BROAD BEACH GEOLOGIC HAZARD ABATEMENT DISTRICT

REGULAR MEETING AGENDA

Sunday, April 29, 2012 at 9:30 a.m. (Closed Session begins)

Private Residence-
31330 Broad Beach Road, Malibu, California 90265

Closed Sessions Matters

Under this item, the GHAD Board shall meet in a closed session to discuss matters pursuant to Government Code Sections 54956.8 and 54956.9 (a).

a. Negotiation of Moffat & Nichol contract
BBGHAD Negotiator- Chair Norton Karno and GHAD Counsel Ken Ehrlich
Moffat & Nichol Negotiator- Russ Boudreau, Scott Ullman and Larry Treglia
Under Negotiation- assignment of existing contract, potential entry into new contract, and contract terms.

Regular Session Matters- estimated start time: 10:00 a.m.

1) **Call to Order**

2) **Roll Call**

3) **Adoption of Agenda**

4) **Approve Summary of Actions from March 11, 2012 Meeting**

Recommendation: Chair to conduct vote on approving Summary of Actions from March 11, 2012 Meeting. If passed, Chair to sign Summary of Actions.

5) **Ceremonial/Presentations**

None.

6) **Consent Calendar**

None.

7) **Public Hearings**

None.

8) **Old Business**

a. Report on Recording of GHAD Assessment Diagram (GHAD Project Counsel).

b. Permitting and Regulatory Process (GHAD Project Counsel).

c. Proposed BBGHAD Website. Discussion of proposed pre-launch version of BBGHAD web site in HTML format. Solicit guidance from Board re same (GHAD Project Counsel).

Recommendation: Staff recommends launch of web site as soon as practicable following implementation of guidance from Board

9) **New Business**

None.

10) **GHAD Boardmember Reports**

11) **GHAD Officer Reports**

a. Treasurer's Report. (GHAD Treasurer)

b. Discussion of Budget. (Board Members Levitan & Marquis)

12) **Public Comment on Items Not on the Agenda**

Communications from the public concerning matters which are not on the agenda but for which the GHAD Board has subject matter jurisdiction. The GHAD Board may not act on these matters except to refer the matters to staff or schedule the matters for a future agenda.

a. Public Comment on Closed Session Item

b. Public Comment on Non-Agendized Items

13) **Future Meeting**

Next Meeting: May __, 2012; __:00 a.m./p.m. Location: TBD, Malibu, CA

14) **Adjournment**

AGENDA ITEM - 4

SUMMARY OF ACTIONS
BROAD BEACH GEOLOGIC HAZARD ABATEMENT DISTRICT
REGULAR MEETING
MARCH 11, 2012
30756 PACIFIC COAST HIGHWAY, MALIBU, CALIFORNIA

1. CALL TO ORDER

Chair Karno called the meeting to order at approximately 1:12 p.m.

2. ROLL CALL

PRESENT: Chair Karno, Vice Chair Grossman, Board Member Levitan, Board Member Lotman, and Advisor Goss.

ABSENT: Board Member Marquis.

GHAD STAFF ALSO PRESENT (not Board Members and not subject to Roll Call): GHAD Manager Uri Eliahu (telephone), GHAD Clerk and Treasurer Barbara Hamm, and GHAD Project Counsel Ken Ehrlich.

3. ADOPTION OF AGENDA

Board Member Levitan moved, and Vice Chair Grossman seconded, the approval of the Agenda with no changes. GHAD Clerk Barbara Hamm reported that the meeting Agenda was posted at 8:30 a.m. on Thursday March 8, 2012 within the boundaries of the GHAD. The motion approving the agenda passed 4-0.

4. APPROVED SUMMARY OF ACTIONS FROM FEBRUARY 12, 2012 MEETING

Chair Karno referenced an edit on page 3 of the Summary of Actions circulated with the Board packet (adding the words "the project does not include" as the first words after the beginning of the parenthesis at line 10 of the first full paragraph on page 3). Subject to the edit requested by the Chair, Board Member Lotman moved, and Board Member Levitan seconded, the approval of the Summary of Actions from the February 12, 2012 meeting. The motion passed 4-0.

5. CEREMONIAL PRESENTATIONS

None.

6. CONSENT CALENDAR

None.

7. PUBLIC HEARINGS

Chair Karno stated that the Board will conduct a single Public Comment period for both agenda item 7a. and 7b., and Broad Beach GHAD property owners may substitute their ballots

on the proposed assessment at any time until the closing of the public hearing on agenda item 7a. The Chair further stated that the Board's three (3) minute time limit for commenters will be increased to ten (10) minutes per speaker for the entirety of Agenda item 7. The Chair stressed that the current item is quite important for the GHAD and all of its property owners, and the Board wants to ensure that all views are shared among the GHAD property owners, the public, the Board, and other stakeholders.

GHAD Counsel Ehrlich presented the Staff Report for the agenda item, and recommended Board approval, subject to the GHAD property owner's assessment vote, of both the agenda items 7a. and 7b, including Resolution Nos. 2012/03 and 2012/04. GHAD Counsel Ehrlich further reported on the March 9, 2012 receipt of written protests to the proposed assessment from Arthur Barens, counsel for Chad McQueen, and from Kenterra VI, L.P.'s ("Kenterra") counsel, Allan Abshez, and retained engineer, David Weiss. The Kenterra written protest (letter from counsel and report from David Weiss) was marked as Exhibit 1 and the Barens/McQueen protest was marked as Exhibit 2. GHAD Counsel Ehrlich also stated that the GHAD's Engineer, Moffat & Nichol, has prepared a response to Exhibits 1 and 2, a letter report dated March 10, 2012. The Moffat & Nichol letter report was marked as Exhibit 3.

The Chair then recognized Allan Abshez, counsel for Kenterra. Mr. Abshez stated that he represents the entity which owns the parcels at 31388 and 31406 Broad Beach Road and which has submitted a written protest to the proposed assessment. Mr. Abshez also submitted copies of maps of historic mean high tide lines for Broad Beach and a diagram of historic high tide lines in the area. These documents collectively were marked as Exhibit 4. On behalf of his client, Mr. Abshez requested that the GHAD Board decline to adopt the proposed assessment based on the materials submitted on Kenterra's behalf and for the reasons mentioned by Mr. Abshez during the January 2012 GHAD Board meeting. Mr. Abshez further requested that the GHAD remove the properties west of the beginning of Little Broad Beach Road from the proposed assessment district or, alternatively, decline to adopt the proposed assessment.

The Chair then recognized Wini Lumsden. Ms. Lumsden introduced herself as the President of Trancas Property Owners Association ("TPOA") and spoke about some of the history of the western end of Broad Beach. Ms. Lumsden stated that she has been a resident of Broad Beach since 1957. Ms. Lumsden presented a picture taken in 1975 that shows dunes at the western end of Broad Beach near Lechuza Point; a copy of this photograph was marked as marked as Exhibit 5. Ms. Lumsden stated that sand has been significantly eroded since that date.

The Chair next recognized Max Factor. Mr. Factor shared a two page letter with the GHAD Board, and same was marked as Exhibit 6. Mr. Factor stated that he supports and endorses the comments of Mr. Abshez, but is primarily concerned about his own property at 31460 Broad Beach Road. Mr. Factor explained that he believes his property will incur physical damage from the proposed sand nourishment if 20 vertical feet of sand is placed on the beach seaward of his home. Mr. Factor is concerned that sand would spill over the existing retaining wall, into his yard and home and potentially the yard and home of his neighbor as a result of the

nourishment. Mr. Factor stated that the area of beach around his home needs less sand than areas to the east and, therefore, should pay a smaller proportionate share of GHAD costs than other GHAD owners. Mr. Factor also questioned the GHAD's beach frontage determination as he claimed that his frontage is actually 50 feet and not 51 feet as specified in the GHAD materials. By using 51 feet as the frontage for the proposed assessment, Mr. Factor claimed that his family is being charged too much for the proposed assessment.

Mr. Factor further stated that, in his view, a small group of GHAD property owners wants the proposed beach nourishment and dune restoration, but a larger group of GHAD property owners are disproportionately subsidizing the small group. Mr. Factor further stated his belief that, as a result of the project, the western Broad Beach area will be serving as a "warehouse" for sand and, therefore, the "warehousers" should get paid to store the sand. Mr. Factor also stated a concern for tide pools and other habitant areas at the western part of Broad Beach and claimed that these areas could be adversely affected by nourishment activities. Mr. Factor closed by stating that his family does not want to be treated disproportionately, and has spent hundreds of thousands of dollars on protection from the sea and does not want to be part of this GHAD effort.

The chair then recognized Allan Mutchnik. Mr. Mutchnik stated that he is the owner of 31372 Broad Beach Road, which is on Little Broad Beach Road, the same road that Mr. Abshez requested for exemption from the GHAD. Mr. Mutchnik stated that Little Broad Beach contains roughly 11 homes and that his home shares a sea wall with 3 other homes. Mr. Mutchnik asserted that he speaks for all of the four (4) owners with the common sea wall in stating that they welcome the sand nourishment and dune restoration contemplated by the project and that these homeowners are strongly committed to the project. Mr. Mutchnik asserted that the common sea wall shared by the 4 homeowners was severely damaged in September 2010 and that the homeowners have spent hundreds of thousands of dollars repairing same; without the project, their homes and sea wall would be compromised. Mr. Mutchnik further stated that nourishment sand will be contoured for each individual home and that the backpassing element of the project is critically important to maintain sand at the western end and to lengthen the amount of time between major nourishments. Since the historic pattern of sand movement at Broad Beach is from west to east for most of the year, Mr. Mutchnik asserted that backpassing is critical to the preservation of the nourishment. He expressed strong support for the project and stated that his support is shared by many homeowners of the west end.

The Chair then recognized Vice Chair Grossman. Vice Chair Grossman confirmed with Mr. Mutchnik that his property and those of the others with whom he shares a common sea wall are identified as property numbers 20, 21, 22, and 23 in the report prepared by David Weiss ("Weiss Report") and submitted by Kenterra. Mr. Mutchnick confirmed same. Vice Chair Grossman then asked when the 4-home sea wall was built and how it failed in 2010.
Mr. Mutchnik related that the sea wall was built after severe storms in the early 1990's. The sea wall faces the ocean and has two (2) returns-- one at each end of the sea wall. The eastern-most return failed in September 2010 and collapsed into the deck of his current home at 31372 Broad Beach Road. Mr. Grossman then asked if Mr. Weiss served as the engineer of record for the

construction of the sea wall in 1990's or served in a similar capacity for the reconstruction in 2010. Mr. Mutchnik stated that he does not know if Mr. Weiss was the original engineer for the sea wall and that he was not the engineer of record for the recent reconstruction of the sea wall.

Vice Chair Grossman than addressed questions to Mr. Factor and Dr. Jane Arnault. After thanking Mr. Factor and Dr. Arnault for the professional and courteous manner in which they have stated their views on the proposed project, Vice Chair Grossman asked about the history of the sea wall at the Factor/Arnault home. Dr. Arnault responded that David Weiss was the structural engineer for the sea wall at their home and it was constructed with permits more than 10 years ago. Dr. Arnault stated that the cost of the sea wall was "six figures". She further explained that it was built with the cooperation of her neighbor, Bill Curtis, and the two homeowners have since started replacing and repairing under-home support columns one by one. A recent single column repair cost in excess of $100,000, and six to seven more columns must be repaired. Dr. Arnault related that there are many unknowns and idiosyncrasies involved in the repair of each individual column and obtaining firm bids for the work is difficult. Dr. Arnault further stated that Mr. Weiss is assisting them now in their current replacement and repairing of the under-home columns.

Vice Chair Grossman then thanked Mr. Factor and Dr. Arnault for their December 2011 questioning of the beach frontage numbers used for purposes of the GHAD as their questioning allowed the GHAD to confirm the frontage for each parcel, including the Factor/Arnault parcel, and also obtain a third party, independent survey repair review of the entire survey aspect of the project. Dr. Arnault responded by stating that the date of the survey used to calculate GHAD beach frontages was arbitrary and not fair or appropriate for the process. Dr. Arnault suggested that all owners should submit their own surveys, regardless of dates, and the GHAD should use the submitted surveys. Vice Chair Grossman responded that the GHAD's outside professionals and consultants advised the GHAD as to the manner and conduct of the beach frontage survey.

The Chair then recognized Board Member Levitan. Board Member Levitan stated that, in the past year, his family has learned that their home suffers from significant foundational undermining caused by sand erosion. Board Member Levitan stated that an area originally filled with sand has now been carved out by wave and tidal action. Approximately 600 cubic yards of sand from under the Levitan residence has been washed out to sea. Board Member Levitan stated that having increased sand area between homes and the ocean and no wave action pounding against homes, such as that proposed by the project, can only benefit the community and area homes. In contrast, high waves, erosion, and water smashing into homes and sea walls hurts the community and area homes. Therefore, the proposed sand nourishment and dune restoration project will place wave action a far and significant distance away from homes, which will be good for all.

The Chair then recognized Vice Chair Grossman. Vice Chair Grossman requested Mr. Abshez to respond to various questions. Vice Chair Grossman asked if Exhibit 1 (letter and Weiss Report) were submitted on behalf of Kenterra only or other clients. Mr. Abshez

responded that Exhibit "1" was submitted on behalf of Kenterra only. Vice Chair Grossman then asked if Mr. Abshez inquired of Mr. Weiss as to whether Weiss had been consulted or retained by the GHAD in connection with this project. Mr. Abshez responded that he does not recall. Mr. Abshez added that he retained Mr. Weiss in January 2012. Vice Chair Grossman stated that on January 9th, 10th or 11th of 2012, GHAD Counsel Ehrlich had two different conversations with Mr. Weiss and in those conversations shared with Mr. Weiss attorney client confidential information in order to acquaint Mr. Weiss with the nature of the project, pending issues, and the GHAD's position on the same. Vice Chair Grossman stated that it would seem logical that Mr. Weiss would not have engaged in such an interview process with GHAD Counsel Ehrlich had he already been retained by Kenterra. Therefore, Vice Chair Grossman requested Mr. Abshez to provide a copy of his firm's engagement letter with Mr. Weiss. Mr. Abshez stated that he would need to look into the matter and did not commit to producing a copy of the engagement letter.

Vice Chair Grossman then asked if Mr. Weiss inspected the beach prior to the preparation of his report. Mr. Abshez responded that he believed that Mr. Weiss visited the beach, but Mr. Weiss was not present to confirm same. Vice Chair Grossman then asked about the status of permitting for shoreline protective devices at lot numbers 7, 27 and 28 as identified in the Weiss Report. Mr. Abshez responded that he has no idea of the permitting of shoreline protective devices for such lots. Mr. Abshez added that his client's sea wall is permitted and Mr. Weiss believes that the current sea wall at the Kenterra property will be acceptable for at least 20 years, the anticipated life of the proposed restoration project. Therefore, Mr. Abshez requested that his client not be assessed funds to protect a sea wall that, according to Mr. Abshez, does not need protection. Mr. Abshez stated that some of the homes within the GHAD are on rocky cliffs and bluffs and, therefore, do not need protection. He also asserted that the GHAD will be paying to "fill public land" to create a dry sand beach that will be owned by the public. Mr. Abshez questioned why Kenterra and other members of the GHAD are being required to subsidize property improvement on a public beach with no monetary participation by the state of California. Mr. Abshez further commented that his client: opposes the questioning of various facts in the Weiss Report, seeks to be deleted from the GHAD, and has no interest in paying to place sand at Lechuza Point and "incur environmental damage" as a result.

Vice Chair Grossman responded that the questions regarding the Weiss Report are important because Kenterra and Mr. Abshez have asked the GHAD Board to rely on the Weiss Report. Therefore, it is important for the Board to determine whether the Weiss Report presents accurate facts, was prepared with sufficient care, and is otherwise credible. Vice Chair Grossman then asked Mr. Abshez if, prior to the construction of the current sea wall at the Kenterra property, previous shoreline protective devices or other structural elements of the Kenterra property failed due to wave or tidal action. Mr. Abshez responded that he does not know. Vice Chair Grossman then showed Mr. Abshez a photograph at page 111 of a book entitled "Images of America Malibu" and asked if what is now the Kenterra property is in the background of the photograph. Mr. Abshez stated that he did not see how a response would benefit the discussion. Vice Chair Grossman stated that the GHAD Engineer has opined that

what is now the Kenterra property is in the background of the photograph, with visible dunes seaward of the improved property.

Vice Chair Grossman then asked if the Kenterra properties were in escrow to be sold. Mr. Abshez responded that he does not see how this question could be relevant to the issue at hand.

Vice Chair Grossman then asked Mr. Abshez if he could explain the recent failure of the steel sheet pile wall protecting property numbers 21 through 24, as numbered by the Weiss Report, in light of the fact that the Weiss Report concludes that such wall would not be undermined by wave action. Mr. Abshez responded he does not know anything about these properties or the shoreline protective device(s) seaward of them.

Vice Chair Grossman then asked Mr. Abshez if the statement on page 3 of the Weiss Report that "the western beach never had a protective dune" is correct. Mr. Abshez stated he could not answer the question and referred Vice Chair Grossman to the Weiss Report. Vice Chair Grossman then showed Mr. Abshez a photograph identified as taken on February 14, 1982 at Victoria Point with obvious sand dunes in the background. The photograph was marked as Exhibit "7". Vice Chair Grossman then asked Mr. Abshez if he could explain how it is that his client is endorsing a report that has factual inaccuracies in it-- i.e., representing that the western portion of Broad Beach never had a protective dune when other evidence shows otherwise. Mr. Abshez responded that he does not know that the report is factually inaccurate. Mr. Abshez then stated that it was his belief that, traditionally, eastern Broad Beach homes had deeper lots with more sand dune than western lots, and future protection of the eastern lots should not be borne by the owners of the western lots.

Vice Chair Grossman then asked Mr. Abshez to outline the relief that his client requests. Mr. Abshez responded that Kenterra seeks to be deleted from the GHAD assessment and/or revise the project so the "cove" is not filled with sand.

The Chair recognized Board Member Levitan. Board Member Levitan stated that review of Moffat & Nichol's 1972 and 2010 Broad Beach/Lechuza Point photographs clearly show the potential of the proposed project to restore all of Broad Beach, including the Lechuza Point area, to the approximate beach conditions which existed in or about 1972 - at least as close as possible. Board Member Levitan stated that this is a positive goal and a good thing for all stakeholders.

The Chair recognized Dr. Arnault. Dr. Arnault requested additional copies of the March 10, 2012 Moffat & Nichol Letter Report. Copies of the same were handed to all who requested them.

The Chair then recognized Mr. Mutchnik, who responded to previous speakers who claimed that the proposed project would disproportionately benefit eastern Broad Beach. Mr. Mutchnik testified that, at high tide each day, his sea wall is pounded by waves and that such pounding reverberates through his entire home. Mr. Mutchnik stated that eastern Broad Beach

The Chair further sought confirmation that no member of the public, GHAD Board member, or GHAD staff had any further comments on this agenda item. No such comments were forthcoming. The Chair then declared the public comment portion of the meeting closed and asked the GHAD Clerk and GHAD Counsel to begin the tabulation of the votes on the proposed GHAD assessment.

