

CALIFORNIA COASTAL COMMISSION

SAN DIEGO AREA

3111 CAMINO DEL RIO NORTH, SUITE 200

SAN DIEGO, CA 92108-1725

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Staff: DL-SD
Staff Report: September 9, 1998
Hearing Date: October 13-16, 1998

REGULAR CALENDAR
STAFF REPORT AND PRELIMINARY RECOMMENDATION

Th 11a

Application No.: 6-97-164

Applicant: Dale and Terry Lingenfelder

Agent: C. J. Randle

Description: Filling a 38-foot wide, 12-foot high, maximum 15-foot deep sea cave at the base of the bluff below a lot containing an existing single-family residence, with a colored and textured erodible concrete mixture and riprap. This application is a follow-up to an emergency permit granted for the seacave fill.

Zoning	Open Space/Recreation
Plan Designation	Open Space/Recreation

Site: Bluff face below 309 Pacific Avenue, Solana Beach, San Diego County.
APN 263-312-04

Substantive File Documents: City of Solana Beach General Plan and Zoning Ordinance;
C.J. Randle, Geotechnical Study Slope Stability, July 10, 1998; CDP 6-89-366.

STAFF NOTES:Summary of Staff's Preliminary Recommendation:

Staff is recommending approval of the proposed seacave fill with special conditions requiring long-term monitoring of the seacave fill, regular maintenance, final plans demonstrating the coloring and texturing process, a waiver of liability, and submittal of other required permits. As conditioned, the project will not have a significant adverse impact on shoreline processes, public access and recreation, or the visual quality of the shoreline because the fill will not encroach beyond the bluff face, will erode consistent with the native bluff material, and will be colored and textured to match the surrounding bluffs.

intersection. The program shall describe how the method by which measurements shall be taken.

- D. Provisions for taking the measurements called for in Sections B and C above and for conducting the evaluation described in section A above annually, by May 1 of each year for three years beginning on the date of Coastal Commission approval of this permit.
- E. Provisions for submittal of a report to the Executive Director of the Coastal Commission on May 1 of each year for three years beginning May 1, 1999. Each report shall be prepared by a licensed geologist or geotechnical engineer. The report shall contain the measurements and evaluation required in section D above. The report shall also summarize all measurements and provides some analysis of trends, annual retreat or rate of retreat. In addition, each report shall contain recommendations, if any, for necessary changes or modifications to the project. If the seacave plug is found to extend seaward of the face of the natural bluff by more than six (6) inches in any location, the report shall include alternatives and recommendations to remove or otherwise remedy this condition such that no seaward extension of the plug will remain.
- F. Provisions for submission of a report containing the information identified in section E above at 3 year intervals following the last annual report (i.e, the first of these triennial reports to be submitted on May 1, 2004); however, reports shall be submitted in the Spring of any year in which the following event occurs:
 - 1. A 20-year storm event
 - 2. An "El Niño" storm event
 - 3. A major tectonic event magnitude 5.5 or greater affecting San Diego County

Thus reports may be submitted more frequently depending on the occurrence of the above events in any given year.

The permittee shall undertake monitoring in accordance with the approved plan. Any proposed changes to the approved plan shall be reported to the Executive Director. No changes to the plan shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

2. Future Maintenance/Debris Removal. The permittee shall remove all debris deposited on the beach or in the water during and after construction of the shoreline protective devices or resulting from failure or damage of the shoreline protective device. In addition, the permittee shall maintain the permitted sea cave fill in its current state except to the extent necessary to comply with the requirements set forth below.

b) State lands are involved in the development, and all permits required by the State Lands Commission have been obtained; or

c) State lands may be involved in the development, but pending a final determination of state lands involvement, an agreement has been made by the applicant with the State Lands Commission for the project to proceed without prejudice to the determination.

6. Public Rights. By acceptance of this permit, the applicant acknowledges, on behalf of him/herself and his/her successors in interest, that issuance of the permit shall not constitute a waiver of any public rights which may exist on the property. The applicant shall also acknowledge that issuance of the permit and construction of the permitted development shall not be used or construed to interfere with any public prescriptive or public trust rights that may exist on the property.

