

**CALIFORNIA COASTAL COMMISSION**

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# W18b

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## STAFF REPORT: REGULAR CALENDAR

**Application No.:** 6-21-0758

**Applicant:** Kate and AJ Pollock

**Agent:** Jim Sneed

**Location:** 529 Pacific Avenue, Solana Beach, San Diego County. (APN 263-041-02)

**Project Description:** Construction of an interior and exterior remodel and 406 sq. ft. addition to an existing 2,866 sq. ft., 1-story bluff top home with basement and garages on a 6,022 sq. ft. bluff top lot.

**Staff Recommendation:** Denial.

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### STAFF NOTE

This item was previously scheduled for the Commission hearing on November 16, 2022. However, on November 10, 2022, the applicant requested postponement in order to work with staff. The applicant is allowed one such postponement as a matter of right (pursuant to California Code of Regulations Section 13073); future requests for postponement can be granted at the discretion of the Commission. However, the applicant has not provided any new information, project revisions, or comments in response to the staff report and thus staff's recommendation remains the same.

## SUMMARY OF STAFF RECOMMENDATION

Commission staff recommends denial of coastal development permit application 6-21-0758. The subject application involves an addition and extensive remodeling work to all of the major structural components of an existing bluff top residence located in a non-conforming, hazardous location. The home was constructed 71 years ago and is therefore reaching the end of the typical economic lifespan anticipated for residential structures, which is 75 years. The extensive remodeling proposed is expected to extend the life of the structure significantly. Since the proposed addition and all of the changes being made to the structure are seaward of the Geologic Setback Line (GSL), the project substantially increases the potential that the structure will require shoreline protection.

The existing 2,866 sq. ft. home is located 31 ft. from the bluff edge. There is currently no shoreline protection on the bluffs or beach immediately below the structure; however, seacaves have been infilled on the properties to either side of the subject site ([Exhibit 4](#)). The project includes complete demolition of the easternmost first-floor wall of the existing residence and demolition of 139.5 sq. ft. of the northern attached garage. The remainder of the area that was previously the northern attached garage would be converted to a new entry, bathroom, and stairway to the basement. A new 406.5 sq. ft addition would be constructed on the landward side of the residence and attached to the existing detached garage. This new addition would include new internal living space (laundry, hall, closet) and new garage area to accommodate one car. The proposed project also includes interior remodeling of the remainder of the existing residence, including relocation of the interior stairway to the basement, and master bedroom, bathroom, and kitchen remodeling and relocation ([Exhibits 5-7](#)). The project also includes a substantial renovation to the majority of the major structural components of the existing house. As proposed, 43.8% of the exterior walls, 49.9% of the roof structure, 48% of the foundation, 19.75% of the floor structure, and 19.7% of the floor area will be altered.

Because none of the proposed major structural component alterations exceed 50%, the proposed improvements do not meet the definition of “Bluff Top Redevelopment” in the City of Solana Beach’s certified Land Use Plan (LUP), which is used for guidance in Solana Beach. However, even when a residence is not being entirely demolished and rebuilt, improvements that increase the economic life of a nonconforming structure in a hazardous location are inconsistent with the Coastal Act. The extended life of the structure may reduce the incentive to move the structure landward in order to reduce risk and the need for shoreline protection. To be consistent with Chapter 3 policies, significant improvements that extend the life of a non-conforming structure in its current location must be limited to those that would not result in the need for future shoreline protection, particularly improvements to portions of bluff top structures located seaward of the Geologic Setback Line (GSL).

Determining a precise location of the GSL has become more complex in recent years given the likelihood that rates of sea level rise will continue to increase in the future, driving more rapid bluff erosion and retreat. In addition to simply evaluating historic

retreat rates, it is now necessary to estimate future rates of erosion that may accelerate over time as sea level rises. While there are various accepted models and methods available for projecting future bluff erosion, the uncertainties, in terms of both the trajectory of sea level rise and how beaches and bluffs will respond, are very large. In such situations, the Commission interprets Chapter 3 policies liberally in order to protect coastal resources and minimize risks. The frameworks outlined in the Commission's Sea Level Rise Policy Guidance and the 2018 State Guidance issued by the Ocean Protection Council recommend using the 0.5% probability sea level rise projection for the high emissions scenario for determining the possible hazards to new residential development. In the case of the subject site, the applicant determined that the GSL would be approximately 53 feet from the bluff edge. However, the Commission's geologist has reviewed several estimates with different methods and levels of risk, and with a future bluff retreat analysis accounting for the higher sea level rise projections recommended by the Sea Level Rise State Guidance, and finds that the GSL should be located up to 86-89 ft. from the bluff edge ([Exhibit 3](#)). Because the existing bluff top home is located as close as 31 feet from the bluff edge, regardless of whether the GSL on the subject site is located 56 ft. or a greater distance from the bluff edge, a significant portion of the residence is located seaward of the GSL and all of the proposed improvements would be located seaward of the GSL.

Despite not triggering the definition of redevelopment in the Solana Beach LUP, the proposed improvements would increase the degree of non-conformity, given that the proposed project includes the construction of new floor area and significant remodeling seaward of the GSL. This is particularly relevant given that the subject residence was constructed in 1951 and is thus 71 years old and reaching the end of its economic life. The existing home on the subject site is a pre-coastal structure and, pursuant to Section 30235, may be entitled to some form of shoreline armoring to provide protection for the life of the home, provided that the home was shown to be in imminent danger from erosion and the shoreline protection was designed to eliminate or mitigate adverse impacts on local shoreline sand supply. The proposed changes to the structure will undoubtedly extend the life of the structure and increases the potential that it will require shoreline protection at some point in the future. If bluff top properties are allowed to increase the degree of non-conformity of bluff top structures by undertaking substantial improvements seaward of the GSL and thus extending the life of the structures indefinitely, eventually the structures will require shoreline protection. As the coastline of Solana Beach continues to become more fortified and sea levels continue to rise, it will be even more likely that the public beach fronting the bluffs will become inaccessible at all but the lowest tides.

There are alternatives that would allow the applicant to continue to enjoy reasonable use of the home. Repair and maintenance of the structure is permitted. The applicant could potentially redevelop the site and construct a home with a significantly larger setback from the bluff edge than currently exists. It is also possible that the applicant could remodel the existing home and remove the seawardmost portions of the residence to reduce the risk to the structure and lessen the nonconformity. As proposed, extending the life of a nonconforming structure in a hazardous location without resolving the non-conformance is not consistent with the policies of the Coastal

Act, as well as the Solana Beach LUP, that call for avoiding and minimizing existing and future impacts to coastal resources and the potential need for future bluff retention devices. Therefore, the Commission finds the permit application must be denied.

