continued to recommend that we avoid relying on the lower projections in planning and decision-making processes.

Application to the Proposed Project

Commission staff has reviewed the submitted coastal hazards analysis and has utilized the USGS Coastal Storm Modeling System (CoSMoS) to analyze the project site’s vulnerability to coastal hazards assuming that 6.8 feet of sea level rise occurs by 2100 (6.8 feet represents the amount of sea level rise that would occur using the medium-high risk aversion scenario for residential development in the Commission’s sea level rise guidance). Based on the site conditions, beach erosion and wave uprush events will not significantly impact the single-family residence given the

³ <http://www.opc.ca.gov/webmaster/ftp/pdf/docs/rising-seas-in-california-an-update-on-sea-level-rise-science.pdf>

⁴ This range of sea-level rise reflects the low emissions scenario and high emissions scenario for a site located within the Santa Monica NOAA tide gauge and a medium-high risk aversion. According to the updated OPC guidance, the medium-high risk aversion scenario should be used when determining a residential structure’s vulnerability to sea-level rise hazards.

current width of the public beach. The flood maps also show that the subject site is not likely to flood over the next 75 years under a 6.6 ft. sea-level rise scenario and a 100 year storm scenario (**Exhibit 3**).⁵ This was determined using the “Flood Potential” model, which utilizes spatially variable elevation data to display the minimum and maximum flooding possible. This is in part due to the residence being elevated above the beach level. This is substantiated by the applicant’s submitted coastal hazards survey, which identifies the lowest living floor level for the residence as being positioned above any potential ocean flood elevation. The patio, however, is sited at the beach sand level. According to the CoSMoS model, flooding impacts would reach the patio; wave uprush projections would stop just short of the patio, but would erode virtually all of the public beach sand in front of the project site.

Action 7.3.13 of the Land Use Element limits the use of shoreline and/or bluff protective devices to the minimum protection required to protect existing development from erosion. “Existing development” in this policy is defined as a principal structure, which includes a residential structure, a required garage, or a second unit (i.e. an accessory dwelling unit). Decks, patios, pools, tennis courts, cabanas, stairs, and landscaping are considered accessory structures; and Action 7.3.13 provides that no shoreline protection device shall be permitted for the sole purpose of protecting accessory structures. And Open Space/Conservation Element Policy 1-F provides that shoreline protective devices that adversely affect shoreline sand supply or shoreline processes shall not be approved unless there is “clear evidence” that existing structures are in danger from erosion and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. These policies are consistent with Coastal Act policies that prohibit new development that causes “destruction of the site or surrounding area” (Section 30253) and only allow construction that “alters natural shoreline processes” 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 sand supply (Section 30235, emphasis added).

The City-approved project consisted of a retaining wall supported on three deepened piles embedded approximately ten feet into bedrock under the sandy beach. In response to the Commission’s finding of Substantial Issue for the appeal of the local CDP, the applicants submitted revised project plans for consideration by the Commission. The modified plans include a wall that is of the same length as the original wall (50 feet in length), but the pile foundations have been redesigned to be embedded at a shallower depth (1 foot embedment under beach sand as opposed to a ten foot embedment into bedrock). The revised wall design, with the shallower footings, is not likely to function as a traditional seawall in the sense that it would not be effective at protecting the project site against wave energy. However, according to the project plans, the wall appears to hold back an approximately 5-foot high beach scarp and would prevent natural beach sand flow in front of the project site. Ultimately, the wall would fix the beach in place as a six-foot tall vertical element, with approximately 18-inch diameter concrete footings buried a foot under the sandy beach, and a subdrain system that would deposit groundwater under the wall onto the sandy beach. The proposed wall is indeed a retaining wall that would alter natural sand flow processes.