GHAD Counsel Ehrlich thanked the board and the Chair, and stated that the tabulation of the votes on the proposed assessment would begin. GHAD Counsel Ehrlich explained that the votes will be tabulated both manually and electronically. The votes will be tabulated manually by GHAD Clerk Barbara Hamm, and electronically via a programmed Excel spreadsheet prepared by GHAD Manager ENGEO and in use on the GHAD Counsel's computer, the GHAD Clerk's computer, and that of the GHAD Manager in northern California. Each valid ballot will be opened and the vote will be announced, at which time the amount of that parcel's linear beach frontage (according to the January 18, 2012 Assessment Diagram) will be added to either the "yes" or "no" spreadsheet column depending on the GHAD parcel owner's vote. Concurrently, the GHAD Clerk will manually record each vote and, after opening all valid votes, will add the linear frontage feet voting "yes" and the linear frontage feet voting "no", and announce the results.

GHAD Counsel Ehrlich further stated that the vote will not be recommended for approval or certification until the manual tabulation and the electronic tabulation are identical. GHAD Counsel Ehrlich further announced that only valid ballots will be counted. Specifically, only those green ballots submitted by the owner of each parcel will be counted. GHAD Counsel Ehrlich announced that the GHAD Clerk has previously placed the received ballots in APN order, and the ballots will be opened in that order. Mr. Abshez asked if a record of non-green ballots would be kept. Mr. Ehrlich answered in the affirmative. Dr. Arnault asked if there would be a printout of the results available for the homeowners. GHAD Counsel Ehrlich answered in the affirmative.

The votes were then tabulated. During the course of the tabulation, it was discovered that the owners of the parcels with the APNs ending in 013-004 and 014-016 submitted white ballots and such ballots were not counted. After tabulating all of the valid, received ballots, electronic tabulation showed 4,618 feet voting "yes," 785 feet voting "no," and a total of 5,403 feet voting in the election. GHAD Counsel Ehrlich announced that the manual tabulation of the votes will now commence. After approximately ten (10) minutes, the GHAD Clerk announced a manual calculation of 4,618 feet voting "yes," 785 feet voting "no," and a total of 5,403 feet voting. The GHAD Clerk announced that the electronic and the manual tabulation matched identically. GHAD Counsel Ehrlich asked the GHAD Clerk if she, therefore, certifies the assessment vote. The GHAD Clerk responded in the affirmative. GHAD Counsel Ehrlich further questioned the GHAD Clerk as to whether she could certify the vote in writing in accordance with proposed Resolution No. 2012/03 to the extent that the GHAD Board passes the resolution. The GHAD Clerk responded in the affirmative. GHAD Counsel Ehrlich announced that he will take possession of all the ballots. At this time, the GHAD Clerk signed Exhibit 1 to Resolution No.

2012/03. The GHAD Clerk then handed the signed Exhibit 1 to proposed Resolution 2012/03 to the Chair. Due to a personal emergency, Board Member Levitan left the meeting at this time.

The Chair then declared the tabulation portion of this agenda item closed. The Chair then requested a motion to adopt Resolution No. 2012/03. Vice Chair Grossman moved that the GHAD Board adopt Resolution No. 2012/03. Board Member Lotman seconded the motion. The motion carried 3-0.

Board Member Lotman moved that the Board adopt Resolution No. 2012/04. Vice Chair Grossman seconded the motion. The motion carried 3-0. The Chair noted that, inherent in the results of the vote on the proposed assessment and the GHAD Board's adoption of Resolution Nos. 2012/03 and 2012/04, there was no majority protest or opposition to the proposed assessment, and that the tabulation results revealed at least 85% of the voting property owners in favor of the proposed assessment. Thus, the Chair stated that the GHAD Board finds no majority protest to the proposed assessment, and Resolution Nos. 2012/03 and 2012/04 are enacted accordingly.

8. OLD BUSINESS

A. Report On Permitting and Regulatory Process. GHAD Counsel Ehrlich reported on the status of the permitting and regulatory process for the project. GHAD Counsel Ehrlich reported that, in the last month, the permitting effort has continued even though the proposed assessment has taken significant attention. The State Lands Commission ("SLC") is moving forward with its assessment and analysis of environmental impacts for the project. The SLC has informed the GHAD that, if the assessment vote passes, the SLC would assert that the CEQA exemption in GHAD law would apply and, therefore, prevent the agency from completing an Environmental Impact Report ("EIR") or otherwise applying CEQA to the permitting process. Instead, the SLC has informed the applicant that, instead of an EIR, the agency will prepare an Analysis of Public Trust Resources ("APTR") using its existing contractor, AMEC, with substantially the same format of a CEQA EIR. The SLC has also confirmed that it is coordinating efforts with the California Coastal Commission ("CCC") such that the two agencies will share analyses and investigations conducted and prepared by AMEC and the applicant's technical consultants.

GHAD Counsel Ehrlich also reported that the GHAD received in the last week a letter from the Regional Water Quality Control Board ("RWQCB") stating that the agency has ceased processing the GHAD's water quality certification request due to the lack of fee payment. GHAD Counsel Ehrlich reminded the Board that the applicant and the agency have a dispute over the applicable fee, and that a meeting is scheduled to occur in mid-April in an attempt to resolve the dispute.

9. NEW BUSINESS

A. Proposed BBGHAD Web Site. Board Member Lotman reported that the web site is ready to be launched with the relevant documents for inclusion. The Chair requested that the contact numbers for the GHAD Clerk be placed on the "Home" page and the "Contact Us" page, and that the emails and contact information of Board Members be deleted. Board Member Lotman agreed to implement the request. Vice Chair Grossman thanked Board Member Lotman for his significant efforts in creating the web page.

10. GHAD BOARD MEMBER REPORTS

The Chair solicited reports from the remaining Board Members. Vice Chair Grossman asserted that the active participation of those who objected to the GHAD assessment and the repeated inquiries from various Malibu West Board members and residents enriched the GHAD Board's consideration of the GHAD itself and the proposed assessment, and benefited the community at large. Vice Chair Grossman stated that this input demonstrates democracy in action and has resulted in a better process than would have otherwise occurred. Vice Chair Grossman also expressed thanks to GHAD Board Advisor Mark Goss for his wise counsel under difficult circumstances on behalf of Malibu West.

Board Member Lotman had no further comments. The Chair echoed the Vice Chair's comments and observed that all of the people on the beach remain neighbors and expressed the hope that we can go forward in a constructive and neighborly way to beautify and restore the beach.

11. GHAD OFFICER REPORTS

A. Financial Report. GHAD Treasurer Barbara Hamm reported a cash balance of $453,092 as of February 29, 2012. Several GHAD property owners have been contributing significant fair share payments. The Chair stated his appreciation and that of the Board for those who have contributed to date and have helped the GHAD pay bills in these difficult times. The Chair expressed his hope that, now that the assessment has passed, additional fair share payments would be made. The Chair noted that a budget discussion was agendized, but the two principal Board Members to lead the discussion, Board Members Levitan and Marquis, were absent. Therefore, the Chair announced that this item would be tabled until the next GHAD Board meeting.

12. PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

The Chair solicited any additional comments from the public. None were forthcoming.

13. FUTURE MEETING

After conferring with Board Members, the Chair announced that the next GHAD Board Meeting will be April 29, 2012, at 9:30 a.m. at the private residence located at 31330 Broad Beach Road.

14. ADJOURNMENT

Board Member Lotman moved for adjournment. The Chair seconded the motion. The motion carried 3-0. The meeting adjourned at 4:47 p.m.

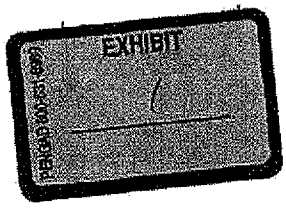
Approved and adopted by the Broad Beach GHAD Board on April ____, 2012.

_____
NORTON KARNO, Chair

ATTEST:

_____
BARBARA HAMM, GHAD Clerk

EXHIBIT 1



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March 9, 2012

Board of Directors
Broad Beach Geological Hazard Abatement District
c/o Marquis Property Company, Ltd.
29169 Heathercliff Road, Suite, 212
Malibu, California 90265

Re: Proposed Broad Beach GHAD Assessment

Honorable Board Members:

We are writing on behalf of our client, Kenterra VI, L.P. ("Kenterra"), the owner of the property located at 31388 - 31406 Broad Beach Road in Malibu, California, to object to the proposed assessment and to respectfully request that the Broad Beach Geologic Hazard Abatement District ("GHAD") Board refrain from adopting it.

By law, the GHAD is a limited purpose agency, whose only purpose is to prevent, mitigate, abate, or control geologic hazards. The boundaries of the Broad Beach GHAD primarily include privately-owned property.[1] However, the GHAD Board's proposed project proposes to a program to primarily fill public trust tidelands lands to maintain the dry sandy beach at Broad Beach for an approximately twenty-year period. At the end of this period, according to the GHAD's own engineers, the beach will have eroded to approximately today's elevation and width.[2] Thus, the GHAD Board's project provides at best a temporary program for an approximately 20-year period.

The primary purpose of the project is plainly to support the Topanga Property Owners Association ("TPOA's") desire to obtain from the California Coastal Commission a permanent (or at least 20-year length) Coastal Development Permit that would allow the temporary emergency revetment installed in 2010 by 78 TPOA members under Emergency Permit 4-10-

[1] The Broad Beach GHAD includes two accessways to Broad Beach that are owned by the County of Los Angeles, but such accessways are not proposed to be assessed for the GHAD's project.

[2] The Engineer's Report states that the current rate of erosion at Broad Beach is 35,000 cubic yards per year. Thus, it is anticipated that the 600,000 cubic yards of sand added by the project will be lost in approximately 17 years, more or less.

003-G to be retained.[3] The January 24, 2012 ballot solicitation by the GHAD Board admits this purpose in its warning that in the absence of the project:

> "[a]s detailed in the CCC's emergency revetment permit, the CCC could insist on the removal of the emergency revetment (which would affect the 78 homes currently benefitting from the revetment)... if the emergency were removed, the pre-emergency revetment lack of protection against storms, erosion, and potential damages to properties would return."

The project also proposes primarily aesthetic improvements to those 78 properties behind the temporary emergency revetment, including burying the temporary emergency revetment so as to conceal it and creating restored sand dunes over the revetment. These expenditures exclusively benefit the 78 emergency revetment properties. Moreover, the project assessment proposes to unlawfully refund up to approximately $2.6 million dollars incurred by the 78 homeowners in connection with the installation of the temporary emergency revetment.

PLAINLY, THE PURPOSE OF THE PROJECT DISPROPORTIONATELY PERTAINS TO THE 78 HOMES LOCATED BEHIND THE TEMPORARY EMERGENCY REVETMENT.

Whatever the merit and value of the GHAD Board's temporary project for the 78 homes behind the temporary emergency revetment, the GHAD improperly includes and proposes to assess – on the same basis as the 78 temporary emergency revetment homes – lots that are not behind the temporary emergency revetment without any evidentiary showing that the GHAD's project is necessary to protect such lots, or that the special benefit (if any) conferred on those lots is equal (on a linear footage basis) to the special benefit conferred on the temporary emergency revetment lots. Indeed, the evidence shows that Kenterra's property and many lots located on the westerly stretch of Broad Beach require no additional protection within the 20-year project period because they are situated where they are already protected (for example, on rocky bluffs well-above the beach), or because they are protected by improvements that are already in place that can be maintained at far lesser cost than the assessment. In addition, Kenterra and other property owners along the westerly stretch of Broad Beach object to and oppose the

[3] The project is a replacement for the application for Coastal Development Permit 10-064 filed by the TPOA with the City of Malibu on December 13, 2010, which application is hereby incorporated by reference as if set forth in full.

environmental damage that would be caused by filling near-beach and intertidal areas along the westerly stretch of Broad Beach as proposed by the GHAD Board's project.[4]

IN SUMMARY, THE ASSESSMENT REQUIRES KENTERRA AND OTHER UNWILLING PROPERTY OWNERS TO SUBSIDIZE COSTS THAT SHOULD BE BORNE BY THE 78 TEMPORARY EMERGENCY REVETMENT HOMEOWNERS, THE COUNTY, AND THE STATE OF CALIFORNIA.

The California Constitution protects property owners from being compelled to pay assessments unless the assessment meets very stringent requirements. As discussed below, the assessment proposed by the GHAD Board does not comply with the requirements of Proposition 218, codified at Article XIII D of the California Constitution, in that (among other things) it: (i) fails to include and assess publicly owned land which will receive benefits; (ii) exceeds the reasonable cost of benefit conferred upon privately owned parcels; (iii) is not supported by an engineer's report and rate and method which meets Proposition 218 requirements; (iv) is partially or wholly based on claims of general enhancement to property value; and (v) improperly includes costs that are not part of the project.

A. The Assessment Improperly Excludes Publicly Owned Parcels that Received Special Benefits and Fails to Separate and Assess General Public Benefits

Article XIII D of the California Constitution mandates that "[p]arcels within a district that are owned or used by any agency, the State of California or the United States shall not be exempt from assessment unless the agency can demonstrate by clear and convincing evidence that those publicly owned parcels in fact receive no special benefit." Cal. Const., Art. XIII D, § 4 (a) (emphasis added). Exclusion from a district of parcels that are specially benefitted is a basis for setting an assessment aside. As the Court of Appeal held in *Town of Tiburon v. Bonander*, 180 Cal. App. 4th 1057, 1085-86 (2009), "[i]f a property receiving a special benefit is excluded from an assessment district, then the assessments on properties included in the district will necessarily exceed the proportional special benefit conferred on those properties. In such a case, the properties in the assessment district effectively subsidize the special benefit enjoyed by properties outside the district that pay no assessment."

The GHAD Board, its representatives, its consultants and public agencies such as the California Commission acknowledge that virtually *all* of the 100+ foot dry sandy beach will be created by adding fill to public trust lands owned by the State of California, resulting in special

[4] See **Exhibit A**, Moffat & Nichol's Beach Restoration Project Progress Report dated July 2011 recommending that the GHAD project be redesigned to avoid impacts to western beach near beach areas, sea-grass and inter-tidal areas to avoid environmental damage.

benefit to those State lands – specifically, the creation dry sandy beach that will be owned and enjoyed by the public. As the California Coastal Commission's letter dated May 12 , 2011 (attached as **Exhibit B**) states:

> "In particular, it should be clearly stated that in the event that the proposed beach nourishment program is successful in creating a widened beach within the project area as a result of placing fill on public trust lands, including sand for the purpose of beach nourishment, then those new areas of beach would be public lands available for public use and would not be subject to private ownership interest." (emphasis added)

The GHAD Board's project arbitrarily proposes to widen the dry sandy beach to 100 feet – wider than any recorded width during the twentieth century. Moffat & Nichol's Project Description (attached as **Exhibit C**) describes the objectives of the project as follows:

> "The Trancas Property Owner's Association (TPOA), representing almost all of the property owners along the Broad Beach shoreline, has elected to address the extensive erosion by privately funding a beach and sand dune restoration project which will not only protect their homes but also restore the beach to its historic grandeur not only for their benefit but for the benefit of the public at large. The Broad Beach restoration project seeks to design, permit, and implement a shoreline restoration program that provides erosion control, property protection, improved recreation and public access opportunities, aesthetics, and dune habitat."

Indeed, the Moffat & Nichol trumpets this public benefit as "unprecedented":

> "In addition to the natural shore protection benefit afforded by a widened beach, the general public would also directly benefit through enhanced and unprecedented access and related recreational opportunities."

Exhibit C at pages 2 and 8 (emphasis added).[5]

Moreover, the Engineer's Report also admits that the assessment will specially benefit Zuma Beach. See **Exhibit C** at page 8 ("Any nourishment activities at Broad Beach would also benefit Zuma Beach and shorelines further east, at no cost to the public."). The District also improperly exempted from assessment public access lots owned by the County of Los Angeles fronting the beach. Because of the admitted unprecedented benefit to publicly-owned lands, in order to the assessment to meet the requirements of Article XIII D, the special benefit to such lands must be separated and assessed.

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[5] See also, September 12, 2011 Record of Proceedings and Hearing Transcript before the Malibu City Council authorizing formation of the Broad Beach GHAD incorporated herein by reference.

In this regard, the Engineer's Report also fails to separate the amount of general benefit to be received by the public so that government agencies could use revenues other than assessments to pay for those costs. *Beutz v. County of Riverside*, 184 Cal. App. 4th 1516, 1532 (2010) ("Local government must use a professional engineer's report to estimate the *amount* of special benefit landowners would receive from the project or service, as well as the *amount* of "general benefit." This step is needed because Proposition 218 allows local government to recoup from assessments only the proportionate share of cost to provide the special benefit. That is, if special benefits represent 50 percent of total benefits, local government may use assessments to recoup half the project or service's costs. Local governments must use other revenues to pay for any remaining costs. This limitation on the use of assessments represents a major change from the law prior to Proposition 218, when local governments could recoup from assessments the costs of providing both general and special benefits.") (emphasis in original).

Because the Engineer's Report fails to quantify and include special benefits to publicly owned and land and fails to include such lands in the assessment, and because the Engineer's Report fails to separate general benefits to the public that must be borne by public agencies, the proposed assessment is unconstitutional.

B. The Proposed Assessment Exceeds the Reasonable Cost of Special Benefit Conferred upon Kenterra's and Other Parcels

While the Engineer's Report makes an extensive case as to why the project may specially benefit the 78 homes that are protected by the emergency revetment, neither it – nor the 2011 Moffat & Nichols Report on which it is based – contains any analysis of the circumstances and improvements of the other lots within the District and an analysis of their need, if any, for the ostensible protection of the project.[6] The Engineer's Report merely asserts – in an entirely conclusory manner (without any analysis or substantial evidence whatsoever) – that the "special benefit is proportional to the length of beach frontage, regardless of the presence of pre-existing protective structures, such as revetments or seawalls." See Engineer's Report at page 9.

The Engineer's Report should have analyzed each of the lots included within the GHAD other than the 78 emergency revetment lots so that a determination could be made regarding the type and amount of special benefit, if any, that is actually conferred by the GHAD Board's temporary twenty-year project for those lots. Such an analysis is necessary to ensure: (i) that there is in fact a geologic hazard to be abated for these lots within the purpose of the GHAD

[6] The so-called Engineer's Report by ENGEO Incorporated dated January 18, 2012, which supports the Broad Beach GHAD Board's proposed assessment, contains no analysis whatsoever, but relies exclusively on a 2011 report prepared by Moffat & Nichol, who are described as Engineer of Record for the proposed improvements.

enabling statute, and (ii) that the amount of the assessment for those lots did not exceed the reasonable value, if any, of the GHAD's 20-year project to them.

The analysis contained in the accompanying expert engineer's report by David Weiss dated March 9, 2012 ("Weiss Report") demonstrates that the lots along the westerly stretch of Broad Beach (the "Western Beach" (from the approximate beginning of "Little Broad Beach Road" through Victoria Point)) including Kenterra's property: (i) are situated significantly differently than the lots along the eastern stretch of Broad Beach where the emergency revetment is located; (ii) do not need the ostensible protection afforded by the GHAD's project in many, if not all, cases; and (iii) that many of the Western Beach lots should not be assessed any amount, much less $400 per linear foot of beach frontage.

The Weiss Reports explains that the eastern stretch of Broad Beach (the "Eastern Beach" (i.e., the easterly approximately five-thousand feet of beach from Trancas Creek west to the public vertical access walkway at the beginning of the private access road commonly knows as "Little Broad Beach Road")) consists of very deep, flat lots extending from the Broad Beach Road right of way line to the beach. The floor levels of the houses on Eastern Beach are lower than those of the Western Beach. It was the Eastern Beach lots that were exposed to "[h]igh erosion rates during the 2009-2010 winter season and widespread failure of then existing temporary emergency sandbag revetments necessitated permitting and construction of a temporary emergency rock revetment by the TPOA." **Exhibit C** at page 5.