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## EXHIBITS

[Exhibit 1 – Vicinity Map](#)

[Exhibit 2 – Location Map](#)

[Exhibit 3 – Site Plan](#)

[Exhibit 4 – Neighboring Seacaves](#)

[Exhibit 5 – Proposed Exterior Wall Alterations](#)

[Exhibit 6 – Proposed Roof Structure Alterations](#)

[Exhibit 7 – Proposed Foundation Alterations](#)

[Exhibit 8 – Geotechnical Review Memo from Commission’s Geologist \(11/4/2022\)](#)

## MOTION AND RESOLUTION

### Motion:

I move that the Commission approve Coastal Development Permit 6-21-0758 pursuant to the staff recommendation.

Staff recommends a **NO** vote on the foregoing motion. 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 Chapter 3 of the Coastal Act and will prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit 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.

## I. FINDINGS AND DECLARATIONS

### A. Project Description and Background

The proposed project involves a substantial remodel to an existing 2,866 sq. ft. single-family residence that includes a 1,154 sq. ft. basement on a 6,021 sq. ft. bluff top lot in the City of Solana Beach. The home has one attached 1-car garage and one detached 1-car garage. There is an existing patio and deck attached to the seaward side of the structure. The subject site sits above an approximately 50-foot high coastal bluff. The existing home is a legal non-conforming structure because portions of the home are located seaward of the minimum 40-foot bluff setback with the northwestern corner of the home sited as close as 31 feet from the bluff edge ([Exhibit 3](#)). The southern detached garage is also legal nonconforming in regards to the City's required 5-foot front yard setback. The Tide Beach Park public access stairway is located approximately 600 feet south of the site. ([Exhibit 2](#))

The proposed project includes alterations that affect every major structural component of the home, with alterations of the existing exterior walls, foundation, and roof structure being particularly substantial ([Exhibits 5,6,7](#)). As proposed, the project includes complete demolition of the easternmost first-floor wall of the existing residence and demolition of 139.5 sq. ft. of the northern attached garage. The remainder of the area that was previously the northern attached garage would be converted to a new entry, bathroom, and stairway to the basement. A new 406.5 sq. ft addition would be constructed on the landward side of the residence, connecting the residence with the

detached southern garage. This new addition would include new internal living space (laundry, hall, closet) and new garage area to accommodate one car. The proposed project also includes interior remodeling of the remainder of the existing residence, including relocation of the interior stairway to the basement, with master bedroom, bathroom, and kitchen remodeling and relocation.

No changes to the rear patio or deck on the seaward side of the residence are proposed. On the landward side of the residence, the northern driveway will be removed and replaced with a curb, gutter, and sidewalk to match the remainder of the site. The southern driveway will be expanded to allow for access to the new garage addition. The project includes new three-foot high fencing along the front property line with three pedestrian access gates. The project also includes 167 cubic yards of grading for removal and re-compaction of the new slab and 96 cubic yards of excavation for the footings for the new addition.

The Commission certified the City's LUP in March 2012; however, the City does not yet have a fully certified Local Coastal Program (LCP). Therefore, the Chapter 3 policies of the Coastal Act are the standard of review, with the certified LUP used as guidance.

#### Site History/Past Permits:

The existing single-family residence was built in 1951. In 2015, an exemption was issued for repair and maintenance of an existing rear-yard deck and trellis located within 50 feet of a coastal bluff, including replacement of existing deck railing, replacement of existing trellis, and partial replacement of existing deck girders and joists. No replacement of existing deck posts or foundation work was proposed or approved (#6-15-0203-X). The Commission does not have any additional permit history for this site and the applicants are not aware of any other permits for the site.

The Commission has approved shoreline protection on the neighboring lots immediately north and south of the subject site (533, 523, and 525 Pacific Avenue) ([Exhibit 4](#)). There are seacaves on both of these lots that threatened the stability of the residences. Permit history for those sites that is relevant to the review of the subject site includes:

At 533 Pacific Avenue/Becker (immediately north of subject site):

- CDP #6-99-091/Becker: In 2000, the Commission approved the filling of three seacaves with colored and textured erodible concrete at the base of the bluff. At that time, these sea caves extended approximately 50 feet, 27 feet, and 23 feet deep into the bluff and threatened the stability of the home.
- CDP #6-02-095/Becker: In August 2003, the Commission approved demolition of the home at 533 Pacific Avenue and construction of a new home. At that time, the Commission's technical staff recommended a setback of at least 88 feet and the existing home was located as close as 22 feet from the bluff edge. However, because the lot was only 100 feet deep, the Commission approved the new home with a setback of at least 47 feet and special conditions that, among others, waived any rights to construct additional shoreline protection.

At 523 and 525 Pacific Avenue/Bannasch (immediately south of the subject site):

- CDP #6-87-391: In August of 1987, the Commission approved the filling of five seacaves at 523 and 525 Pacific Avenue. The 5 seacaves extended up to 75 ft. into the bluff. The Commission found that the seacave infills were consistent with Coastal Act Section 30235 and were necessary to provide protection for the pre-Coastal bluff top home. However, the sea cave fills were not constructed as approved by the Commission, and instead of completely filling the seacaves, they were only “plugged” and a void was left behind the “plugs.”
- CDP #6-91-81: In July of 1991, the Commission approved demolition of the existing home and construction of a new home on one of the two lots and a boundary adjustment between the two lots. In addition, the Commission approved the infilling of the seacaves that were previously only “plugged” by boring through the bluff from the bluff top and pumping in concrete fill material. The new home was approved with a bluff setback of 29 feet, but designed so that it could be removed if necessary, and special conditions prohibited any future shoreline or bluff protection and the future removal of the home should erosion extend to within 5 feet of it.
- CDP #6-13-0948: In 2014, the Commission approved repairs and expansion of the five seacaves infills using erodible concrete.

Thus, the site is located in an area of known hazards where the need for shoreline protection has already been experienced on either side of the subject site.

## **B. Geologic Stability/Bluff top Development**

As described above, the standard of review is Chapter 3 of the Coastal Act, with the City’s LUP providing guidance. As such, applicable Coastal Act policies are cited in this report, as well as certain LUP policies for guidance as relevant.

Section 30235 of the Coastal Act states:

Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing 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.

Section 30253 of the Coastal Act states:

New development shall do all of the following:

- (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.



(b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

[. . .]

In addition, the following certified City of Solana Beach Land Use Plan (LUP) policies provide additional guidance regarding geologic hazards and development on bluff top property:

City of Solana Beach LUP Policy 4.14 states:

Existing, lawfully established structures that are located between the sea and the first public road paralleling the sea (or lagoon) built prior to the adopted date of the LUP that do not conform to the provisions of the LCP shall be considered legal non-conforming structures. Such structures may be maintained and repaired, as long as the improvements do not increase the size or degree of non-conformity. Additions and improvements to such structures that are not considered Bluff Top Redevelopment, as defined herein, may be permitted provided that such additions or improvements themselves comply with the current policies and standards of the LCP. Bluff Top Redevelopment is not permitted unless the entire structure is brought into conformance with the policies and standards of the LCP...