7. Seacave Fill Surface Treatment Plans. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, and within 60 days of Commission action, the applicant shall submit to the Executive Director for review and written approval, final plans for the seacave fill which describe in detail the construction method and technology utilized for texturing and coloring the fill. Such plans shall confirm, and be of sufficient detail to verify, that the fill color and texture closely matches the adjacent natural bluffs, including provision of a color board indicating the color of the fill material.

The permittee shall undertake the development in accordance with the approved plan. Any proposed changes to the approved plan shall be reported to the Executive Director. No changes to the plan shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

IV. Findings and Declarations.

The Commission finds and declares as follows:

1. Detailed Project Description. The proposed project involves filling a 38-foot wide, 12-foot high, maximum 15-foot deep seacave with both riprap and pneumatically placed concrete. The cave is located at the base of an approximately 80 foot high coastal bluff below a lot which contains an existing single-family residence. This permit application is a follow-up to an emergency permit granted on December 24, 1997, to fill the seacave (#6-97-164-G).

The site is located west of Pacific Avenue, between Clark Street and Hill Street, in the City of Solana Beach. The City of Solana Beach quitclaimed the bluff face to the property owner and subject applicant in 1989. The City of Solana Beach owns the beach below the residence.

area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

Coastal Act Section 30235 acknowledges that seawalls, revetments, cliff retaining walls, groins and other such structural or "hard" solutions alter natural shoreline processes. Thus, such devices are required to be approved only when necessary to protect existing structures. The Coastal Act does not require the Commission to approve shoreline altering devices to protect vacant land or in conjunction with construction of new development. A shoreline protective device proposed in those situations is likely to be inconsistent with various Coastal Act policies. For example, Section 30253 addresses new development and requires that it be sited and designed to avoid the need for protective devices that would substantially alter natural landforms along bluffs and cliffs.

The proposed development is located at the base of a coastal bluff in the City of Solana Beach. Continual bluff retreat and the formation and collapse of sea caves have been documented in northern San Diego County, including the Cities of Solana Beach and Encinitas. Bluffs in this area are subject to a variety of erosive forces and conditions (e.g., wave action, reduction in beach sand, seacave development). As a result of these erosive forces, the bluffs and blufftop lots in the Solana Beach and Encinitas area are considered a hazard area. Documentation has been presented in past Commission actions concerning the unstable nature of the bluffs in these communities and nearby communities (ref. CDP Nos. 6-93-181/Steinberg, 6-92-212/Wood, 6-92-82/Victor, 6-89-297-G/Englekirk, 6-89-136-G/Adams, and 6-85-396/Swift). In addition, a number of significant bluff failures have occurred along the northern Solana Beach/Encinitas coastline which have led to emergency permit requests for shoreline protection (ref. CDP Nos. 6-93-181/Steinberg, 6-93-131/Richards et al, 6-93-36-G/Clayton, 6-93-024-G/Wood, 6-92-212/Wood, 6-92-167-G/Mallen et. al., 6-92-73-G/Robinson, and 6-91-312-G/Bradley).

Historically, the Commission has approved a number of regular permits for seacave fills similar to the proposed project on the bluffs in Solana Beach (#6-96-102/Solana Beach & Tennis Club; #6-92-82/Victor; #6-87-391/Childs). As noted above, the Commission recently granted a request for temporary riprap on the beach in front of the subject site and 16 other locations in Solana Beach (CDP Nos. 6-97-125 through 6-97-138; 6-98-2) this past winter. In addition, the Executive Director granted two emergency permits for seacave filling on the bluffs adjacent to the project site to the south (#6-98-25-G/Stroben and #6-98-29-G/Bennett) in December 1997.

The geotechnical report submitted with the application provides an evaluation of the condition of the bluffs and coastline in the general area of the project site. The report indicates that mechanisms for sea cliff retreat in this area include undercutting by wave action, storm surf, surge and higher tides. Other factors affecting the rate of bluff retreat include degree of fracturing, jointing, seacave and scour formations, consolidation of sediments, steepness of slope, groundwater and surface water conditions, vegetation or

to the narrowing and eventual disappearance of the beach in front of the structure, and a reduction/elimination of sand contribution to the beach from the bluff. Other impacts include sand loss from the beach due to wave reflection and scour, accelerated erosion on adjacent unprotected properties and the adverse visual impacts associated with construction of shore/bluff protective device on the contrasting natural bluffs.