Here, notwithstanding the applicant’s recent modifications to the design of the proposed wall, the proposed wall will function as a shoreline protective device to hold back beach scarp (albeit not as a

⁵ The CoSMoS modeling tool has a limited range of sea-level rise scenarios to choose from. The 6.6 feet sea-level rise scenario was the closest available approximation to the 6.8 foot scenario recommended under the Commission’s sea-level rise guidance.

traditional seawall). The information provided by the applicant does not indicate that the primary structure (i.e. the single-family residence) is in any imminent danger of erosion. The City's Design Review Board noted during a local hearing that the residence was not in imminent danger of erosion. This finding is supported by the applicant's hazards analysis, which notes that "the lowest living floor level for the residence is positioned. . . above any potential ocean flood elevation." In any case, the California Coastal Act defines "existing development" as any structure that existed prior to adoption of the California Coastal Act (January 1, 1977). In this case, the single-family residence was constructed in 1982, after adoption of the California Coastal Act. Therefore, the house would not be considered to be "existing development" under the Coastal Act and would not be allowed shoreline protection.

Although it does not appear that the primary residence is likely to be threatened by coastal hazards now or in the foreseeable future, the proposed wall would hold back beach scarp from reaching the patio, as the patio lies adjacent to a mound of sand at the beach sand elevation and, in fact, was damaged during the storm event that destroyed the prior wall. The protection afforded to the applicant's property is likely to increase with expected sea level rise, as the coastline migrates landward and wave uprush and impacts from storm events become more frequent. In addition, the proposed wall will be located on and under the sand and will prevent sand from migrating to the beach through natural erosion; thus, the wall will alter natural shoreline processes in a manner generally prohibited by the LCP and Coastal Act except in certain narrowly-defined situations—e.g., when necessary to protect existing structures in danger from erosion and when designed to mitigate or eliminate adverse impacts on local shoreline sand supply.

The applicants have not applied for repairs to the existing patio - this application only considers the replacement of the destroyed wall with a new, more substantial retaining wall. The design of the proposed retaining wall and the current residence's location above any potential flood elevation render it unlikely that the wall would serve to protect the residence or the surrounding bluff areas (which may include the project site). However, the wall (even with its reduced foundation plan), could potentially protect the patio from future storm events. If the applicant decides to repair the patio at a later time, the patio repairs could not rely on the new retaining wall for protection from coastal hazards, as new development which relies on shoreline protection would be inconsistent with Land Use Element policy 7.3.13, which prohibits new development from relying on shoreline protective devices.

The facts of this case do not justify authorization of a shoreline protective device under the LCP policies discussed above. As previously mentioned, there is no "clear evidence" that the single-family residence is in danger of erosion, as required by Open Space/Conservation Element Policy 1-F and LUE Action 7.3.13. The CoSMoS model shows that under a 6.6 foot sea-level rise and 100-year storm scenario, wave uprush and flooding events are not expected to reach the single-family residence (although the beach is anticipated to erode almost up to the seaward property line of the project site, where the destroyed retaining wall was located). Furthermore, the coastal hazards analysis submitted with the project application states that not even the lowest living floor elevation of the current residence is in imminent danger from erosion due to the residence's location above the beach level. Therefore, there is no evidence, much less clear evidence, that a shoreline protective device is needed to protect the primary residence from coastal hazards. Furthermore, LUE Action 7.3.13 states that shoreline protective devices should not be authorized for the sole purpose of protecting accessory development. Here, the proposed wall would function as a shoreline protective device (albeit not as a traditional seawall) that protects only accessory

development, including the patio and related development, which is located at the beach level and has already been damaged by coastal hazards.

In summary, the proposed wall is not consistent with the certified LCP policies, including Land Use Element Policy 7.3.9, Land Use Element Policy 7.3.13, and Open Space Conservation Element Policy 1-F. Therefore, the project must be denied.

D. PUBLIC ACCESS/RECREATION

The certified Laguna Beach Local Coastal Program contains policies which prohibit construction of structures on the sandy beach and prohibit shoreline protective devices, except under specific circumstances which the proposed project does not satisfy.

Open Space Conservation Element (OSCE) Policy 1-E states:

Prohibit the construction of buildings and other man-made structures on the sandy portion of the beach unless necessary for public health and safety.

The Coastal Act sections on public access and recreation are also part of the standard of review for the proposed project.