City of Solana Beach LUP Policy 4.17 states:

New development shall be set back a safe distance from the bluff edge, with a reasonable margin of safety, to eliminate the need for bluff retention devices to protect the new improvements. All new development, including additions to existing structures, on bluff property shall be landward of the Geologic Setback Line (GSL) as set forth in Policy 4.25. This requirement shall apply to the principal structure and accessory or ancillary structures such as guesthouses, pools, tennis courts, cabanas, and septic systems, etc. Accessory structures such as decks, patios, and walkways, which are at-grade and do not require structural foundations may extend into the setback area no closer than five feet from the bluff edge. On lots with a legally established bluff retention device, the required geologic analysis shall describe the condition of the existing seawall; identify any impacts it may be having on public access and recreation, scenic views, sand supply and other coastal resources; and evaluate options to mitigate any previously unmitigated impacts of the structure or modify, replace or remove the existing protective device in a manner that would eliminate or reduce those impacts. In addition, any significant alteration or improvement to the existing structure shall trigger such review (i.e., the analysis of the seawall) and any unavoidable impacts shall be mitigated.

City of Solana Beach LUP Policy 4.18 states:

A legally permitted bluff retention device shall not be factored into setback

calculations...

City of Solana Beach LUP Policy 4.19 states:

New shoreline or bluff protective devices that alter natural landforms along the bluffs or shoreline processes shall not be permitted to protect new development. A condition of the permit for all new development and bluff top redevelopment on bluff property shall require the property owner record a deed restriction against the property that expressly waives any future right that may exist pursuant to Section 30235 of the Coastal Act to new or additional bluff retention devices.

City of Solana Beach LUP Policy 4.25 states:

All new bluff property development shall be set back from the bluff edge a sufficient distance to ensure that it will not be in danger from erosion and that it will ensure stability for its projected 75-economic life. To determine the GSL, applications for bluff property development must include a geotechnical report, from a licensed Geotechnical Engineer or a certified Engineering Geologist, that establishes the Geologic Setback Line (GSL) for the proposed development. This setback line shall establish the location on the blufftop where stability can be reasonably assured for the economic life of the development. Such assurance will take the form of a quantitative slope analysis demonstrating a minimum factor of safety against sliding of 1.5 (static) or 1.2 (pseudostatic,  $k=0.15$  or determined through analysis by the geotechnical engineer), using shear strength parameters derived from relatively undeformed samples collected at the site. In no case shall the setback be less than 40 feet from the bluff edge, and only if it can be demonstrated that the structure will remain stable, as defined above, at such a location for its 75-year economic life and has been sited safely without reliance on existing or future bluff retention devices, other than a caisson foundation.

Furthermore, all new development including, but not limited to principal structures, additions, and ancillary structures, shall be specifically designed and constructed such that it could be removed in the event of endangerment.

The predicted bluff retreat shall be evaluated considering not only historical bluff retreat data, but also acceleration of bluff retreat made possible by continued and accelerated sea level rise, future increase in storm or El Niño events, the presence of clean sands and their potential effect on the pattern of erosion at the site, an analysis of the ongoing process of retreat of the subject segment of the shoreline, and any known site-specific conditions. To the extent the MEIR or geology reports previously accepted by the City address the issues referenced above and remain current, technical information in the MEIR and previously accepted geology reports may be utilized by an applicant. Any such report must also consider the long-term effects of any sand replenishment and/or retention projects to the extent not addressed in the MEIR or the EIR for the specific application.

City of Solana Beach LUP Policy 4.29 states:

A bluff home may continue its legal non-conforming status; however, a Blufftop Redevelopment shall constitute new development and cause the pre-existing non-conforming bluff home to be brought into conformity with the LCP. Entirely new bluff homes shall also conform to the LCP.

City of Solana Beach LUP contains the following definitions:

**Bluff Retention Devices** means a structure or other device, including seacave/notch infills, dripline infill, coastal structures, upper bluff systems, and temporary emergency devices, designed to retain the bluff and protect a bluff home or other principal structure, or coastal dependent use from the effects of wave action erosion and other natural forces.

**Bluff Top Redevelopment** shall apply to proposed development located between the sea and the first public road paralleling the sea (or lagoon) that consists of alterations including (1) additions to an existing structure, (2) exterior and/or interior renovations, (3) and/or demolition of an existing bluff home or other principal structure, or portions thereof, which results in:

(a) Alteration of 50% or more of major structural components including exterior walls, floor and roof structure, and foundation, or a 50% increase in floor area. Alterations are not additive between individual major structural components; however, changes to individual major structural components are cumulative over time from the date of certification of the LUP.

(b) Demolition, renovation or replacement of less than 50% of a major structural component where the proposed alteration would result in cumulative alterations exceeding 50% or more of a major structural component, taking into consideration previous alterations approved on or after the date of certification of the LUP; or an alteration that constitutes less than 50% increase in floor area where the proposed alteration would result in a cumulative addition of greater than 50% of the floor area taking into consideration previous additions approved on or after the date of certification of the LUP.

**Cantilever:** A projecting or overhanging structure of up to 10 feet in depth on the west side of a Bluff Home that is supported at one end and carries a load at the other end or along its length. Cantilever construction allows for structures to project seaward of the GSL of bluff edge setback (minimum 40 feet) with external bracing. All foundation footings and structural supports for cantilevered square footage shall be located landward of the geologic setback line or bluff edge setback (minimum 40 feet). No newly constructed cantilevered square footage is permitted to project over the bluff edge.

**Floor Area** means the enclosed interior space inside a bluff home, excluding required parking of 200 square feet per parking space, both before and/or after completion of any remodel.

**Geologic Setback Area (GSA)** is that portion of the bluff property located between the bluff edge and the Geologic Setback Line.

**Geologic Setback Line (GSL)** is the line marking the distance from the bluff edge that will assure stability for new development, to be determined on a case-by-case basis for each bluff property.

The subject application involves a 566 sq. ft. increase in floor area, as well as extensive remodeling work, to an existing, non-conforming bluff top residence located in a hazardous area. There is no existing shoreline armoring fronting the subject site, and the existing home is located as close as 31 ft. from the bluff edge. The Commission has approved shoreline protection on either side of the subject site in the form of seacave infills. The project therefore raises concerns about whether the proposed improvements will extend the economic life of a nonconforming structure in a hazardous location and over time are likely to result in the need for shoreline armoring. Both the Coastal Act and certified LUP policies require that new development minimize geologic hazards and assure the stability of new development without the need for shoreline protection. Under the framework of the LUP, these standards can largely be met by siting new development behind a Geologic Setback Line (GSL) that accounts for the geologic stability and bluff erosion hazards that may be present over a 75 year economic life, without relying on existing or future shoreline protection. In this case, as described below, the proposed project does not meet these standards.