To address these impacts to shoreline processes, the Commission has developed an in-lieu fee program to provide mitigation for the quantifiable effects of seawalls on the shoreline. The methodology estimates the total quantity of sand necessary to replace: a) the reduction in the beach quality material contributed from the seacliff over the life of the armoring; b) the reduction in beach width which will occur when the landward migration of the beach profile is stopped, over the life the structure; and c) the reduction in beach area which will occur from the seaward encroachment of the seawall. The methodology uses site specific information provided by the seawall applicant as well as estimates, derived from region-specific criteria, of both the loss of beach material and beach area which could occur over the life of the structure, and of the cost to purchase an equivalent amount of beach quality material and to deliver this material to the beaches in the project vicinity. Once the effects are quantified and the costs totaled, an in lieu fee is paid for use for beach sand replenishment projects as mitigation for impacts of the development on beach sand supply.

However, in contrast to seawall projects, the proposed sea cave plug is set into the bluff face and would not take up a portion of the beach seaward of the bluff face that is currently available for public use. Because the structure would be within the bluff, the accelerated erosion from increased wave reflection and "edge effects" to adjacent properties associated with seawalls are not expected to occur with the proposed project. In addition, as noted above, the proposed sea cave plugging and filling procedure has been designed with a "leaner" soil-cement mix 12-14 inches deep on the external facade and a "stronger" mix internally to allow the plug to erode at the same rate as the adjacent bluffs, at least until the internal steel mat is exposed. Thus, the back of the beach is not permanently fixed in place. Further, the seacave will not prevent the erosion of bluff face material onto the beach via subaerial erosion since it will not cover any portion of the bluff as a seawall or upper bluff work would.

On the other hand, like a seawall, the proposed project will have an adverse impact on shoreline processes in that by reducing the risk of bluff collapse, the sandy material of the bluff will not contribute to the beach as it eventually would if the site were left unprotected and the bluffs allowed to erode naturally. However, this impact is outweighed by the benefits of constructing the proposed sea cave plugs now, as a preventative measure, rather than waiting until collapse of the caves requires construction of a seawall, which, as described above, can cause far more adverse impacts to shoreline sand supply and public access. Thus, the shoreline protection mitigation fee has not typically been applied to seacave fill projects, and has not been attached to this project.

Commission refuses to grant such a permit, the permittee should obtain an amendment to this permit. If the protruding portion of the plug is removed, the concrete would not adversely impact sand supply. Should the applicant request more substantial shoreline protection in the future, the Commission would reassess the need and appropriateness of assessing the mitigation fee at that time. Thus, the Commission can be assured that, as conditioned, the proposed project will continue to function as proposed, the fill will be properly maintained and that any adverse impacts to shoreline processes have been mitigated.

Thus, the proposed development has been designed and conditioned to be the least environmentally damaging feasible alternative. Failure to pursue the sea cave fill is likely to result in requests for shoreline and/or upper bluff protection in the future which, if permitted, could have a far greater impact on coastal resources. Although the Commission finds that the sea cave plugs have been designed to minimize the risks associated with their implementation, the Commission also recognizes the inherent risk of shoreline development. The plugs will be subject to wave action and will be surrounded by an eroding bluff. Thus, there is a risk of bluff failure during and after construction of the sea cave fill. In addition, there is a risk of damage to the sea cave fill or damage to property as a result of wave action on the sea cave fill. Although these risks are minimized, it is not possible to eliminate the risk entirely. Therefore, as a condition of approval of the sea cave plugs, the Commission must impose a waiver of liability and indemnification requirement as Special Condition #3. By this means, the applicant is notified of the risks and is made aware that the Commission cannot be held liable for damages in connection with permitting the development. The requirement also insures that the Commission is indemnified in the event that third parties seek to hold the Commission liable for damages in connection with the development.

Special Conditions #4 requires the applicant to submit a copy of any required permits from the Army Corps of Engineers, to ensure that no additional requirements are placed on the applicant that could require an amendment to this permit. Because the development has already been constructed, all of the "prior-to-issuance" conditions are required to be satisfied within 60 days of Commission action.

Given the above special conditions, the risk to the bluff top structures will be minimized and future stability assured, without adverse impacts to shoreline sand supply. Therefore, the Commission finds that the subject development, as conditioned, is consistent with Sections 30235 and 30253 of the Coastal Act.