Section 30210 of the Coastal Act states:

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

Section 30211 of the Coastal Act states:

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

Section 30221 of the Coastal Act states:

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

The applicants are proposing to construct a retaining wall on the seaward side of an existing single-family residence. The project site is a rectangular-shaped lot that extends from Pacific Coast Highway on the landward side to the sandy beach on the seaward side. The seaward property line is on top of a publicly accessible beach (Aliso Beach). Although the wall is proposed to be set back five feet landward of the seaward property line, the retaining wall would still be sited on the beach

sand, and in fact, would hold back (retain) sand that would otherwise migrate to the public beach via natural shoreline processes.

As explained earlier in this staff report, rising sea levels will result in shoreline erosion over time, and an overall reduction and/or loss of public beach area, with no increase of the landward extent of the beach which is occupied by the single family residence. The findings regarding the impacts of shoreline protective devices on public beaches and public access in section E of this staff report are incorporated herein by reference. In short, the presence of shoreline protective devices, particularly seawalls, exacerbates shoreline loss by cutting off potential areas of natural sand replenishment through bluff erosion activities. This means that wave uprush actions could eventually hit a concrete barrier and essentially eliminate the public beach for use, whereas the beach sand behind a shoreline protection device would be protected for private development. This runs counter to Sections 30210 and 30211, and 30221 of the Coastal Act which require the provision of maximum public access, and prohibit private development from interfering with the public's right of access to the sea, including use of the beach and public recreation. The proposed retaining wall, even as modified to include shallower footings, will protect the private patio (considered to be an accessory structure) from future wave uprush events and function as a shoreline protective device. The loss of public beach will be exacerbated by expected sea level rise at this location, which eventually could preclude the public from accessing and recreating along the public beach area in front of the project site. Furthermore, the proposed retaining wall is in direct contradiction to Policy 1-E (stated above), which explicitly prohibits the construction of buildings and other man-made structures (including retaining walls) on the sandy beach itself. Under OSCE 1-E, the proposed development would be inconsistent with the certified LCP unless it can be proven that the wall is necessary for public health and safety. The retaining wall would be designed to protect an existing private development, and would not offer any protections for public health and safety. Thus, given the extensive evidence of the adverse impacts of shoreline protective devices on natural shoreline processes and beaches, discussed above, the proposed retaining wall is not consistent with OSCE Policy 1-E or with the public access and recreation policies found in Chapter 3 of the Coastal Act. For these additional reasons, the project must be denied.

E. ALTERNATIVES

Denial of the proposed project would not eliminate all economically beneficial or productive use of the applicant's property. The applicant already possesses a substantial residential development of significant economic value on the project site (i.e. the single-family residence). In fact, alternatives to the proposed development exist that can be found to be consistent with the Laguna Beach certified LUP and the Chapter 3 policies of the Coastal Act. Possible alternative developments include the following (though this list is not intended to be, nor is it, comprehensive of all possible alternatives):

1. No Project

The applicant could maintain the project site as-is with no new retaining wall. As has been described in previous sections, the single-family residence is situated above the beach sand elevation, and has not been demonstrated to be vulnerable to flooding or in imminent danger of erosion. Therefore, the residence could continue to be used in its current condition without the need of a retaining wall that is inconsistent with the certified LCP and the Chapter 3 Coastal Act policies. This policy would maintain consistency with OSCE policies 1-A and 1-E, which aim to maintain

the public beach in a natural state and prohibit the construction of manmade structures on the sandy portion of the beach.

The maintenance of the project site in its current state (with no new retaining wall) may also have benefits to public access and recreation. The public beach area in front of the project site is expected to erode over the next 50 years according to CoSMoS model studies. Although wave uprush and flooding hazards are not anticipated to directly impact the project site under the projected conditions (refer to the coastal hazards section for more detail), the public beach directly in front of the project site would essentially disappear. As explained earlier in this report, shoreline protective devices, including retaining walls, typically harm shoreline sand supply by preventing sand replenishment from natural bluff erosion processes. Under this project alternative, the bluff areas surrounding the project could undergo their natural erosion processes, which may allow for a small portion of public beach area to be maintained, even in the wake of sea-level rise impacts. This alternative would also result in a natural buffer between the applicants' home and the sandy beach (a migrating sandy slope).