By contrast, as the Weiss Report analyzes, the Western Beach is naturally protected by Victoria Point, which is a rocky bluff, and there is cobble and bedrock closely underlying the beach that is not subject to the type of scour erosion that threatened the 78 homes now protected by the temporary emergency revetment. Kenterra's property, located at 31388-31406 Broad Beach Road, is already protected by a reinforced concrete sea wall that is supported by a series of concrete soldier piles founded in bedrock strata. As the Weiss Report documents, this seawall is adequate to protect Kenterra's property against even the highest potential sea levels projected by the Engineer's Report during the twenty-year period of the GHAD Board's project. Without establishing that the seawall or homes owned by Kenterra are at risk of any significant damage whatsoever, the GHAD proposes to assess Kenterra's lots approximately $70,000 per year for twenty years. The Weiss Report establishes that the GHAD project is not necessary to protect Kenterra's property given its location and its reinforced concrete sea wall, and that if minor repairs were to become necessary at any time, they would be far less costly than the cumulative cost of the annual assessment ($1.4 million over twenty years before adjusting for potential assessment increases and inflation).

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Simply put, in terms of special benefit, the GHAD Board's project is entirely superfluous to Kenterra's property, and the assessment to Kenterra's property far exceeds the reasonable cost of the special benefit, if any, conferred on the Kenterra property.

As documented in the Weiss Report, the houses on sites 1 through 6 inclusive, 9 through 14 inclusive, 16 and 17 are all located high enough above the beach that they do not need additional protection from ocean wave action and are supported on piles founded in the bedrock.[7] Site number 15 is not only above the beach but is protected by an existing timber bulkhead. Other homes are also protected by devices or structures. For example, the houses on sites numbered 7, 8, 27 and 28 have rock revetments that will provide sufficient protection from wave action during the project term. The house on site number 20 is underpinned into the bedrock and is also protected by a rock revetment. Sites 21 through 24 inclusive are protected by a steel sheet-pile wall that is cantilevered out of the cobble layer, if not the bedrock, and will not be undermined by wave action. According to the Weiss, who has prepared property-specific engineering studies of over 80 properties on Broad Beach, none of the foregoing lots needs additional protection, even in the event that sea level rises to the "Likely High Rate" of sea level during the 20-year project period.

Neither the Engineer's Report nor the Moffat & Nichol Report contain any analysis: (i) substantiating a geologic threat to each of the foregoing numbered lots that needs to be abated; (ii) that considers the location of homes along the Western Beach stretch and the protective devices already in place to determine that each of the lots has a need for the GHAD Board project's temporary protection. Most importantly, the Engineer's Report does not contain any analysis that might substantiate that the amount of potential damage to any such lots from wave exposure justifies an assessment of $400 per linear foot of frontage per year (or $20,000 per year for a fifty foot wide lot) during the 20-year project period.

The Engineer's Report does not address lots that are already protected by the rock outcropping on which they are situated and whatsoever and makes entirely gratuitous statements about benefitting the "longetivity" of protective structures. But the Engineer's Report provides no analysis demonstrating that a $400 per linear foot annual assessment is reasonable to address wear and tear that may occur within the 20-year project period. The Weiss Report directly addresses this issue and explains:

> "Any wear and tear from wave action during the project term can be effectively repaired, and at a cost much lower than the proposed beach restoration project. For example, rocks in revetments exposed to wave action will, from time to time, roll off the face of the revetment and should be retrieved and replaced back onto the revetment.

[7] Numbering references are to the Weiss Report.

> Concrete and timber seawalls may be pock marked and damaged by debris that may be thrust against them by storm waves. This is rather minor wear, and can easily be repaired as it occurs. It certainly can be repaired for much less that the proposed assessment of $400.00/ft of property per year for the next twenty years. Moreover, not all wear requires repair. For example, the under deck area of the house on site 17 has sustained cosmetic damage by wave action, but this is not a condition that threatens the structural integrity of the home, and can be easily repaired or ignored, as the property owner wishes."

Because it lacks requisite analysis to support the proposed assessment for Kenterra's property and the other lots along the Western Beach, it is clear that the Engineer's Report merely spreads the cost of the GHAD's project, which disproportionately benefits the 78 emergency revetment lots and public trust lands to be improved, in violation of Article XIII D of the California Constitution. Thus, the proposed assessment is unconstitutional.

C. The California Constitution Bars Assessments Based on General Enhancement of Property Value.

The California Constitution narrowly defines a "special benefit" as "a particular and distinct benefit over and above general benefits conferred on real property located in the district or to the public at large." Article XIII D, subd. (i). The definition of special benefit expressly states: "General enhancement of property value does not constitute 'special benefit.'"

In violation of the California Constitution, the proposed assessment and the Board's campaign for the assessment are based on claims of general enhancement to the property value of each lot in the District based on the linear frontage of each lot to new dry sandy beach. See, e.g., the GHAD Board's January 24, 2012 letter at page 5 ("there would be little prospect of a dry sand beach, which, among other effects, could reduce property values and ability to enjoy your beachfront homes"). Indeed, in response to arguments that the project is not needed by many homes that are naturally protected or that already have engineered protection against potential ocean damage (particularly along the Western Beach), the GHAD Board has responded by arguing that a dry sandy beach will add to property value and therefore the assessment should be supported. Whether or not one believes that increasing the width of dry sandy beach adjacent to privately owned lots in GHAD increases the property value of those lots, the proposed assessment cannot be based on enhanced property value in whole or part. Thus, the proposed assessment is unconstitutional.

D. The Proposed Assessment Includes Impermissible Improvements to Private Property and Reimbursement of Expenses Not Associated with the GHAD Project

Beyond the fill of public trust lands to create a 100-foot wide dry sandy beach, the GHAD Board's project includes primarily aesthetic improvements to the various private properties that are not necessary or incidental to abatement of erosion along the main stretch of Broad Beach, specifically burying the emergency revetment and covering it sand dunes. The purpose of burying the emergency revetment is primarily aesthetic and benefits the 78 homes where the temporary emergency revetment was installed. Imposing the cost of these improvements on homes along the westerly stretch of Broad Beach requires them to subsidize special and disproportionate benefits to the 78 homes in violation of the California Constitution.

The GHAD Board's project budget also includes the payment of up to $2.6 million dollars of so-called "fair share contributions." Many, if not all, of these expenses are poorly documented, were not contributions to the GHAD at all, and were in fact incurred before the GHAD was formed in September 2011. Therefore, they were not "financial assistance" to the GHAD pursuant to Public Resources Code Section 25691. The e-mail communication attached as **Exhibit D** also documents that records for the so-called "fair share contributions" were not available even after the Engineer's Report was finalized and submitted, and therefore such expenses were not independently reviewed by the project engineers. In addition, many of the so-called "fair share contributions" were incurred before or in connection with the installation of the emergency revetment by the TPOA owners in 2010. Because the proposed assessment of $400 per linear foot of frontage per year is based on the inclusion of impermissible improvements and payments to, or for the benefit of, third parties, the proposed assessment violates the California Constitution.

Conclusion

For all of the foregoing reasons, we object to and urge the Board not to adopt the proposed assessment.

Very truly yours,

Allan J. Abshez

AJA:nej

cc: Ms. Paula Kent Meehan
Ken Ehrlich, Esq.
Christi Hogin Esq.
City of Malibu
Ms. Deanna Christensen
California Coastal Commission

EXHIBIT "A"

BROAD BEACH RESTORATION PROJECT
PROJECT PROGRESS REPORT - JULY 2011

This document is the first of a series of progress reports to keep the TPOA members informed regarding the latest progress on the Broad Beach Restoration Project. The long term restoration project has thus far included the following tasks:

Task 1 – Initial Planning Studies
Task 2 – Field Investigations
Task 3 – Project Entitlement
Task 4 – Preliminary Engineering

The following summarizes the current progress and schedule. A summary of the parallel process of creating and maintaining a Geologic Hazard Abatement District (GHAD) follows a review of Tasks 1-4 below.

TASK 1 – INITIAL PLANNING STUDIES - COMPLETE

These studies were summarized in the *Phase 1 Report* which was completed in mid-2010. These efforts investigated the project feasibility, estimated life cycle costs, and outlined the project entitlement process. They formulated the basis for the proposed project, provided necessary information of initiation of the project entitlement process, and formed the technical basis for the initiation of the Geologic Hazard Abatement District (GHAD).

TASK 2 – FIELD INVESTIGATIONS

The goal of this task is to perform the field investigations and studies required to advance the project design to the 30% stage to allow the TPOA to select an alternative for the Final Engineering and provide supporting documentation for the regulatory process.

Task 2.1 – Sand Source Research and Investigation Scoping – COMPLETE This task was also completed in mid-2010, and consisted of office research to identify potential sand sources for beach nourishment, and to provide instructions, a schedule, and the fee for completing the entire offshore investigation and sand source analyses.

Task 2.2 – Offshore Sand Source Investigation – A fairly extensive campaign of offshore sand source surveys was completed in June. The effort was initiated by a Phase 1 study that relied on the geophysical sub-bottom profiling to identify potential sources of beach quality sand. Based on these findings, the greatest promise of a viable source in terms of volume and proximity appeared to be right offshore. The Phase 2 vibracore sampling program was then developed and approved by the various resource agencies. Vibracore samples are collected in a tube that is vibrated into the seabed such that sediments over the full depth of the intended extraction area are tested (Photo 1). Over twenty samples of offshore sediments off Broad Beach and

Zuma Beach were gathered and tested to measure grain size and cleanliness. An example of a core sample is show in Photo 2.

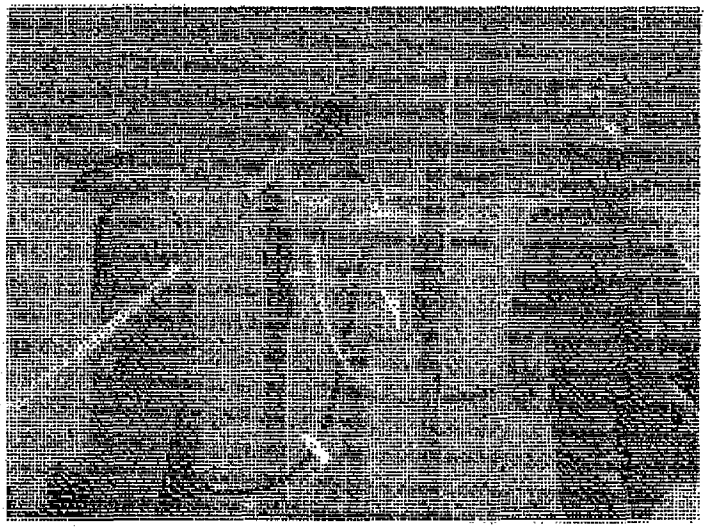


Photo 1 - Top of Vibracore Rig

Photo 2 - Example Vibracore Sample

Unfortunately, the Phase 2 vibracore investigation of the potential offshore sand sources did not produce the desired results – the sand grain size is just too fine and we have strong concerns about its longevity on your beach. The average grain size of all the samples taken off Broad Beach and Zuma are less than 0.2mm. We were hoping for at least 0.25mm to 0.3mm or greater. There is a direct correlation of grain size and beach fill longevity. For comparison, much of the existing beach grain size is in the 0.2mm to 0.4mm range. We want at least that for the beach fill, if not coarser.

We went back to the existing grain size data we have, and we feel there is strong promise for a higher quality sand source off Marina del Rey. Prior to our Phase 1 geophysical investigation, we felt this sand source held the most promise, as discussed in our initial sand source investigation report completed in Task 2.1. We have reviewed actual vibracore data from that site and the average mean grain size sampled throughout the area was 0.51mm. That is really great beach nourishment material.

In summary, we strongly recommend proceeding with another round of vibracore sampling off Marina del Rey. It should be noted that we will still strongly consider multiple sources of beach sand to develop an optimum project based on performance and cost. For example, we could use the finer local sand source to construct the dune restoration, and then use the coarser beach sand as your front line of defense against erosion.

Task 2.3 – Beach Profile Surveying in Spring and Fall Seasons – Coastal Frontiers Corporation surveys beach sand profiles in the spring and fall seasons at five locations along Broad Beach. The beach profiles extend from the landward extent of the dune out to a water depth of approximately 30 feet. This is the active beach zone that experiences both seasonal and annual shifts that are critical to quantify for design and regulatory purposes. These data are useful for tracking the movement of the position of the shoreline over time, and for estimating changes in beach sand volume over time and space when combined with the aerial photography analysis. Rates of sand loss from the beach or gains to the beach can be accurately estimated from these data. They are one of the most useful planning and design data sets, and will be the primary future monitoring requirement of several permit agencies. These semi-annual surveys have been undertaken since fall 2009; the next scheduled survey is fall 2011.

Task 2.4 – Biological Marine Habitat Survey of the Receiver and Borrow Site(S), and Baseline Sand Dune Habitat Assessment – Chambers Group is our team's marine biology subconsultant. To date, they have completed a survey of the marine biological habitat along Broad Beach, which will be the "receiver" site for beach nourishment material. The focus of their work was to document any sensitive intertidal resources such as rocky intertidal (especially tidepools) and surfgrass. Their work included a reconnaissance level survey of the nearshore area off Broad Beach in order to characterize the habitat and resources including giant kelp, palm kelp, feather boa kelp, surfgrass, eelgrass, and gorgonians. The nature of the substrate and approximate height of relief is also documented.

Their findings are generally good news – limited sensitive habitat issues are present. Only at the extreme west end of the project do we need to modify the initial design of the beach fill to avoid sensitive rocky habitat and surf grass. This issue is discussed in greater detail under Project Entitlement.

Our dune habitat consultant, WRA, has conducted surveys to characterize existing native dune habitat for the purpose of developing an initial constraints map for planning purposes. The purpose of their work is to provide descriptions of the on-site native

dune habitat, and report any sensitive species or other sensitive habitats (ESHA's). This information is required as part of the CDP application and for the EIR.

Task 2.5 –Bathymetric Survey of Borrow Sites – Once the offshore sand sources have been identified, hydrographic surveys of the preferred dredge borrow site and proposed dredge pipeline route(s) to the shoreline will be conducted. Multi-beam bathymetric sonar, side scan sonar, and magnetometer data will be obtained at the favored borrow site. The proposed dredge pipeline route(s) will be investigated with multi-beam bathymetric sonar and side scan sonar. The objectives of the borrow area surveys are to obtain detailed bathymetry suitable for final dredge plan design, search for and map hard bottom areas, and identify magnetic anomalies (obstacles, debris, and/or shipwrecks). The objectives of the dredge pipeline route surveys are to obtain detailed bathymetry along each route and to identify sea bottom characteristics (sand vs. rocky bottom). Resource agencies will want verification that no sensitive habitat will be impacted by the pipeline installation, operation and/or removal.

PHASE 3 – PROJECT ENTITLEMENT

Applications Submitted:	• Regional Water Quality Control Board (RWQCB) – Section 401C Certification • California State Lands Commission (CSLC) – Lease of State Lands
Applications Pending:	• California Coastal Commission (CCC) – Coastal Development Permit • US Army Corps of Engineers (USACE) – Sections 10 & 404 Permit

Regional Water Quality Control Board – The application was submitted in January 2011 and is in process. Discussion around whether the TPOA will have to pay the $40,000 fee for dredging is ongoing (and is linked to SANDAG's effort to have the same fee waived for their regional nourishment project in San Diego area). Some minor deliverables including a monitoring report and status of long term On-Site Wastewater Treatment (OSWT) management plan are still owed to the RWQCB to comply with emergency permit issued for revetment which should be submitted by the end of this month.

California State Lands Commission – This is the lead agency for California Environmental Quality Act (CEQA) purposes. They have selected the Environmental Impact Report (EIR) consultant and are initiating the EIR process. Regarding the lease agreement, authorization for dredging area will follow finalization of nourishment material sourcing process (material testing and results approval by EPA, USACE, and RWQCB).

California Coastal Commission – A condition of the Emergency Coastal Development Permit (ECDP) issued by the CCC for the revetment indicates that a complete regular Coastal Development Permit (CDP) application for the long term restoration project be submitted within 180 days of the ECDP issuance which is July 25, 2011. However, the CCC is willing to grant an extension since much of the delay has been outside of the TPOA control, such as the significant time required to finally identify the CSLC as the

lead agency under CEQA. Initially this was to be the City of Malibu and considerable effort was expended under that assumption.

The current game plan is to submit an initial incomplete CDP application by the July 25 date, to be followed by a complete application no later than November 7, 2011, which is the designated date the draft EIR is circulated for public review.

Key elements of the CDP application will be a detailed description of the proposed project with sufficient detail and technical support for critical project elements including, but not limited to:

- Duration of project including number of renourishments, including detailed description of physical "triggers" that would warrant the next beach nourishment
- Details and description of triggers for interim "backpassing" whereby beach sand within the project area at the eastern end would be recycled to the west to extend the economic life of the beach nourishment
- Description of the proposed lateral access and privacy buffer and how the limits may change as the public portion of the beach narrows
- Location of the revetment – remain in place or relocation landward – need strong defense to keep in place, including feasibility analysis of relocating leach fields.

US Army Corps of Engineers – Because the USACE permit process relies on the Water Board Permit, which is tied to the CEQA process, the TPOA has decided to hold off on submittal of this application until November 2011 when the draft EIR is available and the Water Board can progress further toward issuance. We may reconsider this and apply earlier if the USACE suggests earlier application to enable the NEPA process to be complete concurrent with the CEQA process. The goal is to have all permits in hand by June of 2012 so that bid advertisements can be distributed to the construction community.

Other Entitlements

Other entitlements such as those possibly of the County and the State Mining and Reclamation Board will occur per the current project schedule with the following modifications:

- City of Malibu – Will not be issuing a CDP but will be required to issue local authority approval of the project as part of the CDP application to the CCC and is scheduled to occur in November 2011, in coordination with the State CDP application and CEQA document distribution.
- California Department of Fish and Game (CDFG) – discussions will begin with CDFG the week of 7/18/11 to determine whether staff will require a streambed alteration agreement to be issued for the project due to the proximity of the project to the mouth of Trancas Creek.

PHASE 4 – PRELIMINARY ENGINEERING AND SCHEMATIC DESIGN

The following technical tasks are currently underway and will be used as technical support for the project in the EIR. These studies will be completed in August.

Task 4.1 – Evaluation of the Causes of Erosion – Preparation of a detailed Project Description for CEQA/NEPA depends on refinement of beach nourishment and re-nourishment quantities and frequencies that were based on findings of the Phase 1 study. The goal of this task is to determine the cause of the sand loss at Broad Beach to predict future nourishment and re-nourishment requirements, and to assess the potential need for sand retention. Not only will this be a requirement for the regulatory process, but it will all help guide the design of the shoreline protection project. The deliverable for this task will be a report, which will be summarized in the CEQA/NEPA documents and attached as an appendix.