### **Geologic Setback Line Determination**

Due to the natural process of continual bluff retreat, coastal bluffs in this area of San Diego County are considered a hazardous area (CDP#6-99-091/Becker, 6-02-095/Becker, 6-87-391/Bannasch, 6-91-81, 6-13-0948, 6-17-0239/Mansukhani, 6-18-0182/Harris). When reviewing development on a bluff top lot, to find it consistent with Section 30253, the Commission must determine that the development is sited with an adequate setback that will minimize its exposure to instability and erosion over its lifetime without having to propose any shore or bluff stabilization devices that would substantially alter natural landforms along the bluffs to protect the structure. The Coastal Act and certified LUP acknowledge that seawalls, revetments, cliff retaining walls, groins and other such structural or "hard" methods designed to forestall erosion alter natural landforms and natural shoreline processes resulting in a variety of negative impacts on coastal resources, including adverse effects on sand supply, public access and recreation, coastal views, natural landforms, and overall shoreline beach dynamics on and off site, including ultimately the loss of beach. Because shoreline armoring directly encroaches upon the beach and fixes the shoreline position, it reduces the beach area available for public use and halts passive erosion, such that additional public beach area can no longer be created.

Furthermore, shoreline armoring constrains the possible responses and evolution of beach ecosystems to adjust to changes in sea level and other dynamic coastal processes, resulting in loss of biodiversity and ecosystem services. As evidenced by the armoring of the bluff located on the properties to either side of the subject site, the existing home is clearly in a hazardous location and will likely be threatened by shoreline erosion in the future. Thus, safe siting of development is critical not only for the inhabitants of the development but to prevent permanent impacts to coastal resources.

Under the framework of the LUP, the location where new development would have to be sited in order to assure stability and structural integrity and not be in danger from erosion over a period of 75 years is known as the geologic setback line (GSL). The GSL for a bluff top site is determined by combining the setback necessary to assure the stability of the slope against sliding in the present day with an additional setback to account for the future retreat of the bluff. Quantitative slope stability analyses typically calculate a "factor of safety" as an indicator of stability. In theory, slope failure is imminent when the factor of safety drops below 1.0, while values above 1.0 indicate increasing confidence in the stability of a slope. A common standard for assuring stability, which the Commission has consistently applied for many years in evaluating bluff top development and which is also included in the policies of the LUP, is a factor of safety of 1.5 or greater (or 1.2 for pseudostatic, conditions, accounting for ground-shaking during a large earthquake). To establish a safe setback for slope stability from the edge of a coastal bluff, it is necessary to find the distance inland of the bluff edge at which the factor of safety is equal to 1.5 (static) or 1.2 (pseudostatic), whichever is greater.

In addition to this landslide potential, bluffs are also subject to erosion and retreat over time. In order to assure that this same minimum level of slope stability will be maintained over the life of a development, it is also necessary to estimate the amount of cliff retreat, and thus the future position of the bluff edge, 75 years in the future, and measure the slope stability setback from that location. As the bluff retreats, the factor of safety at the location of the development can also be expected to decrease. Thus, establishing the required GSL includes estimating long-term bluff retreat as well as slope stability.

The existing residence was built in 1951 and is currently located approximately 31 feet from the bluff edge at its closest point. The residence is not protected by a seawall, although there are sea caves on the neighboring sites to either side, some of which have been plugged with erodible concrete. The applicants have submitted geotechnical reports for the subject site that include site-specific quantitative slope stability analyses and an assessment of the potential for long-term bluff erosion.

The subject lot is approximately 100 feet deep. The geotechnical report submitted by the applicant concludes that a static factor of safety of 1.5 occurs approximately 29-30 feet landward of the bluff edge, depending on the bluff cross section analyzed. However, the geotechnical report also concludes that a pseudostatic factor of safety of 1.2 is achieved slightly farther landward, 31-34 feet landward of the bluff edge. Therefore, under the applicant's analysis, a structure would need to be set back

approximately 31-34 feet from the bluff edge to conform to the slope stability standards in the LUP and achieve reasonable assurance that the development will not be threatened by landslides if built today.

The applicant's geotechnical report also contains an evaluation of long-term bluff erosion over the next 75 years. The analysis begins with an estimated long-term historical bluff erosion rate of 0.27 feet per year, matching the local average from previous studies. To account for the potential effects of sea level rise on the bluff erosion rate, the geotechnical report employs a hybrid approach. For the first 37 years of the project life, the erosion rate is assumed to be the historical average (0.27 ft/yr). For the middle 25 years of the project life, the erosion rate is assumed to increase by 1/3, to 0.32 feet per year. For the final 13 years of the 75-year period, the initial erosion rate was adjusted upward to 0.43 feet per year using a simple equation ("SCAPE equation") that uses the historical rates of bluff erosion and sea level rise, an estimated future sea level rise rate, and an exponential term governing the sensitivity of the bluff erosion response, to project a future bluff erosion rate. In total, the applicant's analysis projects 23.5 feet of bluff retreat over the next 75 years.

The applicant's analysis combines this long-term bluff retreat value with the setback needed to achieve a 1.5 factor of safety (static condition) to arrive at a GSL located approximately 53 feet (23.5 feet + 29.5 feet) landward of the bluff edge. However, the Commission's geologist has reviewed the site information, the applicants' geotechnical reports, and other relevant information and has concluded that there is a risk that a GSL at 53 feet would not minimize geologic hazards and assure the stability of the proposed development over the next 75 years. First, as noted above, the slope stability component of the GSL should be increased to 31 – 34 feet (depending on the bluff top location) in order to achieve a pseudostatic factor of safety of 1.2, consistent with the City's LUP since the pseudostatic factor of safety is located more landward than the static factor of safety. Second, and more importantly, the applicant's long-term bluff erosion projection appears to rely on several assumptions that are far from assured. Specifically, the applicant's geotechnical report assumes that sea level rise will have little influence on the rate of bluff erosion, and, relatedly, that that beach fronting the bluff will persist over the long-term, even in the face of large amounts of sea level rise.

