EXHIBIT B

-OR-

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August 27, 1991

#390005.12

Hyden Associates
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Sacramento, CA 95816

ATTN: **C. GARY HYDEN, ASLA**
PRINCIPAL

RE: **ENCINAL/LECHUZA BEACH**
PUBLIC ACCESS FEASIBILITY ASSESSMENT

Dear Gary:

GENERAL

In accordance with our Scope of Services, delineated in your letter of July 29, 1991, I have conducted a site visit with Mr. Steve Horn of the Coastal Conservancy and Mr. Norm Haynie of the Malibu Vista Professional Center. This site visit was conducted on August 21, 1991 and included reviewing available documents and walking the proposed public access. The documents of interest to the engineering feasibility of this site included a 1" = 40' topographic map prepared by Grimes Surveying and Mapping, Inc. dated October 1990, of the site and surrounding parcels and a slope stability report prepared by Strata-Tech providing a very general geological profile of the site (report dated April 8, 1991).

This letter presents the results of our engineering feasibility assessment of the site for use as a proposed public access. General concepts are developed based on site conditions and constraints and a preliminary estimate of probable construction costs are developed. Finally maintenance issues are discussed and agency reviews and permits are briefly outlined.

THE SITE

The proposed access is a ten (10) foot wide parcel that extends from Broad Beach Road at an elevation of approximately +85 feet to the beach below the terminus of the washed out portion of Sea Level Drive at an elevation of approximately +15 feet. The topographic map that I reviewed cited no datum, so I will assume that the datum is based on NGVD-1929. The proposed access way (see Figure 1) extends a horizontal distance of approximately 350 feet. Figure 2 shows a profile and stations along the approximate centerline of the proposed access. This parcel presently services as a restricted beach access with a locked wrought iron gate at Broad Beach Road. The access begins as a graded path, with chain link fencing, timber retaining wall and shrubs delineating it from adjacent parcels, extending approximately 140 feet to a break in grade as shown on Figure 2. At this grade break another wrought iron gate separates the path from the steep (1.4 horizontal to 1 vertical) slope that is traversed via existing wooden stairs with handrails. At the bottom of the stairs the access parcel turns westward for approximately 30 feet at a constant elevation of about 55 feet. This portion of the path is a wooden walkway flanked to the south by a large concrete retaining wall protecting a residence with a chain link fence as security. Immediately up slope of the wooden pathway is what appears to be loose recently deposited soil from grading the adjacent upper lot. This slope stands at approximately 1 1/3 horizontal to 1 vertical. From station 1+95 the access way turns southwesterly and proceeds down slope as a wooden ramp to approximately station 2+90. This portion of the slope stands at approximately 3 horizontal to 1 vertical. At the base of the ramp is a slightly sloping landing of concrete and rock leading to a final set of stairs that provide access from the bluff at the end of Sea Level Drive to the sandy beach.

PROPOSED ACCESS IMPROVEMENTS

At this level of feasibility studies we propose the following improvements:

1. Retain the wrought iron gate access point at Broad Beach Road. This gate will likely require sanding and painting and may require hardware replacement.

2. Regrade the pathway from Station 0+00 to 1+40 and install a six foot wide decomposed granite (DG) path with 2X6 redwood headers. A low (2 foot high) timber retaining wall may be required on the west side of the path approximately between stations 1+00 and 1+40.

3. Demolish the wrought iron gate at station 1+40 and remove the existing wooden stairs between station 1+40 and 1+65.

4. Install a new 6 foot wide wooden stairway supported on shallow concrete footings between stations 1+40 and 1+65.

5. Demolish the existing wooden path and ramp between approximately stations 1+65 and 2+90.

6. Install a new 6 foot wide wooden bridge supported on shallow (6 foot) concrete caissons with handrails between stations 1+40 and 1+65.

7. Install a new 6 foot wide wooden stairway with handrails and intermittent platforms between stations 1+65 and 2+90. Stairway is to be supported on shallow concrete footings.

8. Demolish existing stairway between approximately stations 2+95 and 3+15.

9. Install a new 6 foot wide wooden stairway with handrails between stations 2+95 and 3+25. Lower portion of stairway is to be constructed below existing beach sand level (approximately 5 feet) to allow for seasonal and storm induced changes in beach elevations. This portion of stairway is to be supported on piles driven into component material to provide some measure of protection from storm wave action and erosion.

From an engineering perspective, the above access improvements are feasible. Limitations do exist on the size and type of equipment that can be used during construction. Existing soils information was not adequate to address the stability of the steep loose slope above the "bridge" section between stations 1+65 and 1+95.

Soils information was not detailed enough to adequately assess the foundation requirements for the stairway sections. Thus, these sections were assumed to be founded on shallow concrete footings with the exception of the beach stairway between stations 2+95 and 3+25. It has been assumed that the proposed access parcel has adequate drainage characteristics and no additional drainage features will be required.

COST ESTIMATE

The following estimate of probable construction was prepared based on the proposed access improvements presented above.

ITEM	QUANTITY	UNIT COST	COST
1. Demolition	Allow	LS	$7,500.00
2. Grading	Allow	LS	$2,000.00
3. D.G. Pathway	840 FT^2	$15/$FT^2$	$12,600.00
4. Stairways	900 FT^2	$30/$FT^2$	$27,000.00
5. Bridge Section	30 LF	$300/LF	$9,000.00
6. Beach Stairway	180 FT^2	$50/$FT^2$	$9,000.00
		SUBTOTAL	**$67,100.00**
	Contingency 20%		$13,420.00
	Surveying (Allow)		2,500.00
	Soils Engineering (Allow)		3,000.00
	Design Engineering (Allow)		7,500.00
		TOTAL	**$93,520.00**

DISCUSSION

The Cost Estimate is conservative and can be defined with additional information. It may be necessary or advantageous to add additional chain link fencing and/or landscaping to provide security and screening. Signage requirements have not been addressed nor have site amenities such as trash receptacles or benches. Public parking has been assumed to be adequate along Broad Beach Road and no additional parking has been provided nor improvements such as striping included in this feasibility level estimate.

Maintenance requirements would be relatively minimal. If trash cans are provided, they would need to be emptied and the accessway should be inspected for repairs and litter retrieval on a weekly schedule. For budgeting

purposes a yearly maintenance cost for the structure only of approximately 5% of the capital cost is a general rule of thumb. This figure obviously depends on the usage and vandalism the structure receives and potential "Acts-of-God" such as storms and landslides.

The Agency reviews and permits will likely begin with a Coastal Permit from the California Coastal Commission. A grading permit may be required from the Los Angeles County Department of Building and Safety. Since all construction activity is above the high tide line, (based on the assumed datum), no Corps of Engineers permit is required.

CONCLUSION

Based on this level of feasibility assessment, the proposed beach access is feasible from an engineering perspective. Concerns that require additional information prior to development of design documents include local slope stability and foundation requirements. Other issues that should be addressed include parking adequacy, signage, site amenities, security, landscaping and maintenance. We believe that this proposed public access could be developed for a capital cost of $100,000 or less.

Please contact the under signed should you have questions.

Sincerely,
Creegan and D'Angelo

Charles I. Rauw
Project Manager

CIR/co

cc: Mr. Steve Horn