2. Vegetated Dune

Another design alternative that the applicant could consider is to maintain a vegetated dune in front of the project site. As previously explained, the project site may be located on a bluff (this has not been determined for certain at this time due to a lack of information). However, site visits and photos indicate that there is an influx of sand that periodically forms a natural dune in front of the project site. The applicant may choose to maintain the dune (fortified with native, drought tolerant plantings) to delay flooding and erosion impacts. Although the vegetated dune would be maintained by the applicant, this alternative would not result in a man-made structure on the sandy portion of the beach. Furthermore, the public beach as a whole would be left in a natural state, consistent with OSCE policy 1-A. This project alternative overall would not have an adverse impact on coastal resources and could be found to be consistent with both the certified LCP and the public access policies in Chapter 3 of the Coastal Act.

3. Perimeter Fence at the edge of the Patio

Alternatively, the applicant could construct a perimeter fence within the existing patio to demarcate the developed lot area and prevent public beachgoers from entering onto the private patio. The fence could be a picket fence or similar material, and would not require footings because it would be situated in the sand at the edge of the existing patio, set back from the scarp that has formed seaward of the patio. This alternative would maintain consistency with the OSCE policies within the certified LCP because it would not result in a man-made structure on the sandy portion of the beach. In addition, the picket fence could be designed so as to not function as a shoreline protective device if it were not embedded into the sand and did not have a solid vertical element holding back sand. This design alternative would overall maintain consistency with the certified LCP and the Chapter 3 public access policies.

F. LOCAL COASTAL PROGRAM (LCP)

Section 30604(a) also requires that a coastal development permit shall be issued only if the Commission finds that the permitted development will not prejudice the ability of the local government to prepare a Local Coastal Program (LCP) in conformity with the provisions of Chapter 3 of the Coastal Act.

The City of Laguna Beach Local Coastal Program was certified on January 13, 1993. The City's LCP is comprised of a variety of planning documents including the Land Use Element (LUE), Conservation/Open Space Element, and Safety Element of the City's General Plan. The Implementation Plan (IP) portion is Title 25, the City's Zoning Code.

As discussed in this staff report, the proposed development has been found to be inconsistent with the policies of the certified LCP that prohibit the development of man-made structures on the sandy beach and that require sandy beaches to be maintained in a natural state. The project is also inconsistent with the certified LCP policies that prohibit the use of shoreline protective devices to protect accessory structures, including private patios. In addition, the project is inconsistent with the Chapter 3 Coastal Act policies pertaining to public access and public recreation. Therefore, the project as proposed by the applicant must be denied.

G. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Section 13096 of the Commission's Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit, as conditioned, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment. The City of Laguna Beach is the lead agency for California Environmental Quality Act (CEQA) purposes. In its November 30, 2017 staff report, the City determined the project to be categorically exempt under CEQA Section 15301, Class 1 (existing facilities) because the project involved the reconstruction of an accessory structure associated with a single-family residence.

As described above, the proposed project would have adverse environmental impacts. There are feasible alternatives or mitigation measures available, such as maintaining a natural buffer in the form of a migrating sandy slope, maintaining a vegetated dune, or placing a picket demarcation fence on top of the existing patio. The proposed project is not consistent with CEQA or the policies of the Coastal Act because there are feasible alternatives, which would lessen significant adverse impacts that the proposed project would have on the environment. Therefore, the Commission denies a permit for the proposed project because of the availability of environmentally preferable alternatives.

In any event, CEQA does not apply to private projects that public agencies deny or disapprove. Pub. Res. Code § 21080(b)(5). Accordingly, because the Commission denied the proposed project, it is not required to adopt findings regarding mitigation measures or alternatives.

Appendix A - Substantive File Documents

- Coastal Commission Appeal No. A-5-LGB-18-0014 (Substantial Issue Staff Report)
- *Coastal Hazards Analysis*, Borella Geology Inc., August 14, 2017