The applicant's analysis purports to account for 6.3 feet of sea level rise over the next 75 years, an amount (and rate) of sea level rise that is similar to the higher-end projections contained in the 2018 State and Coastal Commission Sea-Level Rise Guidances (CCC Sea Level Rise Policy Guidance, updated 11/17/2018; OPC State of California Sea Level Rise Guidance, updated 2018). However, the applicant's projected total bluff retreat of 23.5 feet is only about 3 feet more than would be expected if the average *historical* bluff erosion rate persisted for the next 75 years with no increase. Phrased differently, the applicant's analysis anticipates that over the next 75 years, the bluff retreat rate will increase by only about 16%, despite an average rate of sea level rise (0.084 ft/yr, 6.3 ft/75 yrs) that is an order of magnitude (>10 times) greater than the current rate (0.007 ft/yr, at La Jolla tide gauge). While it

is not expected that increases in the bluff erosion rate will keep pace with the acceleration in sea level rise, an increase as modest as projected by the applicant's analysis is only credible if, as presented in the geotechnical report, coastal bluff erosion at the site is insensitive to increases in sea level, and/or a significant beach persists over the next 75 years and effectively protects the base of the bluff from wave attack.

The first assumption is tenuous based on the recent history of bluff erosion in Solana Beach, including the project vicinity. On multiple instances in recent decades, and in particular during the strong El Nino winter of 1997-98, high water levels combined with large storm waves resulted in sustained wave attack at the base of the bluff, causing significant notching and sea cave formation in the sea cliff bedrock, as well as block falls affecting the overlying bluff. Persistent low sand levels on the beach throughout the 1990s and early 2000s left the bluff with little buffer against frequent wave attack. By definition, sea level rise is an increase in baseline water level, and is expected to increase the frequency of the high total water level events that have contributed to episodes of bluff retreat in Solana Beach in the past. More generally, sea level rise is expected to shrink the distance between the wave breaking point and bluff positions, result in deeper water and reduced wave attenuation, and increase the frequency and effectiveness of wave attack at the base of the bluff, which in turn will increase rates of bluff erosion.<sup>1</sup> Finally, at least in the near-term, sea level rise is expected to result in relatively rapid retreat of the shoreline, and thus the narrowing of beaches, particularly where beaches are partially or wholly constrained by less erodible bluffs or armored inland margins.

The second assumption, that a significant protective beach will be maintained in front of the bluff over the long-term, is more plausible in light of recent and planned beach nourishment projects along the Solana Beach coastline, but still uncertain. For example, the SANDAG Regional Beach Sand Placement (RBSP II) in 2012 has led to a fairly sustained widening of the beach over the last decade (although recent monitoring suggests that the beaches nearest the project site are once again diminishing). It is increasingly likely that the U.S. Army Corps of Engineers (USACE) will soon begin to implement a long-term (50-year) beach nourishment program in Encinitas and Solana Beach. If successful, such efforts could forestall the effects of sea level rise and limit the amount of bluff erosion at the project site over the next 75 years. However, the long-term success of a large-scale beach nourishment project along the Encinitas-Solana Beach coast remains uncertain. Heavy wave action has quickly washed away previous major nourishment efforts, like SANDAG's 2001 Regional Beach Sand Project. Further, nourishment programs are subject to losses

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<sup>1</sup> For purposes of illustration, a recent modeling study by the U.S. Geological Survey projects that future bluff retreat rates in southern California could increase more than two-fold (100-200%) relative to historical means under a sea level rise scenario with 6.6 feet of rise by 2100 (Limber et al. 2018).

of funding, or may be more expensive than expected with a need for increased levels of funding. Moreover, it is unclear if such efforts will be able to keep pace with the rate of future sea level rise.

In summary, the applicant's bluff erosion projection appears to reflect an overly optimistic scenario for the next 75 years. A range of plausible scenarios, with greater or lesser amounts of bluff retreat depending on factors such as the magnitude of sea level rise, the sensitivity of the bluff erosion response, and the success of interventions such as beach nourishment, can be formulated. However, the precautionary approach is to estimate future bluff retreat over the project life assuming a higher-end sea level rise scenario and that the bluff will be increasingly susceptible to erosion due to wave attack. A precautionary approach at this site is also warranted by the extensive sea cave formation and relatively rapid bluff retreat rates that have been observed in the recent past at the neighboring sites (523-525 and 533 Pacific Ave.), which led to the plugging of several large sea caves in the lower bluff with erodible concrete.

The Commission's geologist Dr. Street has provided such an analysis using both the SCAPE equation referenced in the applicant's geotechnical report and bluff retreat projections provided by the USGS CoSMoS cliff retreat model ([Exhibit 8](#)). The frameworks outlined in the Commission's SLR Policy Guidance and the 2018 State Guidance from the Ocean Protection Council recommend using the 0.5% probability sea level rise projection for the high emissions scenario for determining the possible hazards to new residential development. This means that sea level rise of up to about two meters should be considered for the possible future erosion that could occur at this site. Based on this analysis, under scenarios assuming 6.6-7.1 feet of SLR by 2100, the coastal bluff at this site could retreat approximately 55 feet over the next 75 years (average erosion rate of 0.73 feet per year). Accordingly, when considering the pseudostatic factor of safety established previously, the GSL along the western bluff is located approximately 86-89 feet landward of the bluff edge (31-34 feet plus 55 feet) ([Exhibit 3](#)).

The existing bluff top home is located approximately 31 feet from the bluff edge and the bluff top lot has a depth of approximately 100 feet from the bluff edge to the inland property boundary. With the GSL on the subject site located 86-89 ft. from the bluff edge, the majority of the existing residence, all of the proposed new floor area addition, and almost all of the proposed improvements would be located seaward of the GSL.

### **Bluff top Redevelopment Threshold**

The City of Solana Beach certified LUP, which is used here as guidance, includes a definition for "Bluff Top Redevelopment." This definition is intended to identify and prohibit redevelopment projects that essentially consist of rebuilding non-conforming, existing structures in hazardous locations, unless the entire structure is brought into conformance. The definition allows a reasonable amount of changes to an existing structure, including up to a 50% alteration of major structural components and up to a 50% increase in the size of the structure, while barring mischaracterizations of "repair and maintenance" or "improvements" for major work such as stripping a house to the



studs, or gutting the entire interior, or demolishing everything but one wall, that would perpetuate the non-conforming structure. It was anticipated that further refinement of how to implement the definition of “redevelopment” and how regulatory review will be codified would occur during development of the City’s Implementation Plan. However, the City’s Implementation Plan has not been prepared to date. Therefore, while the project is not redevelopment under the LUP definition, it is necessary to examine the extent of modifications proposed to the major structural elements of the existing structure.