3. Visual Resources. Section 30251 of the Act states, in part:

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

approximately three blocks south of the subject site at Fletcher Cove. The proposed sea cave filling will not impact this accessway.

Shoreline protection projects do have the potential to impact existing lateral access along the beach. Structures which fix the back of the beach stop the landward migration of the beach profile while the shoreward edge continues to erode, thereby reducing the amount of dry sandy beach available to the public. In the case of the proposed sea cave filling, the plug material has been designed to erode with the natural bluffs, and thus will not fix the back of the beach. On the subject site, the applicant owns the bluff face, which was quitclaimed to the property owner by the City of Solana Beach. Although the City applied an open space easement over the bluff face, the easement does not migrate to specifically include that beach area that will become available as the toe of the bluff moves landward. Thus, eventually there may be a small portion of sandy beach which would be in private ownership.

Dry, sandy beach is accessible in this area only at lower tides, thus, the protection of a few feet of beach along the toe of the bluff is more critical in this location than it might be in a location where the beach is wider. This stretch of beach has historically been used by the public for access and recreation purposes. It is possible that public prescriptive rights have been established in this area and will continue to be established in the future. Special Condition #6 acknowledges that the issuance of this permit does not waive any public rights that may exist on the property. The seacave plug may be located on State Lands Property, and as such, Special Condition #5 requires the applicant to obtain any necessary permits or permission from the State Lands Commission to perform the work.

Filling of seacaves can present the potential for impacts to public access and recreation resulting from the construction on the beach. However, in the case of the proposed project, the work has already occurred under an emergency permit. No additional work is proposed. Except for minor maintenance, any other work will require an amendment to this permit or a new coastal development permit. Therefore, as conditioned, the Commission finds that the subject proposal will not result in any significant adverse impacts on beach access or public recreation consistent with Sections 30210, 30211, 30212.5, 30221, 30223 and 30252, pursuant to Section 30604(c) of the Coastal Act.

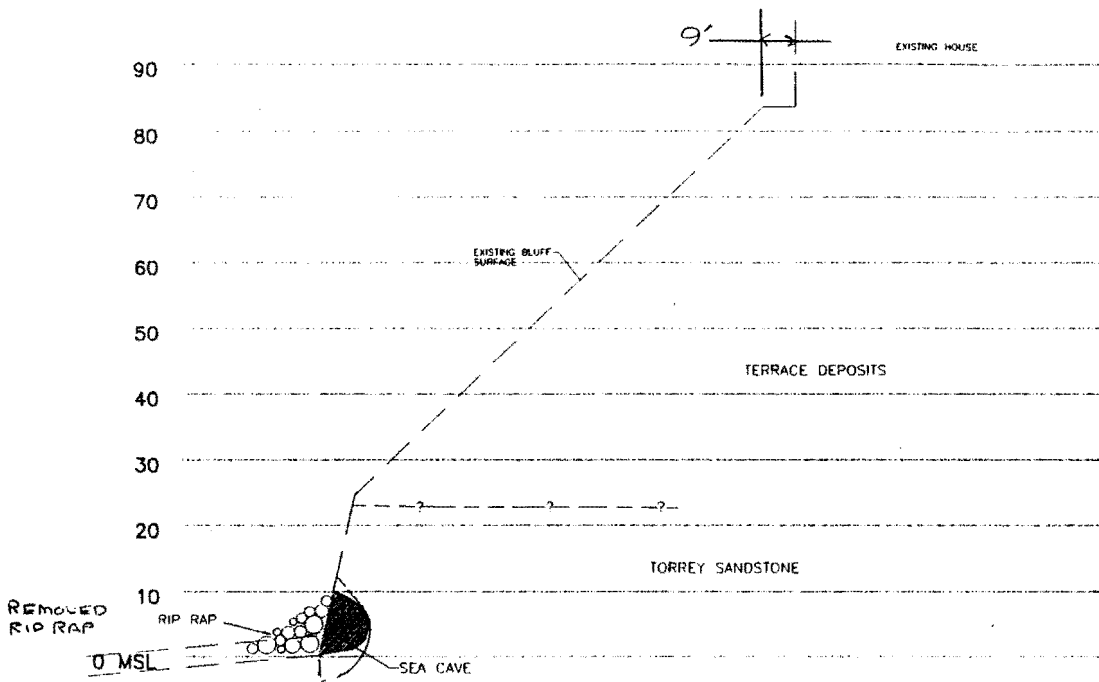
5. Local Coastal Planning. Section 30604(a) also requires that a coastal development permit shall be issued only if the Commission finds that the permitted development will not prejudice the ability of the local government to prepare a Local Coastal Program (LCP) in conformity with the provisions of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