Task 4.2 - 30% Engineering Design Of Project Elements – Initiation of CEQA and NEPA documents will require input from the coastal engineer about the sand dispersion from the project and alternatives. The marine biologist will assess these results and determine any potential impacts to habitat, and any potential mitigation requirements (such as a reef to offset burial of exposed rock near the west end). Project components are assumed to include dredging, beach fill, dune creation, and revetment details. Specific deliverables will include a modeling summary report, project plan views and cross-sections, material quantity estimates, and our preliminary opinion of probable construction costs. This task is separated into the following elements:

A. *Numerical Modeling of the Performance of the Beach Fill (Plan)*
B. *Numerical Modeling Of Cross-Shore Beach Response to Storms*
C. *Estimate of Renourishment Rates and Frequencies*
D. *Prepare 30% Design Documents Provide Opinion of Probable Construction And Maintenance Costs For Planning And Budgeting*
E. *Refine and Finalize the Project Description for Permitting and Environmental Review*

GHAD STATUS

The TPOA continues to move forward with the creation of the GHAD to handle the long-term funding of the project. In recent weeks, we submitted to the City of Malibu petitions signed by the vast majority of property owners within the proposed GHAD. Many thanks to all of the property owners who signed petitions in favor of the creation of the GHAD. The City of Malibu has accepted our petitions and started the City Council process for creating the GHAD. On August 8, 2011, the City Council will receive an update from the City's Planning staff on the accepted petitions and set a date approximately 20 days into the future for the City Council's actual vote on the creation of the GHAD. City staff has informed us that the Council will NOT actually consider the GHAD on August 8, but will simply affirm the acceptance of the petitions and set a future date for consideration of GHAD creation. City staff currently believes that the City Council will consider the actual creation of the GHAD at either its August 29 or September 12 meeting. The TPOA will keep all property owners informed of the City process.

Assuming that the City Council favorably considers the Broad Beach GHAD proposal and creates the assessment district, the GHAD Board must then meet and pass a resolution accepting the GHAD's Plan of Control, hold a public hearing on the proposed GHAD assessment, and conduct the GHAD property owner vote on the proposed GHAD assessment.

The GHAD must provide at least 45 days notice for the hearing. We anticipate this process will be completed by the end of Spring 2012.

EXHIBIT "B"

STATE OF CALIFORNIA – NATURAL RESOURCES AGENCY EDMUND G. BROWN, JR., *Governor*

CALIFORNIA COASTAL COMMISSION
SOUTH CENTRAL COAST AREA
89 SOUTH CALIFORNIA ST., SUITE 200
VENTURA, CA 93001
(805) 585-1800

May 12, 2011

Crystal Spurr
Staff Environmental Scientist
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

RE: Notice of Preparation (NOP) of Draft Environmental Impact Report (DEIR) for a 4,100 linear ft. rock revetment and beach nourishment project at Broad Beach; described in the notice dated April 15, 2011, as the "Broad Beach Restoration Project"

Dear Ms. Spurr:

Commission staff has reviewed the NOP for the DEIR dated April 15, 2011, and we appreciate the opportunity to provide comments for your consideration. The project involves permanent authorization of an "as-built" 4,100 linear ft. rock revetment consisting of 33,000 tons of rock rip rap that will be located seaward of 77 existing beachfront homes and implementation of a beach nourishment program along Broad Beach within the City of Malibu, Los Angeles County.

The proposed project is in follow-up to the Emergency Coastal Development Permit (CDP) 4-10-003 issued by the Executive Director of the Coastal Commission on January 25, 2010, for the installation of a ***temporary*** 4,100 linear ft. rock revetment consisting of 33,000 tons of rip rap on the sandy beach seaward of 77 existing beachfront residences at Broad Beach. The Emergency CDP granted temporary authorization for the rock revetment until January 25, 2013 (the Executive Director may extend this time by an additional two years for good cause). Thus, the applicant must either remove the temporary emergency revetment in its entirety or obtain a regular coastal development permit for its permanent authorization. Moreover, any application for a coastal permit for any form of permanent shoreline protection on site (such as the as-built revetment) must include a full evaluation of all other feasible alternative forms of shoreline protection that would serve to minimize adverse impacts to coastal resources. Such alternative forms of permanent shoreline protection would include, but not be limited to, construction of a vertical sea wall and/or relocation/removal of some or all portions of the revetment to the furthest feasible landward location in order to minimize adverse impacts to coastal resources.

At this preliminary stage, Staff is not prepared to make conclusions regarding alternatives until they have been fully evaluated and the subject application is before us. We anticipate that the EIR will provide a complete analysis that will accommodate our information needs. However, in the interest of early feedback, based on our review of the notice and familiarity with the subject site, we offer the following comments:

Project Description Clarification:
The project description, as described in the notice, must be clarified to identify that a primary component of the proposed project includes the request for permanent authorization of the "as-built" 4,100 linear ft. rock revetment on site. Although the notice states that the project includes "burying of an existing temporary emergency revetment", it does not clearly identify that the revetment on site is a temporary structure only and that permanent authorization of the shoreline protection device is now proposed. Pursuant to the terms and conditions of the above referenced emergency coastal permit, it is important to note that the temporary revetment on site must be removed in its entirety if permanent retention is not authorized pursuant to a new coastal development permit. This clarification is critical to ensure that the EIR includes an accurate description of the baseline of existing site conditions and to ensure that an accurate evaluation of the project's long-term adverse impacts (including both short-term and long-term adverse impacts resulting from the rock revetment) are evaluated.

Baseline Conditions:
The EIR should evaluate the impacts of each alternative relative to the shoreline that would exist if the proposed 4,100 linear ft. rock revetment was not present. Since the proposed project includes the request for permanent authorization of the temporary revetment, the baseline description of the subject site should not include the existing, "as-built", temporary rock revetment since it would not provide useful information regarding the impacts of the revetment and would preclude meaningful analysis of alternatives to the proposed permanent retention of the as-built temporary rock revetment. All alternatives must be considered from the same baseline. Therefore, since the existing revetment was authorized on a temporary basis only; it should not be considered as a permanent structure on the subject site for the purpose of establishing the baseline or existing site condition.

Identification and Analysis of Impacts:
Impacts related to the initial construction and permanent retention of the 4,100 linear ft. temporary rock revetment consisting of 33,000 tons of rip rap should be evaluated as part of the proposed project. This evaluation should include analysis of the long-term effects of the revetment on shoreline sand supply and coastal processes, public access and recreation, visual resources, and sensitive dune habitat and beach habitat. Moreover, the analysis should evaluate the effects of sea level rise relative the proposed rock revetment and beach nourishment project in order to adequately assess potential impacts.

Coastal Act Section 30235 acknowledges that seawalls, revetments, and other such structural or "hard" methods designed to forestall erosion also alter natural landforms and natural shoreline processes. Accordingly, Section 30235 limits the construction of shoreline protective works to those required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion. In this case, the NOP does not include any analysis that permanent shoreline protection is necessary to protect existing structures on site, particularly in relation to the proposed beach

nourishment component of the project. Thus, it is critical that the DEIR fully evaluate the need for permanent shoreline protection on site.

Shoreline protection devices, such as the proposed 4,100 linear ft. rock revetment, directly interfere with public access to tidelands by impeding the ambulatory nature of the mean high tide line (the boundary between public and private lands) during high tide and severe storm events, and potentially throughout the entire winter season. As the shoreline retreats landward due to the natural process of erosion, the boundary between public and private land also retreats landward. Construction of rock revetments and seawalls to protect private property fixes a boundary on the beach and prevents any current or future migration of the shoreline and mean high tide line landward, thus eliminating the distance between the high water mark and low water mark. As the distance between the high water mark and low water mark becomes obsolete the seawall effectively eliminates lateral access opportunities along the beach as the entire area below the fixed high tideline is inundated. The ultimate result of a fixed tideline boundary (which would otherwise normally migrate and retreat landward, while maintaining a passable distance between the high water mark and low water mark overtime) is a reduction or elimination of the area of sandy beach available for public access and recreation.

However, our staff notes that the NOP does not include any discussion or analysis of these above referenced potential adverse impacts to coastal resources that would result from the proposed rock revetment. Thus, since shoreline protection structures, such as the proposed revetment, result in a variety of adverse impacts on coastal resources, including adverse effects on sand supply, public access, coastal views, natural landforms, and overall shoreline beach dynamics on and off site, ultimately resulting in the loss of beach, it is critical that the DEIR fully evaluate the impacts to coastal resources that will result from the proposed revetment.

The proposed project also includes the placement of 600,000 cu. yds. of sand material on the beach at the project site for the purpose of beach nourishment but the NOP does not indicate whether beach nourishment activities would be limited to this one-time event or if the beach nourishment activities would continue with supplemental nourishment operations over a longer period of time in order to maintain a target beach width. The NOP indicates that the beach on site is losing approximately 35,000 cu. yds. of sand per year due to erosion. In respect to the ongoing beach erosion on site, the NOP concludes "[s]ince the sand loss rate in the Broad Beach area could average 35,000 cubic yards per year, it is anticipated that the Project maintenance would require placing high quality beach material on the Project site within the next 20 years.

However, it is not clear whether additional beach nourishment operations are proposed as part of this project. Although the proposed one-time placement of 600,000 cu. yds. of sand material would initially cover the rock revetment, our staff notes that as shoreline erosion continues to occur after the initial placement of sand material, it is likely that the beach would likely be eroded back to the proposed revetment or seawall. If the revetment becomes exposed, at some point in the future, it would also be subject

to wave action and result in significant adverse impacts to coastal resources. Moreover, the analysis should evaluate the effects of sea level rise relative the proposed rock revetment and beach nourishment project in order to adequately assess potential impacts. Thus, for the above reasons, it is important that the DEIR identify the duration of beach nourishment operations and specify what supplemental beach nourishment activities will occur after the initial placement of sand as part of the proposed project in order to fully evaluate the potential long-term adverse impacts that would result from the proposed 4,100 linear ft. rock revetment

In addition, the NOP indicates that the donor site for sand material has not yet been determined but that several different alternative locations, including both on and offshore sites, have been identified as potential sites. When the donor site is chosen, then biological resource surveys and sediment testing of the site should include: (1) grain-size, color, and chemical/contaminant analysis to determine that the dredge material would be compatible with the receiver sites' existing sediments consistent with the guidelines specified by the U.S. Army Corps of Engineers (ACOE) and (2) biological surveys which indicate that the subject dredge area would not constitute environmentally sensitive habitat area (ESHA) and would avoid significant disruptions to marine biota to the maximum extent feasible. In addition, potential impacts to shoreline and intertidal species at the receiver site should also be fully evaluated. The DEIR should also include a detailed analysis of surfing impacts from both the proposed sand excavation and the proposed sand placement.

Further, portions of the as-built revetment have been constructed within several recorded lateral public access easements. However, the NOP does not include any discussion or analysis of the adverse impacts to public access and recreation that will result from the proposed rock revetment. Although the proposed one-time placement of 600,000 cu. yds. of sand material would initially cover the rock revetment, our staff notes that as shoreline erosion continues to occur after the initial placement of sand material, it is likely that the beach would likely be eroded back to the proposed revetment or seawall.

Thus, it is important that the DEIR fully identify all adverse impacts to public access and recreation and evaluate potential mitigation measures to offset these adverse impacts. Further, the analysis should address the potential for impacts to occur in the event that the beach nourishment program fails to establish a wider beach or in the event that the rock revetment becomes temporarily or permanently exposed to wave action resulting in a substantially more narrow beach. Under high tide events, it is possible that all portions of the sandy beach would become impassable to pedestrians due to the obstruction of the revetment. The DEIR analysis should include, but not be limited to, an evaluation of such potential mitigation measures as providing a uniform lateral public access easement over the entire reach of the project site from the mean high tide line to the base of the rock revetment. During conditions when the revetment would be covered in sand, then it would be appropriate to provide lateral public access to the toe of the dunes, if the dunes were located further landward than the revetment. Additional mitigation measures should be evaluated to ensure that public access to and along the

coast is maintained, including the provision of a public trail along the top of the revetment that would be available for public use in the event that during such conditions when the sandy beach is not passable due to inundation.

Alternatives Analysis:
Section 30235 of the California Coastal Act provides that shoreline protective devices may be permitted only when both of the following two criteria are met: (1) the device is required to serve coastal-dependent uses or to protect existing structures or public beaches provided that these areas/structures are in danger from erosion and (2) the device is designed to eliminate or mitigate adverse impacts on local shoreline sand supply. The Coastal Act provides these limitations because shoreline structures can have a variety of adverse impacts on coastal resources, including adverse effects on sand supply, public access, coastal views, natural landforms, and overall shoreline beach dynamics on and off site, ultimately resulting in the loss of beach.

In this case, the NOP did not include an evaluation of the need for permanent shoreline protection to protect the existing residential development on site. Moreover, the NOP identified only a limited range of alternatives to the proposed revetment including: (1) retention of the as-built revetment, (2) adding more rock to the as-built revetment, (3) construction of an artificial reef with beach nourishment, and (4) the "no project" alternative. Thus, it will be critical that the DEIR include both: (1) a full evaluation of both the need for permanent shoreline protection along all sections of the project reach where the revetment is proposed and (2) a complete evaluation of all feasible alternatives to permanent retention of the as-built temporary revetment that would serve to reduce adverse impacts to coastal resources to the maximum extent feasible.

The alternatives analysis should include an evaluation of all alternatives that would allow for a shoreline protection device on site to be located as far landward as feasible and designed in a manner that would minimize adverse impacts to coastal resources. The alternatives to be evaluated should include, but not be limited to: beach nourishment with no permanent shoreline protection device; relocation of the revetment to a further landward location; landward relocation of the downcoast portion of the revetment where the beach is wider; and the use of a vertical seawall in order to minimize the footprint of the structure on the sandy beach. Specifically, since a seawall option would be viable for this beach area, the long-term option of placing a vertical wall further inland of the proposed location for the rock revetment (including installation of a wall immediately seaward of the residences to be protected) should be considered as an option in conjunction with the proposed beach and dune restoration. The beach nourishment and dune restoration could still be constructed, as planned, but with the seawall as the last line of defense instead of the revetment.

In addition, where segments of the revetment or vertical seawall may be necessary because an on-site septic system/leach field is located on the sandy beach seaward of an existing residence, alternatives should be evaluated that would include relocation of septic systems to further landward locations and/or landward of the residence in order to allow for the furthest landward location of the revetment or vertical seawall. Further,

alternative methods of sewage disposal that would eliminate the need for on-site septic systems/leach fields on individual beachfront lots, such as, but not limited to, a use of a single sewage package treatment plant that would serve all the homeowners within the project area should be evaluated. Moreover, the removal of existing private patios, private landscaping, lawns, and accessory structures located on the sandy beach seaward of these residences would allow for the construction of a shoreline protection device in a further landward location than the proposed revetment while still protecting the primary residence on each site. Thus, the DEIR should fully evaluate all feasible alternatives to the proposed revetment in its as-built location, including but not limited to, the above referenced alternatives.

Public Lands:

As discussed above, portions of the proposed "as-built" revetment have been constructed within several recorded lateral public access easements, which would otherwise be available for public use. Moreover, it appears that the rock revetment is located on, or at least partially, on state tide lands. Since the proposed development will be located partially, or wholly, on public lands, the DEIR should address the public's right to access public lands and the public's ownership rights. In particular, it should be clearly stated that in the event that the proposed beach nourishment program is successful in creating a widened beach within the project area as a result of placing fill on public trust lands, including sand for the purpose of beach nourishment, then those new areas of beach would be public lands available for public use and would not be subject to private ownership interests.

I hope this information will assist the California State Lands Commission in completing its EIR and in the applicant's subsequent submittal of a CDP application to the Commission pursuant to the requirement of Emergency CDP 4-10-003-G.

Sincerely,

Steve Hudson
District Manager

EXHIBIT "C"

Broad Beach Restoration Project

Coastal Development Permit
Project Description
FINAL

PREPARED FOR:

TRANCAS PROPERTY OWNER'S ASSOCIATION

PREPARED BY:

moffatt & nichol

3780 KILROY AIRPORT WAY, SUITE 600, LONG BEACH, CA 90806

JANUARY 2011

JOB NO. 6935

1. INTRODUCTION

Broad Beach is located in the northwest portion of the County of Los Angeles and within the City of Malibu. The project area is comprised of the shoreline area fronting approximately 80 homes spanning approximately from Lechuza Point to Trancas Creek. Broad beach has been suffering shoreline erosion over the past 30 plus years, resulting in an almost complete loss of recreation and public access. Public access through dedicated public access ways from Broad Beach Rd. to the beach was rendered impossible during the most severe storms and tidal action over the past few years. The severe erosion problem now threatens private property and dune fields along this stretch of beach.

The Trancas Property Owner's Association (TPOA), representing almost all of the property owners along the Broad Beach shoreline, has elected to address the extensive erosion by privately funding a beach and sand dune restoration project which will not only protect their homes but also restore the beach to its historic grandeur not only for their benefit but for the benefit of the public at large. The Broad Beach restoration project seeks to design, permit, and implement a shoreline restoration program that provides erosion control, property protection, improved recreation and public access opportunities, aesthetics, and dune habitat.

The vicinity and location of the project site are shown below in figure 1.

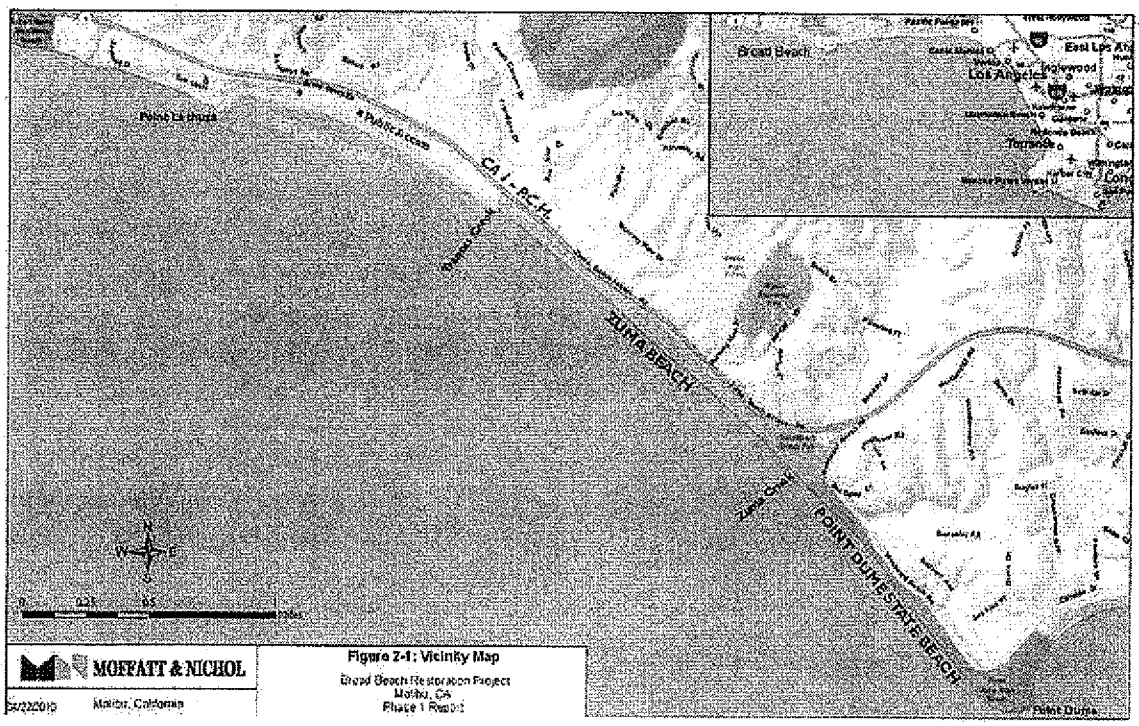


Figure 1 – Broad Beach Restoration Project Location

2. BACKGROUND

Development along Broad Beach began in the 1930s, consisting of small beach cottages. Given the limited infrastructure available, septic systems and leach fields were typically installed in or close to the sand dunes seaward of the residences. As construction continued and the site was further developed, most leach fields remained.