Major structural components are defined in the LUP as exterior walls, the structural components of the floor and roof, and the foundation of an existing home. The LUP definition provides that alterations to major structural components are not additive between individual major structural components, while alterations to individual major structural components are cumulative over time from the date of certification of the LUP (June 12, 2013). That is, alterations to 25% of the exterior walls and 30% of the foundation would not mean 55% of the home has been altered and thus should be considered a new structure. However, a 25% alteration to the exterior walls (or floors, etc.) approved today, would mean any future alteration of the exterior walls more than 24% would be considered redevelopment resulting in a new structure. Similarly, additions are also cumulative over time from the date of certification of the LUP, such that an initial 25% addition would not be considered redevelopment; however, if a subsequent 25% addition was proposed in the future, that would result in a cumulative 50% increase in floor area and would thus constitute “Bluff Top Redevelopment.”

The proposed project includes alterations to all of the major structural components of the home ([Exhibits 5, 6, 7](#)). Based on plans submitted by the applicant, below is a summary of the proposed alterations:

- Exterior Walls: Alteration of approximately 198 linear feet of the existing 451 linear feet of exterior walls (43.8%). This consists of alteration of 191 linear feet (66.3%) of the first-floor (street level) walls and alteration of 7 linear feet (4.3%) of the basement walls. As calculated in this case, the total alteration of existing exterior wall is a combination of exterior walls altered through demolition or replacement, exterior walls becoming interior walls, exterior walls altered through removal or resizing of windows or doors, and exterior walls altered through installation of the new foundation system components.
- Roof Structure: Alteration of approximately 583 sq. ft. of the existing 2,113.5 sq. ft. of roof structure and 473 sq. ft. of new roof (49.9% total alteration). The altered roof structure area consists of modification of the existing roof structure that covers the garages and adjacent portions of the existing residence and new roof area to cover the proposed new addition.
- Foundation: Alteration of approximately 242.2 sq. ft. of the existing 501.23 sq. ft. foundation (48%). The majority of the altered foundation area will occur at the first-floor level and will accommodate changes to the existing garages and the new addition.

- Floor structure: Alteration of approximately 566 sq. ft. (19.75%) of the existing 2,866 sq. ft. of floor structure.
- Floor Area: In addition, the project will increase the floor area from 2,866 sq. ft. to 3,113 sq. ft. Currently, the first floor is 1,418 sq. ft., the basement is 1,154 sq. ft, the garages are 294 sq. ft. The project proposes 159.5 sq. ft. of floor area demolition, and a 406.5 sq. ft. addition of new floor area. Overall, this results in alteration of 19.7% (566 sq. ft.) of the floor area.

While the proposed alterations affect every major structural component of the home, with alterations of the existing exterior walls, roof structure, and foundation being particularly substantial at slightly less than 50%, the project does not exceed the 50% threshold in any one component and therefore does not meet the LUP definition of Bluff Top Redevelopment. Nevertheless, the substantial amount of alterations to the major structural components, the significant remodeling of the interior of the residence, and the new floor area addition, all of which would occur seaward of the GSL, suggests that the project will very likely increase the lifespan of the structure. As discussed below, since all of the changes to the structure being made are seaward of the GSL, extending the life of the structure increases the potential that it will require shoreline protection at some point, inconsistent with the goals and requirements of the Coastal Act and LUP.

### **Inconsistency with the Coastal Act and City of Solana Beach Certified Land Use Plan**

The Commission draws a distinction between the requirements for new development and improvements to existing non-conforming structures, including structures that are located in areas that are no longer considered safe from hazard (e.g., CDP #s 6-14-0679/WJK Trust, A-6-LJS-14-0063/BC5 Camino LLC, 6-17-0239/Mansukhani, 6-18-0182/Harris, A-6-LJS-20-0008/Abbott). New structures are typically required to meet all current setback and other standards, while improvements to existing structures that do not increase the degree of non-conformity may be permitted without bringing the entire structure into compliance. Generally, expansion of a nonconforming use is prohibited.<sup>2</sup> Thus, even when a residence is not completely demolished and rebuilt, improvements that increase the economic life of the structure in a non-conforming and hazardous location may reduce the incentive to move the structure landward to reduce risk and the need for protection. Policy 4.25 of the certified LUP requires that new bluff development be located landward of the GSL. Inconsistent with this policy, the proposed project will exacerbate the existing non-conformity through construction of a new floor area addition

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<sup>2</sup> The California Supreme Court noted “‘The ultimate purpose of zoning is ... to reduce all nonconforming uses within the zone to conformity as speedily as is consistent with proper safeguards for the interests of those affected.’ (*Dienelt v. County of Monterey* (1952) 113 Cal.App.2d 128, 131.) We have recognized that, given this purpose, courts should follow a strict policy against extension or expansion of those uses. (*County of San Diego v. McClurken* (1951) 37 Cal.2d 683, 687.” *Hansen Bros. Enterprises, Inc. v. Bd. of Supervisors* (1996) 12 Cal. 4th 533, 568.

seaward of the GSL, and the significant alterations to the existing structure seaward of the GSL. In fact, the majority of the existing residence is seaward of the GSL. Therefore, much of the existing home (and any improvements) will likely be threatened by erosion within the next 75 years. If bluff top property owners are allowed to increase the degree of non-conformity of bluff top structures by undertaking substantial improvements and thus perpetuating non-conforming bluff top homes in Solana Beach, the likelihood of homes redeveloping further from the bluff edge will be severely diminished and complete armoring of the Solana Beach coastline is very likely to occur. As the coastline of Solana Beach continues to become more fortified and sea levels continue to rise, it will be even more likely that the public beach fronting the bluffs will become inaccessible at all but the lowest tides.

Because none of the proposed major structural component alterations exceed 50%, the proposed improvements do not meet the definition of a Bluff Top Redevelopment as defined in the City's certified LUP. If the proposed improvements did exceed the 50% threshold, per the LUP, the residence would be required to conform to current bluff edge setback policies and to be considered safe for the typical 75-year economic life of new development. Denying such a proposal is especially important when proposed improvements to non-conforming structures would increase the degree of non-conformity. Policy 4.14 of the LUP allows non-conforming bluff top structures to be maintained and repaired only if the improvements do not increase the size or degree of non-conformity. Improvements to non-conforming bluff top structures may only be permitted if the improvements comply with the current policies and standards of the LCP. The proposed changes to major structural components and extensive interior and exterior remodeling clearly go beyond repair and maintenance of the structure and would extend the time that the home will be located in its current non-conforming location. This is particularly relevant given that the subject residence was constructed in 1951 and is thus 71 years old. Policy 4.25 of the certified LUP defines a structure's economic life as 75 years. Meaning at or before that time, the home will likely require substantial amount of upgrading and renovations to remain habitable, which is exactly what is occurring here to this 71-year old house. At that point that a structure reaches the end of its lifespan, it is appropriate to reevaluate the structure for conformity with current standards and policies, such as siting the home in safe location. Extending the life of a nonconforming structure in a hazardous location without resolving the non-conformance is not consistent with the policies of the LUP that call for avoiding and minimizing existing and future impacts to coastal resources and the potential need for future bluff retention devices. Significant improvements, such as those proposed herein, that extend the life of bluff top structures nonconforming to a coastal bluff setback must be limited to those that would not result in the need for future shoreline protection, consistent with Chapter 3 policies and the hazard policies of the LUP.