The subject site was previously in the County of San Diego Local Coastal Program (LCP) jurisdiction, but is now within the boundaries of the City of Solana Beach. The City will, in an likelihood, prepare and submit a new LCP for the area to the Commission for review. Because of the incorporation of the City, the certified County of San Diego

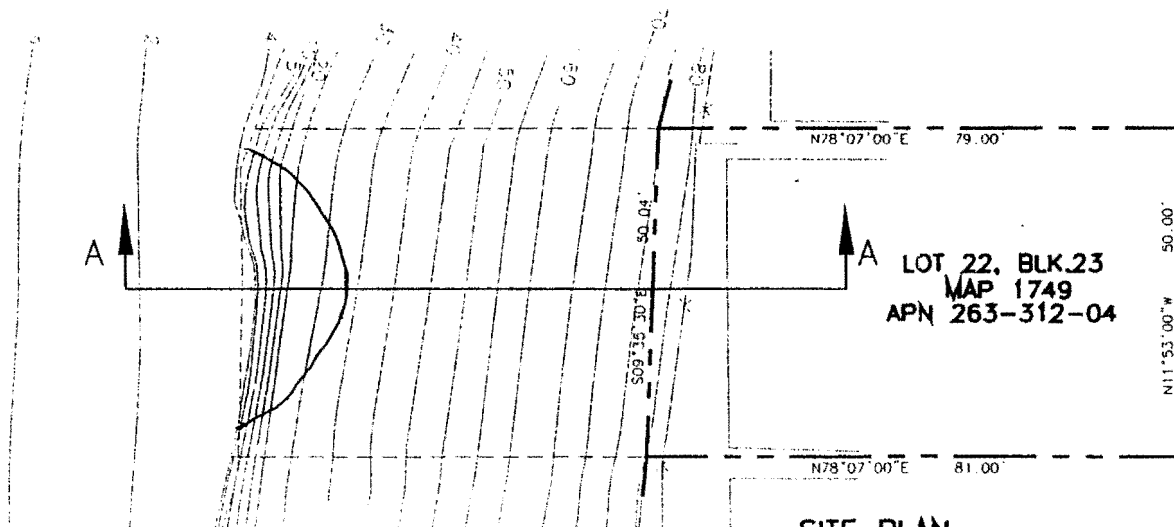
The proposed project has been conditioned in order to be found consistent with the geologic stability, visual quality and public access policies of the Coastal Act. Mitigation measures, including conditions addressing sea cave monitoring and the color of construction materials, will minimize all adverse environmental impacts. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project is the least environmentally-damaging feasible alternative and can be found consistent with the requirements of the Coastal Act to conform to CEQA.

STANDARD CONDITIONS:

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Compliance. All development must occur in strict compliance with the proposal as set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
4. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
5. Inspections. The Commission staff shall be allowed to inspect the site and the development during construction, subject to 24-hour advance notice.
6. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
7. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

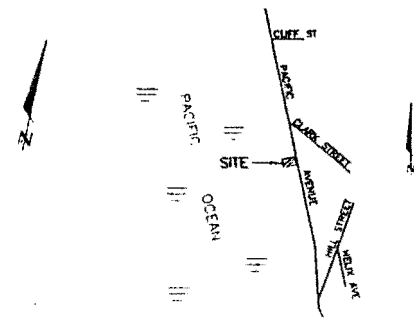


SECTION A-A
N.T.S.



SITE PLAN
N.T.S.

SEA CAVE	(APPROXIMATE SIZE)		
	WIDTH	HEIGHT	DEPTH
ORIGINAL	20	8	10
FINAL	38	12	15



VICINITY MAP
N.T.S.

EXHIBIT NO. 2
APPLICATION NO. 6-97-164
Site Plan
California Coastal Commission