The Broad Beach shoreline is retreating because of a negative sand balance due either to a reduction in sand supply entering around Lechuza Point, or a change in the alongshore component of wave energy that increases the amount of sand leaving the beach near the vicinity of Trancas Creek. Between 1974 and 2009, approximately 600,000 cubic yards (cy) of sand was lost at Broad Beach, a majority of which has moved east to nourish Zuma Beach. On average, the shoreline moved inland 65 feet during that time period. The greatest beach recession occurred close to Lechuza Point and tapered off toward Trancas Creek. Since the sand budget turned negative in 1974, the Broad Beach loss rate has accelerated to approximately 35,000 cubic yards per year during the last 5 years. However, evidence suggests that this annual loss rate could be significantly higher owing to wave behavior and/or storm events and could reach up to 60,000 cubic yards per year. Currently, Broad Beach is a very narrow ribbon of sand visible primarily at low tide but inundated at high tide.

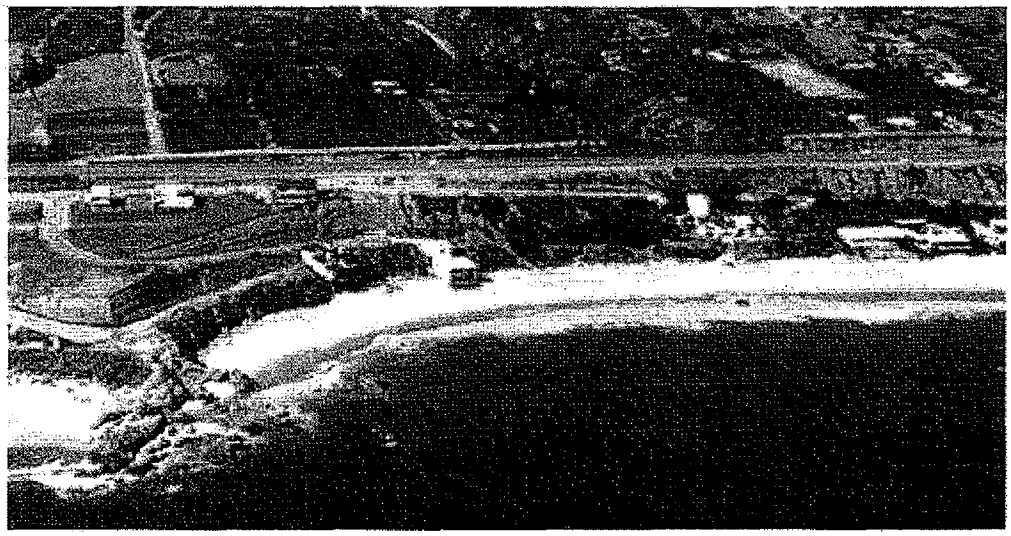


Figure 2 - 1972 Aerial Photo (California Coastal Records Project, 2009)

Figure 3 - 2009 Aerial Photo (California Coastal Records Project, 2009)

3. EMERGENCY REVETMENT

High erosion rates during the 2009-2010 winter season and widespread failure of then existing temporary emergency sandbag revetments necessitated permitting and construction of a temporary emergency rock revetment by the TPOA. This revetment was considered the minimum action necessary and the least environmentally damaging alternative to implement the interim shore protection required to halt the critical erosion and protect residential structures and septic systems. Specific elements of the temporary rock revetment included:

- Filter fabric to eliminate loss of dune material through voids in the stone matrix;
- Reduced armor size (1/2 to 2 ton) stone to allow for faster construction;
- Shallow toe elevation for improved constructability.

Figure 4 below shows a typical design cross section for the emergency revetment.

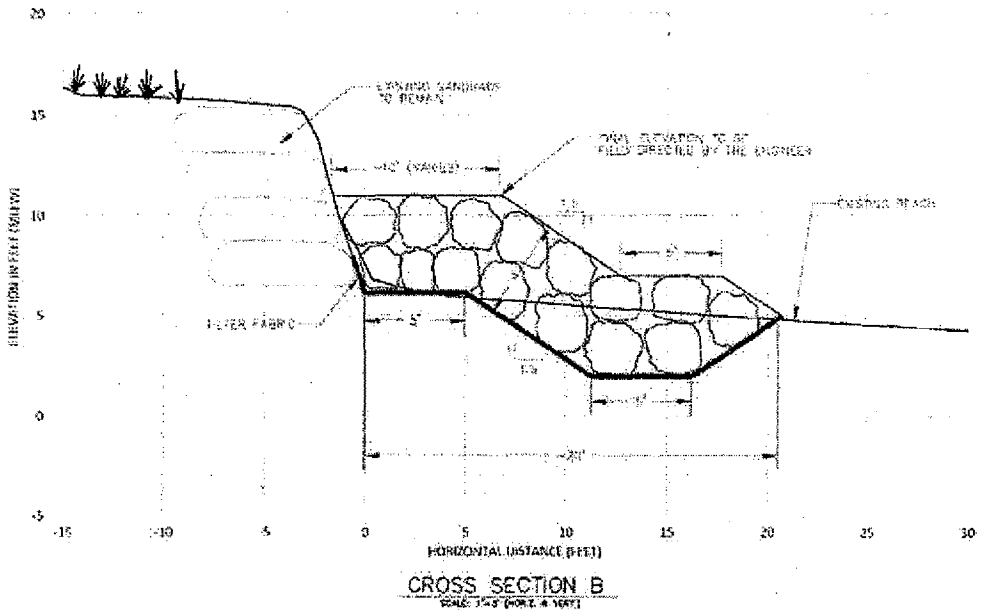


Figure 4 – Typical Revetment Design Cross Section

In total, approximately 77,000 tons of rock were placed along Broad Beach in front of homes located between 30760 and 31346 Broad Beach Road. The rock, each piece weighing between ½ and 2 tons, was placed on top of a filter fabric layer and reaches an average elevation of +13 feet mean lower low water (MLLW). In accordance with permits issued by the California Coastal Commission (CCC) and City of Malibu, homes between 31302 and 31346 Broad Beach Road received a more robust rock revetment design and larger rock (up to 4 tons per rock). The project also involved redesigning the two current public access ways to include stairways over the revetment and onto the beach to provide continued and enhanced vertical public access to the shore. Construction of the revetment began on February 17th 2010 and ended on or about April 15' 2010. Complications associated with construction of the western access stairway has resulted in its construction ending in early December 2010.

It should be noted that the property owner at 30822 Broad Beach Rd opted not to participate in the revetment project and so a break in the continuity of the revetment occurs in front of this property. Drawings 3-a and 3-b in Appendix A, Preliminary Plan Set, depict graphically the final footprint of the revetment as measured on November 10th 2010. The western portion of the revetment is represented by the green outline in drawing 3-a while the eastern portion is shown in drawing 3-b.

Emergency Revetment Permits

Permits required for the construction of the emergency revetment are as follows:

City of Malibu
Coastal Development Permit No. 09-021
Engineering Permit No. 10-002

California Coastal Commission
Coastal Development Permit No. 4-10-003-G

U.S. Army Corps of Engineers
Sections 10 and 404 Permit File # 10-003 No. 2009-00979-PHT

Regional Water Quality Control Board (LA Region)
Section 401C Water Quality Certification No. 2009-00979-PHT

Los Angeles County
Dept. of Beaches and Harbors Permit No. RE-043-09
Dept. of Beaches and Harbors Permit No. RE-029-10

State Lands Commission
Lease of State Lands

Caltrans
Encroachment Permit No. 710-6TK-0146

4. LONG TERM PROJECT APPROACH

Under Coastal Development Permit No. 09-021 issued by the City of Malibu for the emergency revetment, Condition 2 states that a follow-up permit for the rock revetment must be submitted. The longer term project now incorporates that emergency revetment into its design and so this permit application seeks approval to have the emergency revetment become a permanent and integral part of the longer term shore restoration effort.

The TPOA Broad Beach Restoration Strategy constitutes a holistic approach including enhanced beach access for the public, protection of private property for the homeowners and restoration of valuable dune habitat. This approach, which

must be built on property owner, community, stakeholder and regulatory agency consensus, aims to solve the beach erosion problem for today and into the future. Components of the approach are: 1) sand nourishment, 2) appropriate shoreline protection (rock revetment), and 3) dune restoration.

1. **Sand Nourishment**

The primary element of the shoreline protection and enhanced public access would be through an ongoing beach nourishment project. Beach nourishment serves as a primary element of the Broad Beach Restoration strategy. The TPOA seeks to restore Broad Beach with significant "dry" sand between the dune system and the shoreline.

The TPOA and its consultant Moffatt & Nichol has focused a significant amount of its recent Broad Beach work on the sediment transport characteristics of the Broad Beach area and surrounding region, to understand the scope and scale of a beach nourishment project that could meet the long term goals of the project at a definable cost. These efforts have included detailed analyses of beach profiles and surveys, wave data and historic shoreline positions. An extensive collection of ortho-rectified aerial photographs have been acquired, digitized and analyzed to develop an extremely valuable data set of historic mean high tide line positions from 1946 until the present. These data combined with historic wave data and modeling of longshore sediment transport have allowed the TPOA to estimate the most probable range of sand loss rates for the Broad Beach area. This information is being directly applied to the design of an ongoing beach nourishment project.

Research findings show that the sand loss rate in the Broad Beach area can reach 60,000 cubic yards per year. In addition to the natural shore protection benefit afforded by a widened beach, the general public would also directly benefit through enhanced and unprecedented access and related recreational opportunities.

The City of Malibu and the public will garner significant benefits from the proposed beach nourishment project. Without implementation of the proposed restoration strategy, the shoreline is expected to continue to erode. Our investigation of historic shoreline erosion patterns indicates that beach losses may be progressing downdrift toward Zuma Beach and beyond.

2. **Revetment**

As part of the long term strategy for protection of private property, the emergency revetment placed in 2010 will be buried in the landward edge of the widened,

nourished beach. This shore protection would remain buried unless severe beach erosion or other conditions preclude maintaining sufficient beach width for protection. The revetment would serve as a last line of defense against future severe erosion during extreme storm events.

3. Dune Restoration

The restoration project also intends to protect and enhance the existing coastal dune system. Benefits include restoration of this important habitat with a reservoir of sand in the case of severe future erosion.

Figure 5 below shows in cross section how the restored beach and dune system would look. Drawing 8 in the accompanying plan set in Appendix A represents the vision of a post-restoration Broad Beach in plan view.

Figure 5 – Cross Section of Final Beach and Dune Restoration

Shoreline Change and Sediment Transport Rates

In determining the amount of material required to adequately restore the diminishing shoreline to its general 1970's dimensions, detailed sediment transport rate analysis was conducted based on shoreline position analysis, profile change analysis and known transport rates in the region. A crucial step in estimating sediment transport rates is the application of a relationship between shoreline position and sand volume. In the Broad Beach Restoration Project Phase 1 Report prepared by Moffatt & Nichol in coordination with Everts Coastal (included herewith as Appendix C) the shoreline positions and change rates were converted to volumetric transport rates. Figure 6 below shows the average Broad Beach shoreline change relative to 1946 while Figure 7 shows the volumetric changes for the full 63 year data record.

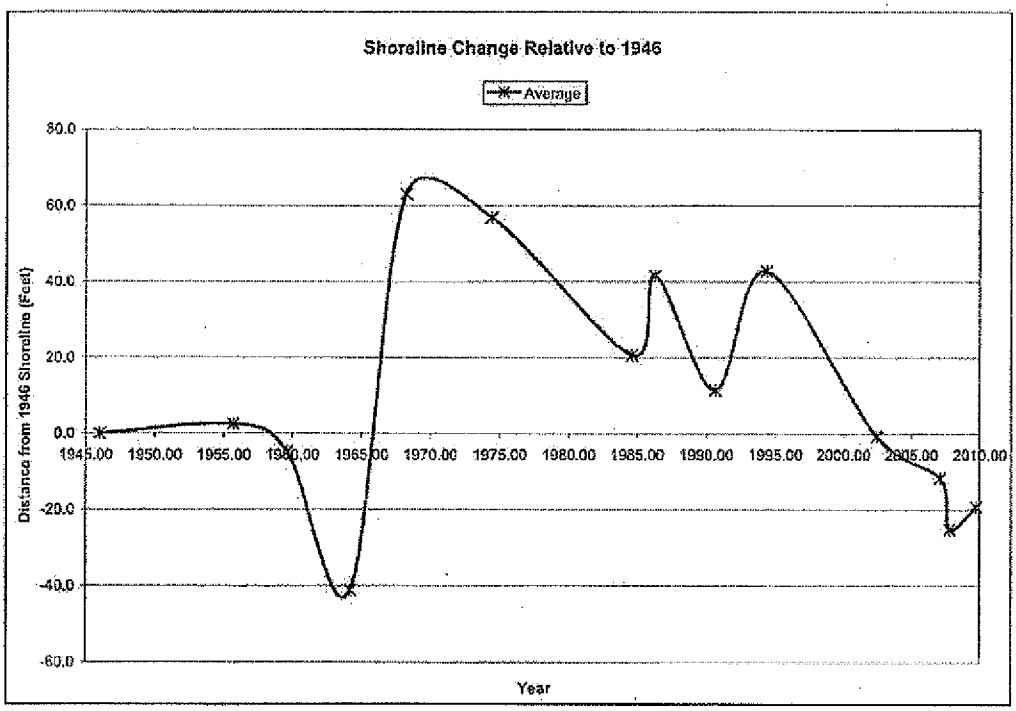


Figure 6 - Average Broad Beach Shoreline Change

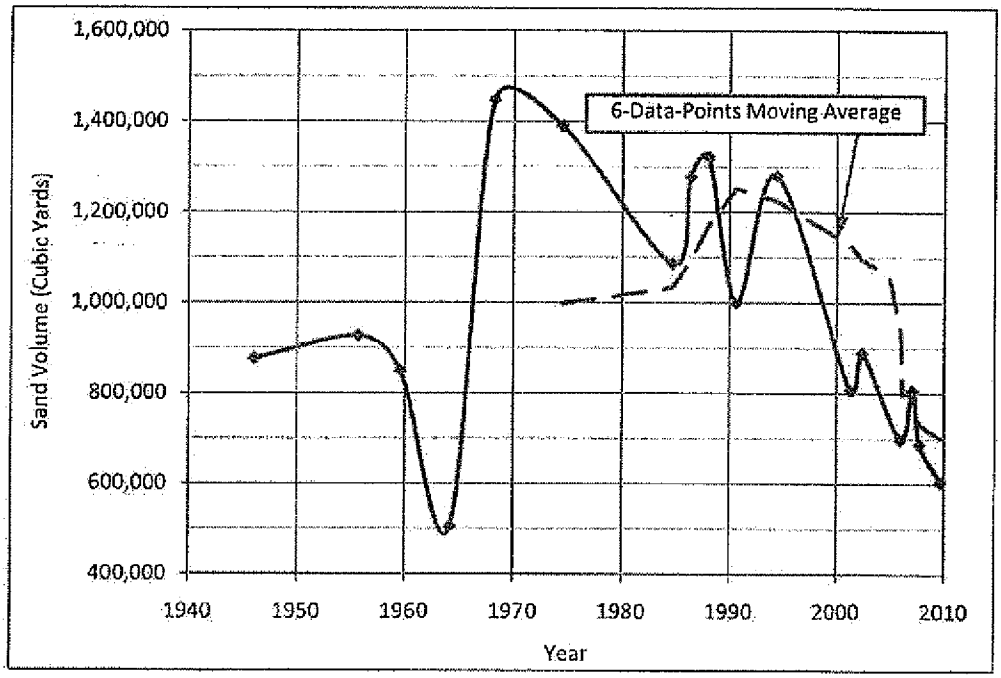


Figure 7 - Volumetric Changes, 1946-2009

Project Design

Imported beach quality material will be placed over the existing revetment to create a restored dune. The dune elevation will be approximately +20 ft MLLW at its highest point and will have a crest width of 50 ft. In areas where the constructed dune abuts existing dune on the landward side, it will meet or exceed the elevation of the existing dune thus providing protection for any existing dune habitat. In areas where the constructed dune abuts lower lying non dune private properties, the dune will slope landward for 10 to 20 feet in a 3:1 slope (ratio of horizontal: vertical dimensions). On the seaward side of the dune, the slope will also be 3:1 and will extend for between 16 and 20 ft. The seaward dune slope will meet the design beach height of approximately from 12 to 14 ft MLLW. The new beach will measure 100 ft in width and will slope seaward for approximately 70 ft at a 5:1 slope.

It is estimated that the total project area footprint incorporating beachfill, dune material and dune buffer will cover 1,821,000 ft^2.

Based on the aforementioned shoreline position and sediment transport analysis, it is estimated that a total of 600,000 cy is the anticipated amount of beach material required for this restoration project. This volume of material will meet the

design beach width of 100 feet as well as the restored dune height of +20 feet MLLW and width of 50 feet. The anticipated project footprint in plan view is provided in drawings 1-a and 1-b while a typical cross section view is provided as drawing 2 in the accompanying Preliminary Plan Set enclosed herewith as Appendix A.

Permits Required for Long Term Project

The following permits are required for the construction of the long term shore and dune restoration project

Table 1 – Permits Required for Long Term Project

Level of Government	Permit Name	Issuing Agency
Local	Coastal Development Permit	City of Malibu
Regional	Section 401C Water Quality Certification	Regional Water Quality Control Board (LA Region)
State	Lease of State Lands	State Lands Commission
	Coastal Development Permit	California Coastal Commission
Federal	Sections 10 and 404 Permit	U.S. Army Corps of Engineers

The County of Los Angeles may also need to issue a Department of Beaches and Harbors permit and Caltrans an Encroachment Permit as were required for the emergency revetment project. It is the intention of TPOA and their agents to work closely with the agencies in order to ensure the permitting process unfolds in a timely and effective manner.

4. ALTERNATIVES

An initial planning study was conducted to determine the basic physical parameters for the site and to develop a clear basis of design that will help direct the project development and entitlement effort. Project alternatives were developed at a concept-level to estimate costs and benefits, and to provide a basis for the project entitlement and environmental review process.

Shoreline management options considered as part of the overall restoration strategy include:

- Managed retreat, wherein residential structures and other facilities that are damaged or endangered by continuing erosion are relocated or abandoned;
- Construct a structure, such as a seawall or revetment, to limit the continuing damage or threat of damage; or
- Initiate a program of periodic beach nourishment to provide the desired level of protection, perhaps in conjunction with dune habitat restoration and hard structures either onshore or offshore. Any nourishment activities at Broad Beach would also benefit Zuma Beach and shorelines further east, at no cost to the public.

The results of a preliminary screening analysis identified three alternatives as viable candidates for the long term restoration of Broad Beach:

Alternative 1 - Beach Nourishment and Dune Restoration with Buried Temporary Revetment

This alternative will form the primary focus of the analysis moving forward based on the fact that the emergency revetment has already been permitted (on an emergency basis) and placed.

Alternative 2 – Beach Nourishment and Dune Restoration with Buried Long-Term Revetment

The emergency revetment that was constructed this past winter was designed with the intent that it could be augmented in the future with one or two outer layers of properly sized armor stone. While it is acknowledged that the revetment is intended to remain buried within the maintained beach nourishment, there may be occasions in the future when a major

storm or series of storms hit at a time when there is sufficient surplus of sand on the beach to protect property.

Alternative 3 – Alternative 1 or Alternative 2 Augmented with Sand Retention Reefs

This alternative will continue to be analyzed in an effort to reduce future beach nourishment requirements, enhance the nearshore environment and provide improved surfing conditions. It will be considered as a stand-alone project that could be added on to any of the other beach nourishment alternatives. It is widely held that this option would require extensive studies and a very compelling argument to be permitted.

More detail is provided on project alternatives in the accompanying Phase 1 Report attached to this application as Appendix C.