Only two other major bluff top remodel projects have been approved by the Commission in Solana Beach since certification of the LUP (CDP Nos. 6-14-0679/WJK Trust located at 355 Pacific Avenue and 6-17-0239/Mansukhani located at 475 Pacific Avenue), which were approved by the Commission in May 2015 and June 2017, respectively. The project at 355 Pacific Avenue consisted nearly entirely of changes to major structural components located on the *landward* side of the existing home, approximately 51 to 74

feet from the bluff edge. The changes to 475 Pacific Avenue were all located more than 40 ft. from the bluff edge and included the voluntary removal of the seawardmost portion of the home to increase the bluff edge setback from 35 to 40 feet, thereby reducing the nonconformity. In both cases, the applicants waived any rights to construct shoreline protection to protect any portion of the home in the future. In 2018, the Commission denied a request to construct a major bluff top remodel at 601 West Circle Drive (CDP No. 6-18-0182/Harris). In that case, the existing home was located between 13 and 55 ft from the bluff edge and thus the entire residence and all of the proposed alterations would be located seaward of the GSL. The Commission found that the proposed project would increase the life of the structure significantly and would substantially increase the potential that the structure would require shoreline protection and thereby denied the application.

The existing home on the subject site is a pre-coastal structure and, pursuant to Section 30235, may be entitled to some form of shoreline armoring to provide protection for the life of the home, provided that the home was shown to be in imminent danger from erosion and the shoreline protection was designed to eliminate or mitigate adverse impacts on local shoreline sand supply. The proposed changes to the structure will undoubtedly extend the life of the structure and increases the potential that it will require shoreline protection at some point in the future. The project therefore raises concerns about whether the proposed improvements are likely to result in the need for shoreline armoring.

While the subject site is currently unprotected by shoreline or bluff armoring, the Commission has approved shoreline protection on the neighboring lots immediately north and south of the subject site as there are sea caves to either side of the subject site ([Exhibit 4](#)). As described previously, in 1987, 1991, 2000, and 2014 the Commission approved shoreline protection in various forms of sea cave infills. Thus, the site is located in an area of known hazards, where the need for shoreline protection has already been experienced on either side of the subject site, in addition to the numerous forms of shoreline protection constructed along the Solana Beach shoreline. The homes to either side of the subject site have been redeveloped (in 2003 and 1991). In both cases, it was infeasible to construct a new home with a full setback that could accommodate both current stability and long-term erosion over the life of the new residence. Thus, the Commission approved the residences with minimum setbacks that assured the structure would be safe at the time it was constructed, increased and improved the setbacks compared to existing conditions, and required special conditions that waived the right to any future shoreline protection and potential future removal of the residences when they became threatened.

As detailed in Policy 4.14 of the LUP, improvements to non-conforming bluff top structures may only be permitted if the improvements comply with the current policies and standards of the LCP. As proposed, the new floor area and the reconstructed portions of the home will not be located landward of the GSL and will therefore not be safe for the extended economic life of the structure. Major alterations to structural components in hazardous locations are clearly inconsistent with the intent of the LUP, which is to incentivize property owners to modify homes in order to increase bluff edge

setbacks and avoid bluff retention devices. Approval of the substantial alterations to major structural components of the home without addressing the seaward portions of the home would significantly reduce the opportunity or likelihood for landward redevelopment in the future at this site and will increase the degree of non-conformity of the structure. As proposed, this project results in a significant investment in the aging home and is not consistent with Section 30253 of the Coastal Act or the certified LUP.

### **Alternatives**

The applicant currently has reasonable use of the site with the existing home and could continue to have use of the site without any of the proposed improvements. Consistent with the certified LUP policy 4.14, the structure "...may be maintained and repaired..." An example of appropriate maintenance and repair that could likely be approved through the permit process includes replacement of roofing materials (i.e., asphalt shingles or tiles), exterior stucco or siding treatment, replacement of exterior doors and windows within their existing openings, and non-structural interior improvements.

The applicant could potentially redevelop the site and construct a home with a significantly larger setback from the bluff edge than currently exists. In June 2016, the Commission approved the demolition of an accessory structure and an existing home and construction of a new home on a bluff top site at 225 Pacific Avenue in Solana Beach, approximately ½ mile to the south of the subject site (CDP No. 6-15-1717/Barr). The accessory structure and the home approved for demolition at 225 Pacific had 0 ft. and 25 ft. setbacks from the bluff edge, respectively. The Commission approved the construction of the foundation elements of the new home with a 46 ft. setback from the bluff edge with an allowance to build cantilevered first and second floor areas as close as 36 ft. from the bluff edge. Because of the limited depth of the lot at 225 Pacific Avenue, the Commission allowed the foundation of the new home be located landward of the location of the current 1.5 Factor of Safety with an additional five foot buffer instead of requiring the home be sited landward of the GSL; however, conditions of approval require the applicant to waive the right to construct any additional shoreline protection. In addition, in June 2017 the Commission approved a substantial remodel of an existing single-family residence on a bluff top site at 475 Pacific Avenue in Solana Beach, approximately 600 feet south of the subject site (CDP No. 6-17-0239/Mansukhani). The home approved for remodeling was approximately 35 feet from the bluff edge. While some of the remodel proposed would occur seaward of the GSL, in that case the applicants also proposed to remove 172 sq. ft. of floor area on the seaward portion of the residence, thereby increasing the bluff setback from 35 ft to 40 ft. While the Commission found that the proposed remodel would extend the life of a non-conforming structure, the proposal to increase the distance from the bluff edge reduced the risk to the structure and special conditions that required the applicant to waive any rights to future shoreline protection and remove the home when it became in danger ensured that adverse impacts on the beach and bluff would not occur. While a similar proposal at the subject site would have to be considered on a project specific basis, it is likely that the applicant would be able to construct a reasonably sized home with a significantly larger bluff edge setback compared to existing conditions and that would reduce the risk from continued shoreline erosion. And similar to projects reviewed by

the Commission in recent years (CDP# 6-02-095/Becker, 6-15-1717/Barr, #6-17-0239/Mansukhani) it is also possible that the applicant could remodel the existing home and remove the seawardmost portions of the residence to reduce the risk to the structure and lessen the nonconformity. Thus, there are feasible alternatives to the proposed project. Therefore, the Commission finds the permit application must be denied.

## **C. Public Access and Recreation**

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.

City of Solana Beach LUP Policy 2.2 states:

Maintain a safe, wide sandy beach to the extent feasible to increase the general quality of life for the citizens and visitors of Solana Beach. A safe, wide sandy beach enhances recreational opportunities such as surfing, sunbathing, fishing, walking, volleyball, and other such activities. This has beneficial economic impacts to the City, its residents, and businesses by resulting in increased business income, sales taxes, transient occupancy taxes, and public and private property values.

The subject site is located between the Pacific Ocean and the first public roadway, which in this case is Pacific Avenue. The site is located within a developed residential neighborhood on an approximately 50 foot-high coastal bluff top lot. Approximately 600 feet to the south of the site is a public access stairway to Tide Beach Park. Vertical access through the site is neither necessary given the proximity of public coastal access nor warranted given the fragile nature of the bluffs.

As discussed above, it is important to ensure that construction of the proposed residence does not include or require the construction of future bluff or shoreline protective devices. The physical encroachment of a protective structure on the beach reduces the beach area available for public use and is therefore a significant adverse impact. Furthermore, when the back beach is fixed with a shoreline armoring device, passive erosion is halted and additional public beach area can no longer be created.

As proposed, the project would result in a significant investment in the aging structure and would increase the likelihood that the property owner would pursue the construction of shoreline armoring in the future. Therefore, the project cannot be found consistent with the public access policies of the Coastal Act and the certified LUP. There are feasible alternatives to the proposed project. Therefore, the Commission finds the permit application must be denied.

## **D. Visual Resources**

Section 30251 of the Coastal Act states:

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.

City of Solana Beach LUP Policy 6.3 states:

Public views to the beach, lagoons, and along the shoreline as well as to other scenic resources from major public viewpoints, as identified in Exhibit 6-1 shall be protected. Development that may affect an existing or potential public view shall be designed and sited in a manner so as to preserve or enhance designated view opportunities. Street trees and vegetation shall be chosen and sited so as not to block views upon maturity.

City of Solana Beach LUP Policy 6.4 states:

Locations along public roads, railways, trails, parklands, and beaches that offer views of scenic resources are considered public viewing areas. Existing public roads where there are major views of the ocean and other scenic resources are considered Scenic Roads and include:

- Highway 101/Pacific Coast Highway and Railway Corridor
- I-5
- Lomas Santa Fe Drive

Public views to scenic resources from Scenic Roads shall also be protected.

City of Solana Beach LUP Policy 6.9 states:

The impacts of proposed development on existing public views of scenic resources shall be assessed by the City prior to approval of proposed development or redevelopment to preserve the existing character of established neighborhoods. Existing public views of the ocean and scenic resources shall be protected.

The subject development involves the remodel of an existing bluff top residence. The proposed development is located in a residential neighborhood consisting of single-family homes of similar bulk and scale to the proposed development.

The city's certified LUP requires that existing or potential public views shall be designed and sited in a manner so as to preserve or enhance designated view opportunities. The subject site slopes downward from east to west and there is potential for public views of the ocean through the side yards of the property. However, the entire frontage of the site is bordered by tall vegetation and solid fencing that entirely eliminates any public views of the coast from the street. In Solana Beach, the Commission typically requires that any gates or fencing on side yards be a minimum 75% transparent and that landscaping be a maximum of three feet in height to allow for public views of the ocean (Ref: CDP Nos 6-15-1717/Barr, 6-17-0239/Mansukhani, 6-14-0679/WJK Trust). The relevant application, as approved by the City, does not propose to modify the existing fencing that acts to eliminate public views of the coast through the site. Thus, the project cannot be found consistent with the view preservation policies of the Coastal Act and the certified LUP. If the proposed project were not inconsistent with the geologic stability and public access and recreation policies of the Coastal Act, it is likely that the project could be conditioned to create view corridors and resolve the inconsistency with the visual resource policies. In this case, for the reasons described above, the permit application must be denied.

## **E. Local Coastal Planning**

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. In this case, such a finding cannot be made.

Based on the above discussion, the proposed development has been found to be inconsistent with the Chapter 3 policies of the Coastal Act and the certified LUP provisions that require new development to meet the Geologic Setback Line (GSL) and provide for a 75 year economic life. The Commission finds that approval of the proposed development as proposed would prejudice the ability of the City of Solana Beach to prepare a Local Coastal Program that is in conformity with Chapter 3 policies. Therefore, it must be denied.



## **F. California Environmental Quality Act**

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 Solana Beach found that the project is exempt from CEQA pursuant to Section 15303 (Class 3 Exemption) which applies to the construction and location of limited numbers of new, small facilities or structures.

As describe above, there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment that have not been incorporated into the project. Therefore, the Commission finds that the proposed project is not the least environmentally-damaging feasible alternative and cannot be found consistent with the requirements of the Coastal Act to conform to CEQA.

## APPENDIX A – SUBSTANTIVE FILE DOCUMENTS

- City of Solana Beach certified LUP
- City of Solana Beach General Plan & Zoning Ordinance
- CDP #s:
  - F7004/Boxtel
  - 6-81-198/Boxtel
  - 6-87-391 & 6-91-81 & 6-13-0948/Bannasch
  - 6-99-095/City of Solana Beach
  - 6-99-091 & 6-02-095/Becker
  - 6-14-0679/WJK Trust
  - A-6-LJS-14-0063/City of San Diego
  - 6-15-1717/Barr
  - 6-17-0239/Mansukhani
  - 6-18-0182/Harris
- CoSMoS Southern California v3.0 Phase 2 projections of coastal cliff retreat due to 21st century sea-level rise, available at <https://www.sciencebase.gov/catalog/item/57f4234de4b0bc0bec033f90>
- Rising Seas in California: An Update on Sea-Level Rise Science (Griggs et al. 2017)
- State of California Sea-Level Rise Guidance 2018 Update (OPC 2018)
- Sea Level Rise Policy Guidance: Interpretive Guidance for Addressing Sea Level Rise in Local Coastal Programs and Coastal Development Permits. (CCC, Adopted August 12, 2015; updated November 7, 2018)
- Geotechnical Review Memorandum by Dr. Joseph Street, November 4, 2022
- GeoSoils, Inc. (GSI), 2019, “Preliminary Geotechnical Set Back Evaluation, Proposed Residential Addition, 529 Pacific Ave., Solana Beach, San Diego County, California, 92075, Assessor’s Parcel Number (APN) 263-041-02-00”, signed by J. P. Franklin (CEG) and D. W. Skelly (RCE), October 25, 2019.
- GSI, 2022, “Geotechnical Update and Response to Review Comments, Proposed Residential Remodel, 529 Pacific Avenue, Solana Beach, San Diego County, California 92075, Coastal Development Permit Application # 6-21-0758”, signed by J. P. Franklin (CEG), D. W. Skelly (RCE), and R. B. Boehmer, March 11, 2022.