5. SAND SOURCE INVESTIGATION

Two main types of sand sources exist - one from the offshore ocean, and the other from the upland. Typically offshore ocean sand sources can provide high quality marine sand at a relatively low overall cost, with minimal environmental impact. Upland sediment sources can also provide sandy beach compatible material, which may be more immediately available than offshore sand, but which may also lead to increased impacts and costs from trucking. Upland sand is typically found behind dams, at quarries, at flood control sites in rivers and detention basins, and at certain alluvial deposits.

A sand source investigation has been initiated to identify viable sources of sand for beach nourishment, followed by the appropriate sampling and testing programs to verify acceptability and compatibility. The investigation identified the sources to be analyzed further to confirm their candidacy. The results of a preliminary investigation based on existing data and studies were compiled into a report completed in June 2010 and titled the Sand Source Investigation Report. This report is included herewith as Appendix D.

The initial sand source investigation has identified a number of offshore sites which may yield material compatible with Broad Beach material. Permitting to collect samples of this material is currently in process and is expected to be completed by early 2011. Drawings 6 and 7 in the accompanying plan set in Appendix A show existing and candidate offshore sand source sites.

6. CONSTRUCTION METHODS / DESIGN FEATURES TO AVOID IMPACTS

It is anticipated that the majority of the material required for beach and dune restoration will come from offshore sources and will be pumped directly onto the beach. This will greatly limit the amount of material to be trucked in. It is possible that the only material to be brought to the beach via truck will be inland material deemed suitable for capping dune habitat and it would roughly amount to less than 50,000 cubic yards.

This section is intended to provide a clear understanding of how sand would be dredged, delivered to the receiver site, and then manipulated to be suitable for public use. It also identifies the design features/specific methods to be incorporated into final design or the contractor's specifications to avoid significant impacts and minimize potential adverse impacts.

Construction would consist of:

1. Dredging the offshore borrow sites with either a hopper dredge or cutterhead suction dredge
2. Transporting the sand via hopper to Broad Beach which would connect with floating/submerged discharge lines outletting on the beach (use of booster pumps as necessary)
3. Discharging the sand at Broad Beach within training dikes
4. Redistributing the sand as needed with earthmoving equipment, such as scrapers, and grading the beach fills to required dimensions with bulldozers.

Dredging Operations

Beach replenishment operations would include the use of dredge vessels, which would dredge sediment from the offshore borrow sites and transfer the sediment to the proposed receiver site. The contractor may use one of two types of dredge vessels, a hopper dredge or a cutterhead suction dredge; both are described below. Regardless of the dredge type, the U.S. Coast Guard would post a *Notice*

to Mariners with the coordinates of dredging activity so that ocean users can avoid the activity.

For both dredge vessels, discharge lines would have to be placed in the ocean. Some portions of these lines would be floating. The floating portion of the dredge discharge line would be marked and lighted for navigation safety and a *Notice to Mariners* would be issued through the U.S. Coast Guard. The discharge line would be trucked or floated in segments to the appropriate placement locations and assembled using cranes and other equipment. The line may be a combination of plastic high density polyethylene (HDPE) and steel materials, depending on need and availability, and would be approximately 30 inches in diameter.

Hopper Dredge

The hopper dredge is a self-contained vessel that loads sediment from an offshore borrow site, then moves to a receiver site for sand placement. The hopper dredge contains two large arms that have the ability to drag along the ocean floor and collect sediment. The drag heads are about 10 feet square. The hopper dredge moves along the ocean surface with its arms extended, making passes back and forth until its hull is fully loaded with sediment. The vessel can hold approximately 2,000 to 5,000 cy of sediment per load.

The hopper dredge can be located just offshore of each site, as it can generally reach within approximately 0.5 mile of shore to offload. No booster pumps are needed as the hopper dredge connects to a floating or submerged pump line from shore. The vessel then pumps a slurry of sediment and sea water onto the receiver site. Submerged lines are encased by several large tractor tires to minimize abrasion of the ocean floor or reefs.

The hopper dredge can also connect to a floating platform called a mono buoy, which is used to interconnect the floating pump line with a steel sinker pipeline that would run the rest of the distance to the beach. The mono buoy is generally anchored to the seabed at an appropriate depth and location to serve the project needs, depending on locations of sensitive resources and engineering considerations. For this project, the mono buoy would be anchored in at least 25 feet of water. The permit would include conditions to avoid sensitive resources such as kelp, reefs, and structures such as outfalls. An anchor plan would be prepared for each mono buoy for submittal to the resource agencies prior to

construction that illustrates the relationship between anchors on the ocean floor and identifying any sensitive resources in the vicinity.

Cutterhead Suction Dredge

A cutterhead suction dredge is similar to a hopper dredge in that it uses a long arm that extends down to the sea floor to dredge sediment. A rotating head about 8 feet in diameter sweeps an area approximately 300 feet wide. However, a cutterhead dredge breaks up sediment material along the seafloor, then uses a vacuum mechanism to suck sediment into an intake line and pump it directly to shore through a discharge line. The cutterhead dredge anchors above a borrow site while its arm swings back and forth to dredge up sediment. It then pumps a mixture of sediment and sea water through a floating discharge line directly onto the receiver site. The discharge line would either be assembled afloat, connected to the cutterhead suction dredge, and pulled to land by tugboats, or assembled on land and dragged offshore to the dredge by tugboat. Unlike the hopper dredge, the cutterhead dredge remains at the dredge site for the entire operation while pipelines carry the material.

Booster pumps would be required approximately every four miles if a cutterhead suction dredge is used. Discharge pipes would either be floating in the ocean or onshore along the beach. The exact locations of pumps are not known at this time.

For all pipeline delivery routes, the floating and submerged portions of the dredge discharge line would be routed to avoid sensitive resources to the maximum extent feasible. Assuming use of a cutterhead suction dredge, the discharge line would require management and maintenance activities during the construction period. After replenishment was complete, all pipelines would be removed.

The dredge discharge line would either be floating or placed on the beach. During the operation, floating pipeline segments would be subject to weather and wave conditions. If substantial wave action is anticipated, any floating pipe would be temporarily dismantled until suitable wave conditions returned. The pipeline could then be temporarily staged along the beach and reconstructed once wave conditions allow. Coordination with the U.S. Coast Guard, as described above, would be a critical component of floating pipeline placement.

Onshore pipeline segments would be placed along the toe of the revetment. The discharge line would be placed on top of the existing sand or cobbles and be buried at intervals to provide for pipe anchoring and for beach access to the public. Areas of active construction, i.e., where sand is being emitted from the pipe and redistributed by earthmoving equipment, would be cordoned off from the public with signs. Construction crews would also be on-site to monitor the construction site to prohibit public access. All other areas of the discharge line would be open to public use.

Maintenance of the discharge line would occur as necessary. The line may be affected by waves and tides and may periodically require added support, protection, or relocation. Earthmoving equipment and cranes may be used to maintain onshore portions of pipeline. More frequent line maintenance may be required for the onshore line at the Broad Beach as little room exists for line placement and protection at this site. The line may be more exposed to waves and may be affected during high tides or waves. If floating, the line would be subject to weather, and would need to be taken down two to three days prior to a predicted weather event. While this is time-intensive process, the intent of maintenance is to provide safety and security for these temporary features.

Training Dikes

Training dikes would be constructed to reduce turbidity and aid in the retention of pumped sand at receiving beaches. The material coming from the dredge material discharge pipeline is a slurry mix of sand and water. Once the water flows back to the ocean, the heavier sand settles onto the beach. The training dike system consist of two dikes--one that is perpendicular to the beach connected to one that is parallel to the beach, forming an "L" with the long end parallel to shore. The dikes would be constructed using two bulldozers. Sand would be placed at a single discharge point behind (i.e., landward of) the dikes. The dikes would be used to direct the flow of the discharge and slow the velocity of the slurry effluent, thereby allowing more sediment to settle onto the beach instead of remaining in suspension and being transported back into the surfzone. Given how little sand currently exists at the Broad Beach site, an initial quantity of sand would be discharged on the highest portion of the beach at low tide for use in building the dikes.

Beach Building

Beaches would be formed by deposition of sand from the dredge discharge line within the training dikes. Sand would be graded and spread along the beach to the dimensions of the beach fill plan using two bulldozers. One crane may be used to progressively move the discharge pipeline along the beach as the fill is placed and the beach fill is lengthened. Sand placement around storm drain outlets would be designed to allow proper drainage.

Dune Building

The project length dune would most probably be formed by deposition of sand from the dredge discharge line within a raised and diked containment system. Sand would be graded and spread along the dune to the dimensions of the dune fill plan using smaller bulldozers. One crane may be used to progressively move the discharge pipeline along the dune as the fill is placed and the dune is lengthened. Sand placement around storm drain outlets would be designed to allow proper drainage.

Drainage.

It is understood that a number of public drains owned by the City of Malibu and a to-be-determined number of private (stormwater) drains are currently daylighting onto Broad Beach. The location of these drains will be mapped and final project design will incorporate a solution to ensure that any remaining drainage pipes can continue to function post construction.

Projected Project Maintenance

Given that the sand loss rate in the Broad Beach area is exceptionally high, on the order of up to 60,000 cubic yards per year, it is anticipated that this shore beach and dune restoration project will require maintenance into the future. Such maintenance would take the form of placing more high quality beach compatible material on the project site approximately every decade or possibly more frequently.

Construction Phasing / Schedule

The potential start date for construction is fall of 2012 and is anticipated to take a total of 3 months. A permit duration of 5 years is requested.

Other Projects in the Area

At this time it is thought that no other beach sited projects are scheduled to occur in the Broad Beach area.

IMPACT AVOIDANCE / MINIMIZATION

During construction, impacts to waters of the U.S. will be minimized by use of appropriate BMPs such as limiting the overfilling of the dredge to reduce turbidity from spillage, restricting dredging and disposal near sensitive habitats and conducting water quality monitoring to assess turbidity levels. Ensuring the material on the beach is placed behind a sand berm will allow settlement of sediment before excess water is drained off and hence curtail turbidity.

APPENDIX A

PRELIMINARY PLAN SET

Drawing 1-a:	**Project Plan View – Beach Nourishment and Dune Restoration with buried Long-Term Revetment - Western Portion**
Drawing 1-b:	**Project Plan View – Beach Nourishment and Dune Restoration with buried Long-Term Revetment - Eastern Portion**
Drawing 2:	**Cross Section View – Beach Nourishment and Dune Restoration with buried Long-Term Revetment**
Drawing 3-a:	**Project Plan View – As-Built Revetment in Green - Western Portion DRAFT**
Drawing 3-b:	**Project Plan View – As-Built Revetment in Green - Eastern Portion DRAFT**
Drawing 4:	**Cross Section – As-Built Revetment Profiles**
Drawing 5-a	**El Nino MHTL's and Septic Systems As Surveyed Pre Construction– Western Portion**
Drawing 5-b	**El Nino MHTL's and Septic Systems As Surveyed Pre-Construction– Central Portion**
Drawing 5-c:	**El Nino MHTL's and Septic Systems As Surveyed Pre-Construction– Eastern Portion**
Drawing 6:	**Sand Source Locations**
Drawing 7:	**Candidate Offshore Sand Sources**
Drawing 8:	**A Vision of a Post Restoration Broad Beach**

APPENDIX B

BIOLOGICAL ASSESSMENT / CEQA DOCUMENT

TO BE PROVIDED

APPENDIX C

BROAD BEACH RESTORATION PROJECT

PHASE 1 REPORT – APRIL, 2010

PREPARED BY
MOFFATT & NICHOL
IN COORDINATION WITH
EVERTS COASTAL

APPENDIX D

SAND SOURCE INVESTIGATION REPORT

JUNE, 2010

APPENDIX E

SEDIMENT GRAIN SIZE EVALUATION OF POTENTIAL RECEIVER SITES

TO BE PROVIDED

APPENDIX F

PROJECT MONITORING PLAN

TO BE PROVIDED

APPENDIX G

ADDRESSES OF ADJOINING PROPERTIES AND RADIUS MAP (CERTIFIED)

TO BE PROVIDED

APPENDIX H

PROPERTY OWNERSHIP DATA

EXHIBIT "D"

From: Barbara Hamm
Sent: 01/24/2012 05:39:47 pm
To: Naren
Cc: Helmut Martinek; wrutter1@verizon.net; Zan Marquis
Bcc:
Subject: TPOA FS records

Hi Naren & Helmut,

THE BBGHAD has received a request for all records related to the TPOA Fair Share and GHAD formation. I need anything that you have related to this. If you could just put all in a box, I will copy and return to you. So this should be from 2009 thru 2011.
I need copies of the invoices that you sent out to the HO for the FS requests. For now, I was told that you can give me an example of each of these billings that were done. So if you could pick a couple of homeowners, from each years request and give me copies of those invoices and letters that were mailed out. Please give me an example for each type of Amount that was requested per lot.

I need all of this, like yesterday, so ASAP.

Also, I do need the labels that you were going to print for me (2 sets).
And I need 75 prestamped envelopes. Regular postage is fine.
Can you also print out return address labels with the following:

Broad Beach GHAD
c/o Point Dume Village
29169 Heathercliff Rd, #212
Malibu, CA 90265

Please acknowledge this email and give me a call so that we can go over this.

When stuff is ready, I can come and pick up.

--

Barbara Hamm
GHAD Clerk
ph: 310-457-6507

Subject: RE: GHAD accounting (timely)

Lynn, thank you. There may have been a disconnect in your communications with Zan over the meaning of how much has been ""solicited."" you appear to be seeking information about the amount ""collected."" that number, as you correctly state, should be easilly available. I will ask that question at today's meeting and you should feel free to to seek whatever information you desire at the meeting today. It is important that there be transparency and that whatever questions are asked be answered. You are also free to contact board members. My thinking is that the best way to get information is collectively at a board meeting, especially when it is imminent. Also, as you may know MW requested the engineers to come to its next meeting and that has been approved by the GHAD. We are doing the best we can as an all volunteer group. Best regards, Marshall.

From: Lynn Norton [lynorton@charter.net]
Sent: Sunday, January 22, 2012 12:34 AM
To: Grossman, Marshall B.
Subject: GHAD accounting (timely)

Marshall,

My professional background is in business analysis and software development and from what I've seen the GHAD's accounting is a mess. I had already received an email response from Zan before you asked me not to email the GHAD board members, and he said "to be exact about total dollars solicited, we would have to spend some staff time going through the numbers and the correspondence and records of all solicitations to confirm a total amount solicited". I honestly cannot imagine a system so bad that you couldn't immediately put your hands on this piece of information. I'm telling you this to help because I hope the GHAD gets the bookkeeping cleaned up before it becomes a public issue. You asked me to ask my questions publicly "when I do ask my question tomorrow about the total Fair Share amount solicited and paid, no one should answer by saying that this is difficult information to compile because that is a huge indication of inadequate accounting. If no one can rattle off the numbers, then they should offer to email them to me in 10 days or whatever the appropriate period is.

I realize the GHAD voted to hire an accountant, but you still need someone to direct that person and tell them what to implement. I remember at a GHAD meeting that Mark Goss offered that he'd be willing to be personally involved somehow in overseeing the GHAD accounting and if he is still willing to do that, I hope the GHAD will take him up on it. I know Mark believes in the GHAD and trust he would do a good job helping you fix the weaknesses in your system and is not looking to harm the GHAD.

Lynn

DCW DAVID C. WEISS
Structural Engineer & Associates, Inc.

24372 Vanowen Street • Suite 104 • West Hills, CA 91307 • Tel: (818) 227-8040 • Fax: (818) 227-8041

DAVID C. WEISS
Structural Engineer & Associates, Inc.

March 9, 2012

Board of Directors
Broad Beach Geologic Hazard Abatement District
C/o Marquis Property Company, Ltd.
29169 Heathercliff Road, Suite 212
Malibu, CA 90265

Subject: Review of Proposed Assessment for the Broad Beach Geological Hazard Abatement District

Honorable Members of the Board of Directors,

For your consideration at the March 11, 2012 public hearing regarding the proposed Assessment for the Broad Beach Restoration Project, and on behalf of my client, Kenterra VI, L.P. ("Kenterra"), I submit my review of and response to the January 24, 2012 letter from Kenneth A. Ehrlich, Project Attorney for the Broad Beach Geological Hazard Abatement District ("GHAD") and accompanying materials.

I am a civil and structural engineer licensed by the State of California, as well as the states of Washington, Oregon, Nevada, Arizona and Wisconsin. My practice involves a particular focus on coastal engineering, and I have been actively involved in the design of structures on the beach in Malibu, specifically structures in the surf zone, for the past forty-seven years. I have prepared numerous Coastal Engineering Reports (Wave Uprush Studies) for sites in Malibu. Approximately eighty-five of those reports have been for properties in the Broad Beach and Lechuza areas. I have also prepared and/or directed the preparation of structural designs for residential structures and storm damage repairs for structures and protective devices for sites in the Broad Beach and Lechuza areas. I am the founder and principal of David C. Weiss, Structural Engineer & Associates, Inc., which has been providing engineering services since 1965. I have been a member of the Structural Engineers Association of Southern California and the Consulting Structural Engineers Society since the early 1970's.

I have reviewed Mr. Ehrlich's letter and the attachments, including without limitation the Engineer's Report prepared by ENGEO Incorporated and dated January 18, 2012 (the "Engineer's Report"), as well as the documents identified on pages 27 and 28 of this letter.

I. BACKGROUND OBSERVATIONS

A. Broad Beach

The area known as "Broad Beach" is a portion of a hook shaped bay extending from Point Lechuza on the west to Point Dume on the east. The amount of sandy beach in this area has increased and decreased throughout the documented history of the beach. The Mean High Tide Line (MHTL) is a meandering entity and has varied significantly over the last century. Records show that there is no predicting where the MHTL will be other than it is more often seaward during summer months and landward during winter months. While recent surveys show the MHTL is currently in a relatively landward position, it is important to note that, as shown on the map of Figure Number Ten, one of the most landward MHTL of record occurred over eighty years ago, in 1928.

24372 Vanowen Street ● Suite 104 ● West Hills, CA 91307 ● Tel: (818) 227-8040 ● Fax: (818) 227-8041

B. The Proposed Beach Restoration Project

The proposed beach restoration project (the "Project") is meant to provide a wide sandy beach for a period of twenty years, from approximately 2013 to 2033. The plan is that the beach would be widened from its present narrow configuration by between approximately fifty to one-hundred feet on the west end to about two-hundred and fifty feet at the east end (Figure 4-1, Reference Number Six) by importing sand from distant sites. The intended result is an approximately 40-60 foot wide restored sand dune system followed by an approximately 100-foot wide dry sand beach. As stated in the balloting materials, the project "intends to return Broad Beach to its historic splendor." This newly created sand beach would be state-owned land seaward of the most landward MHTL.

Sand migration along this beach has been found to be predominantly from west to east. This would cause the west end of the project to erode, while the east end accretes. In order to maintain an equilibrium of width over the life of the project, there would be a system of "back passing" from, most likely, east back to west. Over time, sand would be lost from the system due to normal wave transport. It is estimated that more sand will have to be brought in to re-nourish the system once, after a period of ten years. There is no plan for after the twentieth year. The conclusion of the various documents referenced at the end of this report is that the reason for the Broad Beach retreat is a "negative sand balance", i.e. more sand is moving off the beach than is being moved back on to it by wave action. Without continued re-nourishment, the beach will revert to its present narrow shape around the time the Project ends.

The MHTL is impacted in part by sea level and by weather patterns, such as storm events and wave actions that deposit or remove sand from the shore. Much uncertainty surrounds these issues and it is difficult to predict the factors that impact beach conditions from year to year. The popular philosophy today is that sea level is rising due to global warming and melting of the Polar ice caps. Measurements have been made showing the rate of sea level rise over the past century. Reflecting the high level of uncertainty as to future conditions, a range of projections of sea level rise -- from manageable to catastrophic -- have been made for the next century.

The proposed Project and the Engineer's Report rely on the analysis and recommendations in reports prepared by the engineering firm of Moffat & Nichol. For purposes of their study of Broad Beach, Moffatt & Nichol considered three possible rates of sea level rise over the next 38 to 88 years:

- Low rate of Increase: 2" by 2050, 9" by 2100 - 90% probability
- Likely High Rate of Increase: 12" by 2050, 37" by 2100 – 10% probability
- Highest Rate of Increase: 16" by 2050, 52" by 2100 – (no probability given)

It is important to note that each of these scenarios covers periods extending 18 and 68 years beyond the twenty year term of the proposed beach nourishment project. In addition, the various studies used to arrive at the above projections do not predict that sea level will rise uniformly over the next century. The rate of sea level rise will be less between 2000 and 2050 than between 2050 and 2100, and thus will be below the projected rates during the twenty year term of the Project. From Table 3-3 of referenced reports Number One and Number Six below, it appears that Moffat & Nichol used the "Likely High Rate of Increase" for sea level rise in designing the Project, and assume that sea level will rise just over five inches by the year 2030. For purposes of simplicity, and to err on the conservative side for calculations used later in this report, this office has prepared attached

Figure Two showing each of the above sea level rise projections as a series of straight lines between the years 2000 and 2050 (the Project period will end at the end of 2033)..

II. THE VARIED CONDITIONS ON BROAD BEACH

Broad Beach is comprised not of uniform properties, but of lots with a diverse range of conditions, significantly different relationships to the beach and corresponding risks of damage from sea level rise, storm or other wave events.

Broad Beach can be divided into two major areas, as shown on **Figure Number One**. The easterly approximately five-thousand feet of the beach (the "Eastern Beach") extends from Trancas Creek west to the public vertical access walkway at the beginning of the private access road commonly known as "Little Broad Beach Road." The Eastern Beach consists of a wide dry sandy beach and previously contained a protective sand dune between homes and the dry beach. The individual properties along the Eastern Beach are very deep, flat lots extending from the Broad Beach Road right-of-way to the water's edge.

By contrast, the westerly approximately fifteen-hundred feet of beach (the "Western Beach") is characterized by a relatively slim strip of beach, and the width of dry beach narrows from east to west. The Western Beach never had a protective dune. This is an oscillating section of beach. This beach is often covered with a thin mantel of sand over the layer of rock and cobble below, but this thin mantel of sand comes and goes. As a result, there are times when the rock and cobble is exposed. Individual properties along both beaches are differently situated, as discussed below.

A. Properties on Western Beach

Unlike the Eastern Beach, this area is generally characterized by cliff conditions, with many of the houses located not on the beach, but rather on the slope between the street and the sand. There are twenty-eight houses on the Western Beach. These structures are labeled numerically in Figure One-A to show their location. Figure One-B is a chart showing the address for each site number on Figure One-A.

The houses on sites 1-10 are located on Victoria Point Road, the actual "crook" of the beach hook. These homes are located above the beach. Homes on sites 1 through 6 inclusive, are located higher on the slope between Victoria Point Road and the beach below, and are situated on rock, which is not subject to significant erosion, especially not during the twenty year term of the project. Homes on sites 7 and 8 sit on concrete or timber piles founded in the bedrock strata, and are protected by a rock revetment. (The Engineer's Report does not address homes on the rocks, or homes located above the beach whatsoever).

The houses on sites 11 through 17 are located on the steep slope between Broad Beach Road and the beach. Additionally, the house on site 15 is protected from ocean wave action by a high timber bulkhead wall. The houses on sites 11 through 14 inclusive, 16 and 17 have concrete pile foundations that are embedded deep into the bedrock strata.

Sites 18 through 28 inclusive are located on Little Broad Beach Road. Although these homes have no natural protection, many have installed protective devices. The houses on sites 18 and 19 (31388-31406 Broad Beach Road), which are owned by my client, Kenterra, are protected by a concrete bulkhead wall, discussed further in Section II.C.2 below. The houses on sites 21 through 24 inclusive are protected by a steel sheet pile wall. The

house on site 20 is protected by a quantity of rock that serves as a barrier to retard the force of the waves impinging on the site and has foundations underpinned into the bedrock strata. The house on site 28 is protected by rock revetment and a recently installed concrete "secant" wall.

B. Properties on Eastern Beach

The Eastern Beach still consists of a wide dry sandy beach between the Broad Beach Road right of way line and the new rock revetment. The Eastern Beach differs from the Western Beach, however, in that the floor levels of the houses on the Eastern Beach are lower than those on the Western Beach. Some of the houses on the Eastern Beach are supported on timber piles; the newer houses are supported on concrete piles. These piles would provide protection in the event of wave uprush. Most of the older houses, however, are supported on conventional shallow foundation systems that could be undermined by ocean wave action in severe ocean storms in the event of significant sea level rise.

C. Coastal Protection Requirements During the 20-Year Project Term

Individual lots on Broad Beach have very different requirements for coastal protection over the next twenty years.

1. Western Beach

Properties on the Western Beach have varying degrees of protection and thus varying requirements for coastal protection over the next 20 years. The floor levels of the homes on the Western Beach are higher than those of the homes on the Eastern beach. Those homes that have protective structures, such as seawalls or rock revetments, or that are located high enough on slopes or above the water level, will sustain only the occasional inconvenience of being able to walk on the beach less often because of higher wave uprush. For example, houses on sites 1 through 6 inclusive, 9 through 14 inclusive, 16, and 17 are all located high enough above the beach that they do not need additional protection from ocean wave action and are supported on piles founded in the bedrock. Site number 15 is not only above the beach but is protected by an existing timber bulkhead.

Other homes are protected by devices or structures. For example, the houses on sites numbered 7, 8, 27 and 28 have rock revetments that will provide sufficient protection from wave action during the project term. The house on site number 20 is underpinned into the bedrock and is also protected by a rock revetment. Sites 18 and 19 (Kenterra) are protected by a concrete sea wall. Sites 21 through 24 inclusive are protected by a steel sheet-pile wall that is cantilevered out of the cobble layer, if not the bedrock, and will not be undermined by wave action. None of the above mentioned houses or sites needs additional protection, even in the event that sea level rises to the "Likely High Rate" of sea level rise depicted in Figure Two.

Thus, these homes have various forms of existing protection, including elevation, piles, underlying bedrock and coastal protective devices. Many homes have multiple types of protection, providing a second line of defense if the first were to fail. Many, if not all of these homes currently have adequate protection for the twenty year project term and beyond. The owners of these properties have invested significant resources in providing protection (often multiple levels of protection), and the Engineer's Report has not provided any evidence that the protection they have provided is not sufficient to protect them from wave action during the project term.

Any wear and tear from wave action during the project term can be effectively repaired, and at a cost much lower than the proposed beach restoration project. For example, rocks in revetments exposed to wave action will, from time to time, roll off the face of the revetment and should be retrieved and replaced back onto the revetment. Concrete and timber seawalls may be pock marked and damaged by debris that may be thrust against them by storm waves. This is rather minor wear, and can easily be repaired as it occurs. It certainly can be repaired for much less that the proposed assessment of $400.00/ft of property per year for the next twenty years. Moreover, not all wear requires repair. For example, the under deck area of the house on site 17 has sustained cosmetic damage by wave action, but this is not a condition that threatens the structural integrity of the home, and can be easily repaired or ignored, as the property owner wishes.

2. The Kenterra Property

My client, Kenterra VI, owns property between 31388 and 31406 Broad Beach Road (the "Kenterra Property"), which is located on the Western Beach, at the west end of Little Broad Beach Road. My client has invested in a reinforced concrete seawall to protect the two existing single family dwellings on this site. As discussed in detail below, this seawall is sufficient to protect the existing property from reasonably foreseeable conditions during the 20 year project period. Even in the event of reasonably foreseeable changes that could threaten this protection, maintenance and small scale repairs would be sufficient to resolve such a threat, and would be considerably less expensive than the proposed assessment of my client's property for the beach nourishment project.

The beach fronting the Kenterra Property varies, depending upon the height of the tide and the severity of the wave uprush at any given time, from a sandy beach of varying dry width to a cobble strewn beach approximately five or six feet lower in elevation than the sandy beach at its highest elevation. This change in beach elevation is due to waved action. The sand scours a few hundred feet or yards off the beach forms a protective sand bar. When the wave climate changes, the sand washes back up onto the beach.

As documented in the reports referenced at the end of this report, the beach has not been recovering to the same elevations as in years past due to a "negative sand balance." Negative sand balance is the result of less sand being transported onto the beach (from up coast sources) and more sand being transported down coast. The comparison of photographs from the same area of beach in October 2004 (Figure Three), October of 2009 (Figure Four), and February 2012 (Figure Five) shows the width of this section of beach has declined over time, with cobble exposed at a low beach profile in February of 2012. However, the Western Beach will not scour much deeper than that shown in Figure Number Five. While sand is easily washed on and off the beach, cobble of this size this far back on the beach profile might move and shift, but will not wash very far. Even if the cobble were to wash off the beach, the loss of cobble would expose bedrock, which is not subject to further erosion since the beach will not scour below the bedrock surface. An existing outcropping of bedrock just a few feet into the wet area is shown in Figure Number Six.

The Kenterra Property extends from the Broad Beach Road right-of-way to the MHTL. Starting at the Broad Beach Road right-of-way line, the site slopes steeply to the north side of Little Broad Beach Road. There is then a level pad that extends from the north side of Little Broad Beach Road to the south side of the house at 31388 and the south side of the patio at 31406 to the top of a concrete seawall. The sites then drop vertically to the beach and continue to the water edge. The height of the drop off at the sea wall varies at different times of the year, depending upon the elevation of the sand.

The houses on the two sites are constructed of light timber frame materials on a concrete slab on grade supported by a series of on-grade concrete continuous perimeter and interior footings. Both houses are serviced by on-site wastewater treatment systems on the north (inland) side of the houses, between the houses and the toe of the slope between Broad Beach Road and Little Broad Beach Road.

The houses are protected by a reinforced concrete sea wall that is supported by a series of concrete soldier piles. The wall was designed to protect the two properties after the severe winter ocean storms of 1998. A coastal development permit was issued for this wall by the California Coastal Commission and the design was approved by the City of Malibu Building Department. The bottom of the wall stem is founded in the bedrock strata. The purpose of the wall was to protect the foundations of both houses from being undermined by ocean wave action.

In order to evaluate the adequacy of the existing seawall, my office prepared a Design Beach Profile (Figure Number Seven) for this site. This profile is based upon the lowest of a number of historic profiles that we researched for this section of beach, and on the conservative assumption that the site is underlain by sand only, no bedrock. Under that assumption the site would scour to a depth of approximately 2.8' Mean Lower Low Water (MLLW). We then calculated a matrix of waves that could possibly break on the seawall given a Still Water Line (SWL) or design tide elevation of 7.5' MLLW. The 7.5' MLLW for the design tide was determined by assuming a 6' MLLW tide elevation as being approximately the highest one percent of the tides in this geographic area, plus .75' (9") for storm set-up, plus an additional .75' or **9"** for sea level rise by 2030. The 9" sea level assumption is approximately equal to that shown on our **Highest Rate of Sea Level Rise** graph of Figure Two. This would give a depth of water at the base of the wall, or what is referred to in coastal calculations as d_s, of 4.7'.

On this beach profile our calculations showed that the highest wave that could break on this wall would be one with a breaking wave height (H_b) equal to 6.63'. Since seventy-eight percent of that wave height is above the SWL or tide line, that would give a breaking wave elevation of 7.5'+5.2'=12.7' MLLW. The elevation of the top of the wall is 16.8' MLLW. We calculated a second matrix of waves that could break on the wall under the assumption that the beach would scour no deeper than the cobble layer at the base of the wall. Under that scenario, again on a 7.5' MLLW tide and a d_s of only 2.03', the largest wave that would break on the wall would have a breaking height of only 2.86' and a breaking elevation of only 7.5+2.23'=9.73' MLLW, again, well below the elevation of the top of the wall. The sketches for the wall with toe depths of 4.7' and 2.03' are shown as Figures Eight and Nine respectively. The matrix of calculations for the breaking wave elevations for those two water depths are shown on Figure Ten.

Considering the projection of sea level rise through the year 2033 assumed in the reports referenced below and the most probable future scour of this site due to ocean wave action, it is my professional opinion that the existing seawall will adequately protect both properties from ocean wave action through the year 2033, the period of the proposed Broad Beach nourishment project, and beyond. The Kenterra Property does not need the one hundred plus feet of sand to be projected for this section of beach with the nourishment project for protection from ocean wave action.

Should sea level rise faster or higher than that assumed for our calculations, or should the wall be in danger of being flanked on the west side because of development of the lot to the west, there are ways of addressing those problems much more cost effectively than the projected cost of $400.00 per foot of frontage per year for the next twenty years. It would be far less costly to make repairs and/or clean up after some minor overtopping by

wave action than the projected cost of the proposed nourishment project. Should the need arise it would be far more cost effective to raise the height of the wall than the cost of the replenishment. In the unlikely event that sections of the wall might be undermined by ocean wave scour, those sections of wall could be underpinned for far less than the cost of the sand replenishment solution. Should the wall be in danger of being flanked on the west side due to the development of that site, it would cost less to extend the flank protection than to replenish the beach.

3. Eastern Beach

As discussed above, lots on the Eastern Beach currently enjoy a wide sandy beach and are on relatively long, but low, lots. Because these homes are not at a higher elevation, and sit on conventional shallow foundation systems, they could well sustain damage from wave action scour when sea level rises between 2030 and 2100 to the level predicted in the "Likely High Rate of Sea Level Rise" or "Highest Rate of Sea Level rise" Scenarios, without some type of coastal protection. Of course, the need for protection is less likely to arise during the 20-year term of the project.

These homes were historically protected by the dune system that ran along the Eastern Beach. Since the loss of the dune, these homes are more vulnerable to inundation and scour due to wave action, and have a need that houses on the Western Beach do not. In fact, the project appears to primarily benefit the approximately 78 homes previously protected by the dune system, and now protected by the emergency revetment under the emergency CDP which permit requires a sand nourishment program or other application in order to maintain the emergency revetment.

These homes could be adequately protected with adequate rock revetment, much of which is in place now as an emergency revetment, without the dunes or the addition of a 100-foot beach. This emergency revetment could be made permanent, or a vertical wall could be constructed to provide sufficient protection for these homes. For purposes of protection alone, there is no need for a sixty-five to one-hundred feet wide beach. A permanent revetment or vertical wall would provide effective protection for less than $8,000.00 per lineal foot (i.e. the cost of the assessment over twenty years if there is no increase for cost of living).

III. RESPONSE TO ENGINEER'S REPORT

A. The Engineer's Report Does Not Establish that a 100-Foot Beach is Necessary

The Engineer's Report does not establish a need for the project for at least three reasons. First, the report does not show that a new sandy beach offers necessary or superior protection of beachfront properties. During severe storm events the sand added by the Project will be foreseeably pulled away from the shore, leaving the improvements exposed to wave action as they were in 2009. Therefore it appears that the primary purpose of the project is aesthetic and recreational in nature rather than geologic hazard protection. Based on my experience with coastal properties, the more effective protection in such circumstances is a sea wall, revetment or other coastal protective device, not additional sandy beach. The Engineer's Report does not explore the possibility of less burdensome solutions, such as a permanent revetment or new sea wall, or explain why a sandy beach is necessary and superior to such alternatives. In particular, the existing temporary revetment may be made permanent, yet there is no discussion of such an option or explanation as to why it would not be sufficient to meet the coastal protection requirements during the next 20 years.

Second, the Engineer's Report does not explain why a sandy beach is necessary to protect properties *during the project period*. The proposed beach nourishment is not a permanent solution, and it is acknowledged that even with replenishment the beach will continue narrowing after the project term has ended, and as sea levels rise. Accordingly, it is only appropriate to evaluate the needs that will exist during the project period. The Engineer's Report does not properly evaluate this specific need. The projected sea rise scenarios examine a much longer time period, which would extend well beyond the life of the proposed project. There is not sufficient analysis or conclusion as to what is truly necessary over the next 20 years, given current conditions, and the likely sea rise and other changes during this same time period.

Third, even if an expanded sandy beach were a superior or necessary solution during the project period, the Engineer's Report does not establish that a 100-foot sandy beach and a restored dune system (as opposed to a beach of less width) are necessary to provide protection during the 20 year project period. The Broad Beach restoration project would create a wide sandy beach, wider than that in existence when the beach was supposedly at its widest in 1972. The report does not correlate to any of the sea level rise scenarios with the proposed 100-foot beach, or with any other number. There is no analysis whatsoever of the amount of sandy beach or dune system required, suggesting that the proposed 100-foot beach is an arbitrary number. The 100-foot widening appears to primarily benefit the tidelands owned by the State of California by creating dry sandy beach for public recreation.

Finally, even if a 100-foot wide sandy beach were necessary for some homes, the Engineer's Report does not establish that it is necessary or beneficial for all (or even most) homes on Broad Beach. As discussed in Section II.A above, many homes are sufficiently protected from coastal activity over the next 20 years and do not require additional improvements. Some property owners have natural protection, such as a steep slope or existing wide sandy beach, while others have made substantial investments in sea walls, revetments or other devices to provide the necessary protection.

B. Linear Beach Frontage Does Not Correlate to the Amount of the Special Benefit Provided

Proposition 218 requires that the assessment be distributed among the assessed parcels in proportion to the special benefits conferred on each parcel. The GHAD has the burden of establishing that the assessed properties receive a special benefit and that the amount of the assessment is proportional to and no greater than the special benefit conferred on the property in question. The Engineer's Report merely assumes, without explanation or analysis, that linear frontage correlates to the amount of special benefit received for all properties on Broad Beach.

This assumption is erroneous for several reasons. As discussed above, not all properties are equally situated with respect to risk of erosion or other damage from wave uprush or storm. Some properties, such as the Kenterra Property and many properties along the Western Beach, have no need for additional protection during the 20 year project period, but could achieve the same result with their current protection and maintenance that is far more modest and less expensive than the proposed project. For those properties that may benefit from additional protection, not all of these properties would need the same amount of protection. The Engineer's Report has not shown any relationship between the amount of beach frontage and the amount of protection received.

The Engineer's Report (at pages 9 and 10) states that lots with seawalls will receive a special benefit because (1) by adding sand on the seaward side, it will better balance the pressures that act on the landward side and (2) the additional sand will prevent ocean storm waves from impinging on these walls. However, no such "benefits" are necessary because these walls have been specifically designed to withstand their current conditions. These walls have been designed to withstand the loads of the unequal soil pressures and are not damaged by that unequal pressure. The walls also have been designed to withstand the pressure of the breaking waves. Any damage to the face of the walls due to floating debris can be repaired for much less than the assessment per foot of site. It is very unlikely that a large enough piece of debris would be thrown against either the concrete walls or the steel sheet piles walls to break through them or cause enough damage that would render the wall ineffective for the rest of that storm.

In addition, it is not clear that the same improvements are planned for each lot on Broad Beach. In particular, it is not clear that the restored dune system will be implemented along the full stretch of property to be assessed. To the extent different improvements are planned for different areas, using linear frontage alone to calculate the assessment will not appropriately reflect the amount of special benefit conferred.

Moreover, because the MHTL is not uniform across Broad Beach, beach nourishment may create new dry sand beach on the property of some owners not but others. Assessment by linear frontage does not account for this potentially significant difference in special benefit to individual parcels.

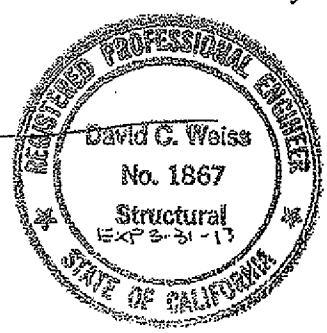
Finally, even if linear frontage were a reasonable way to quantify special benefit of a permanent improvement, the proposed Project is admittedly not a permanent improvement, and its benefits may last no longer than the 20 year project period. The proposed assessment makes no attempt to identify the special benefit conferred on particular properties *during the term of the project*, which is likely to vary greatly from property to property given the vastly different circumstances of individual lots, as discussed above.

C. The Project Has Not Been Approved and Therefore its Benefits Cannot be Sufficiently Known to Justify an Assessment

The Project is merely a proposal and not an approved, permitted plan. It is not certain that the Project will be approved or constructed. In addition, the Project is subject to the jurisdiction of several different agencies, and if approved it is likely to change, perhaps significantly. Given this uncertainty, it is impossible to properly identify or quantify the special benefits to particular properties. An assessment on the proposed Project is based on assumption and speculation as to what will ultimately be approved and implemented.

Thank you for your consideration of these matters. If you have any questions, please contact me.

Very truly yours,



David C. Weiss
S.E. 8167
President,
David C. Weiss, Structural Engineer & Associates, Inc.

Figure Number One: Boundaries of East & West Sections of Broad Beach /Lichuza

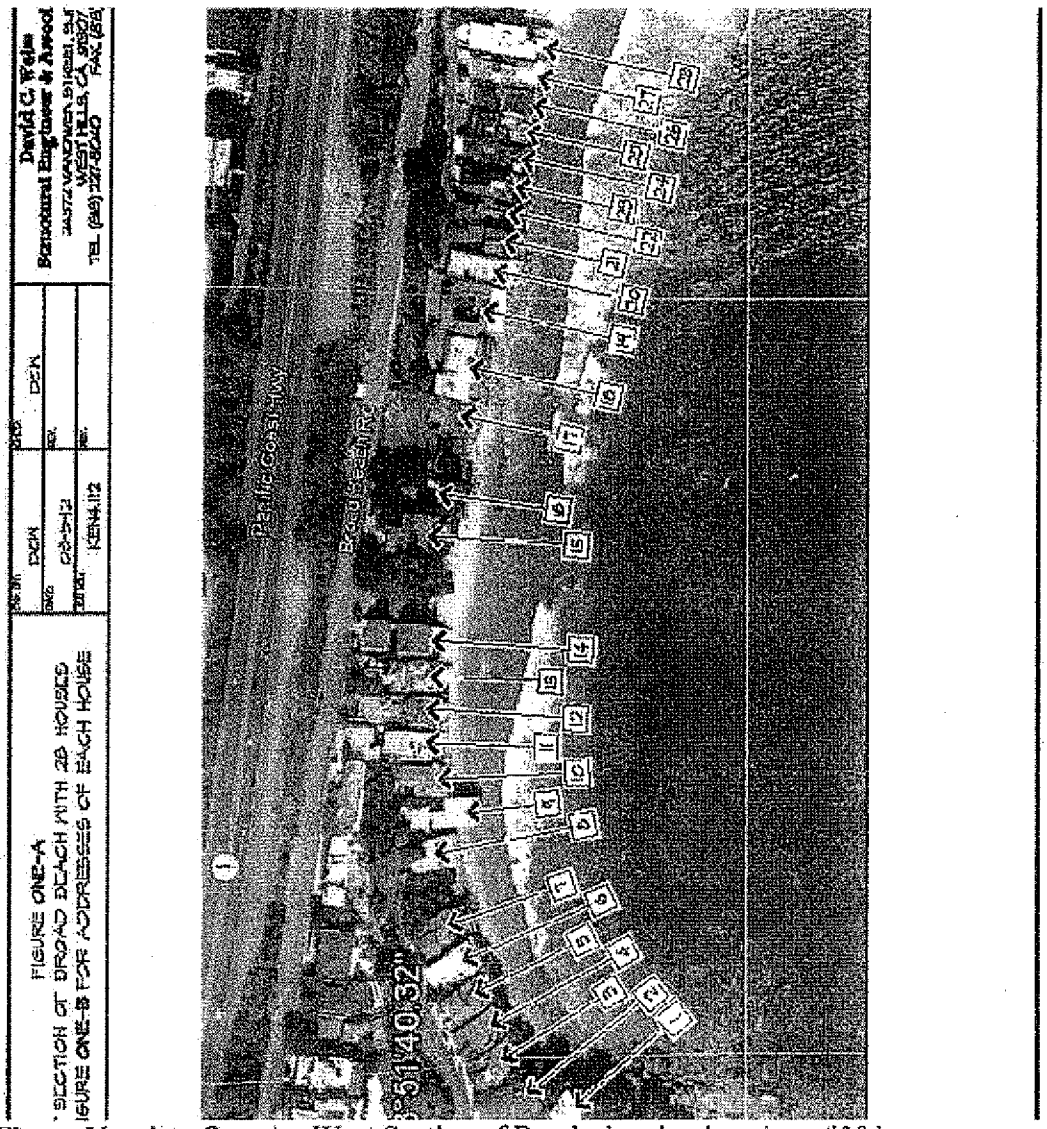
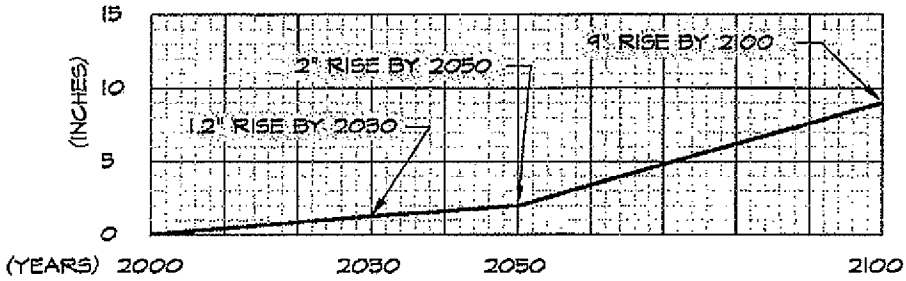


Figure Number One-A: West Section of Beach showing location of 28 houses.

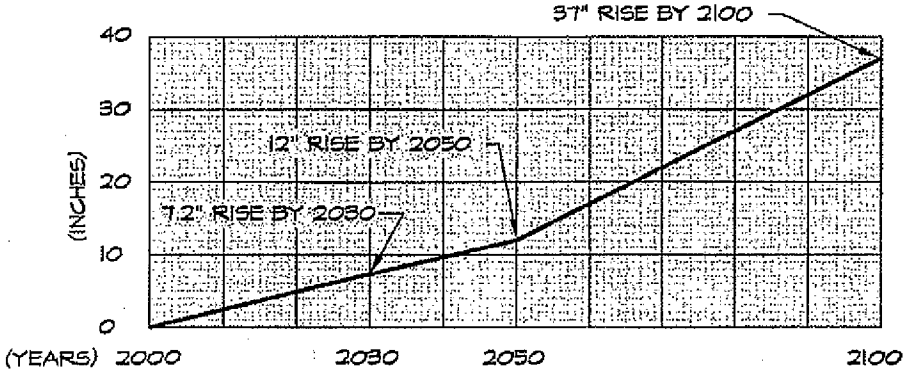
Site # N	Site Address
1	31554 Victoria Point Rd, Malibu Ca
2	31556 Victoria Point Rd, Malibu Ca
3	31532 Victoria Point Rd, Malibu Ca
4	31528 Victoria Point Rd, Malibu Ca
5	31520 Victoria Point Rd, Malibu Ca
6	31516 Victoria Point Rd, Malibu Ca
7	31508 Victoria Point Rd, Malibu Ca
8	31504 Victoria Point Rd, Malibu Ca
9	31502 Victoria Point Rd, Malibu Ca
10	31500 Victoria Point Rd, Malibu Ca
11	31460 Broad Beach Rd, Malibu Ca
12	31454 Broad Beach Rd, Malibu Ca
13	31450 Broad Beach Rd, Malibu Ca
14	31444 Broad Beach Rd, Malibu Ca
15	31430 Broad Beach Rd, Malibu Ca
16	31418 Broad Beach Rd, Malibu Ca
17	31412 Broad Beach Rd, Malibu Ca
18	31406 Broad Beach Rd, Malibu Ca
19	31388 Broad Beach Rd, Malibu Ca
20	31320 Broad Beach Rd, Malibu Ca
21	31376 Broad Beach Rd, Malibu Ca
22	31372 Broad Beach Rd, Malibu Ca
23	31368 Broad Beach Rd, Malibu Ca
24	31364 Broad Beach Rd, Malibu Ca
25	31360 Broad Beach Rd, Malibu Ca
26	31360 Broad Beach Rd, Malibu Ca
27	31350 Broad Beach Rd, Malibu Ca
28	31346 Broad Beach Rd, Malibu Ca

Figure Number One-B: Site Addresses

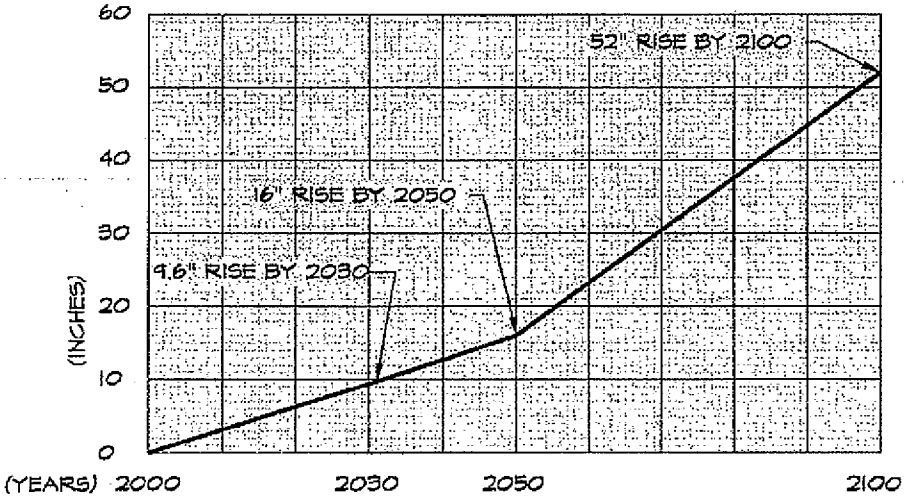
PROJECT: FIGURE TWO SEA LEVEL RISE SCENARIOS	DWG. BY: DCW	CHK'D: DCW	David C. Weiss Structural Engineer & Associates, Inc. 24372 VANOWEN STREET, SUITE 104. WEST HILLS, CA. 91307 TEL. (818) 227-8040 FAX. (818) 227-8041
	DATE: 03-5-12	REV.	
	JOB NO.: KEN4.12	REV.	



LOWEST DATE OF SEA LEVEL RISE



LIKELY HIGH RATE OF SEA LEVEL RISE



HIGHEST RATE OF SEA LEVEL RISE

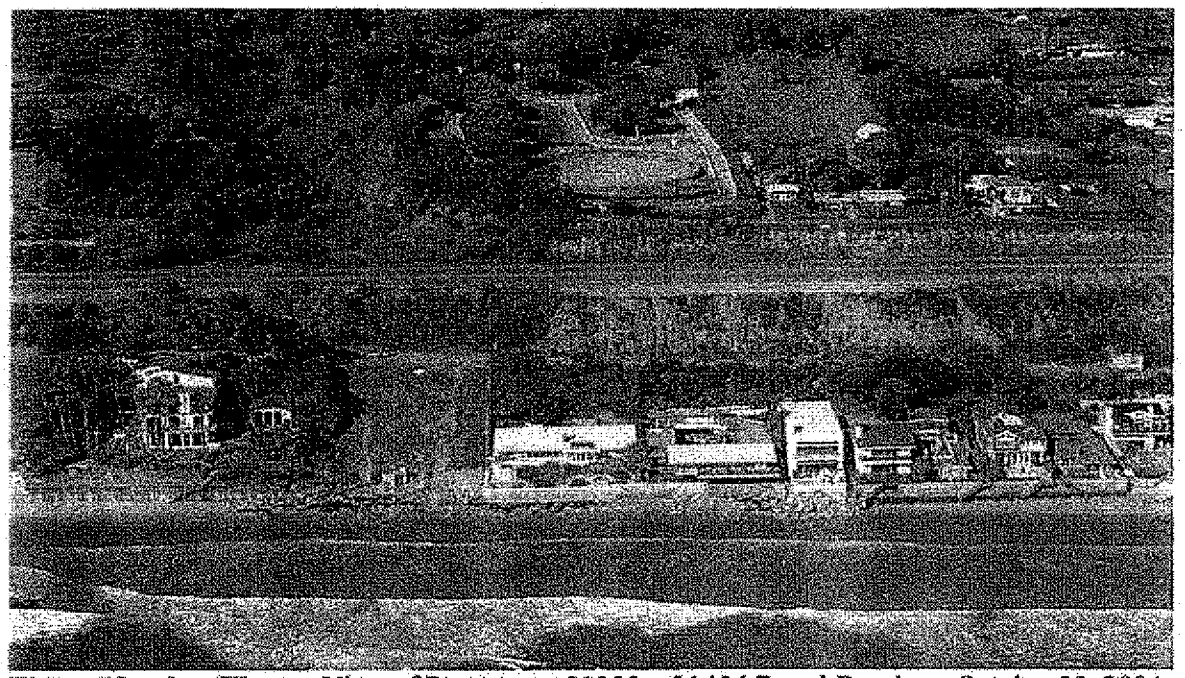


Figure Number Three: View of Property at 31388 – 31406 Broad Beach on October 23, 2004.

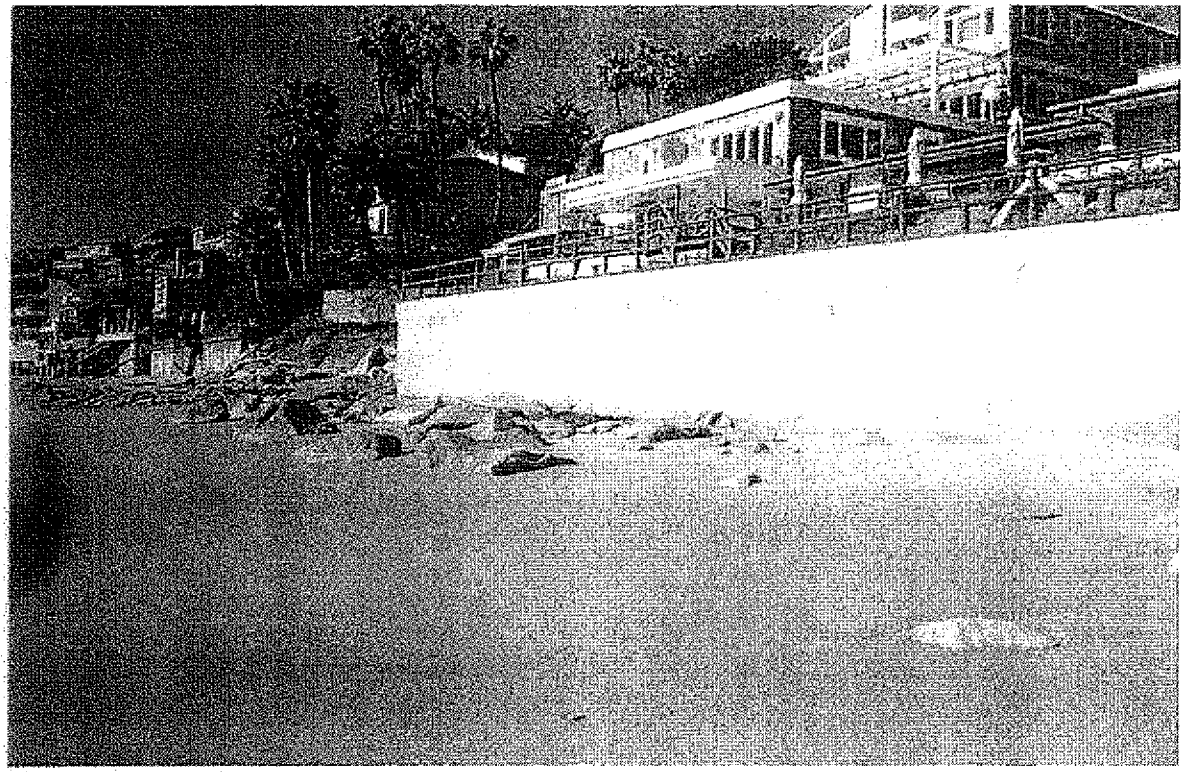


Figure Number Four: View of property at 31388-31406 Broad Beach Road on October 10, 2009.

Figure Five: View of Property at 31388 -31406 Broad Beach Road on February 10, 2012

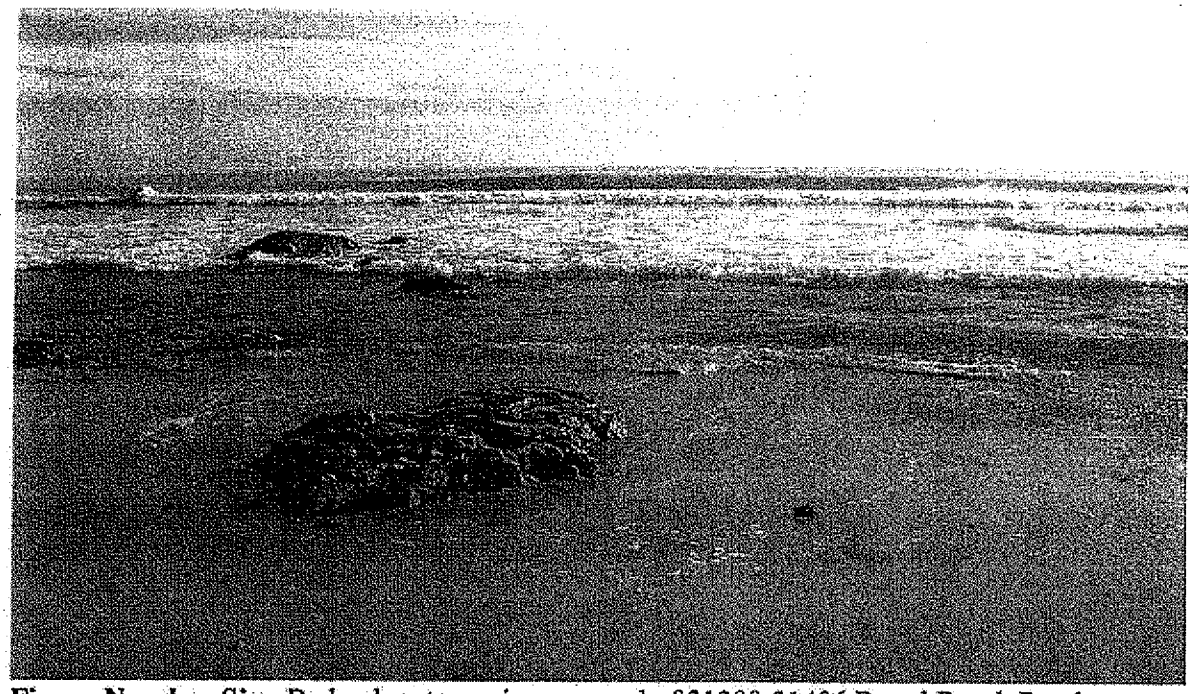


Figure Number Six: Bedrock outcropping seaward of 31388-31406 Broad Beach Road.

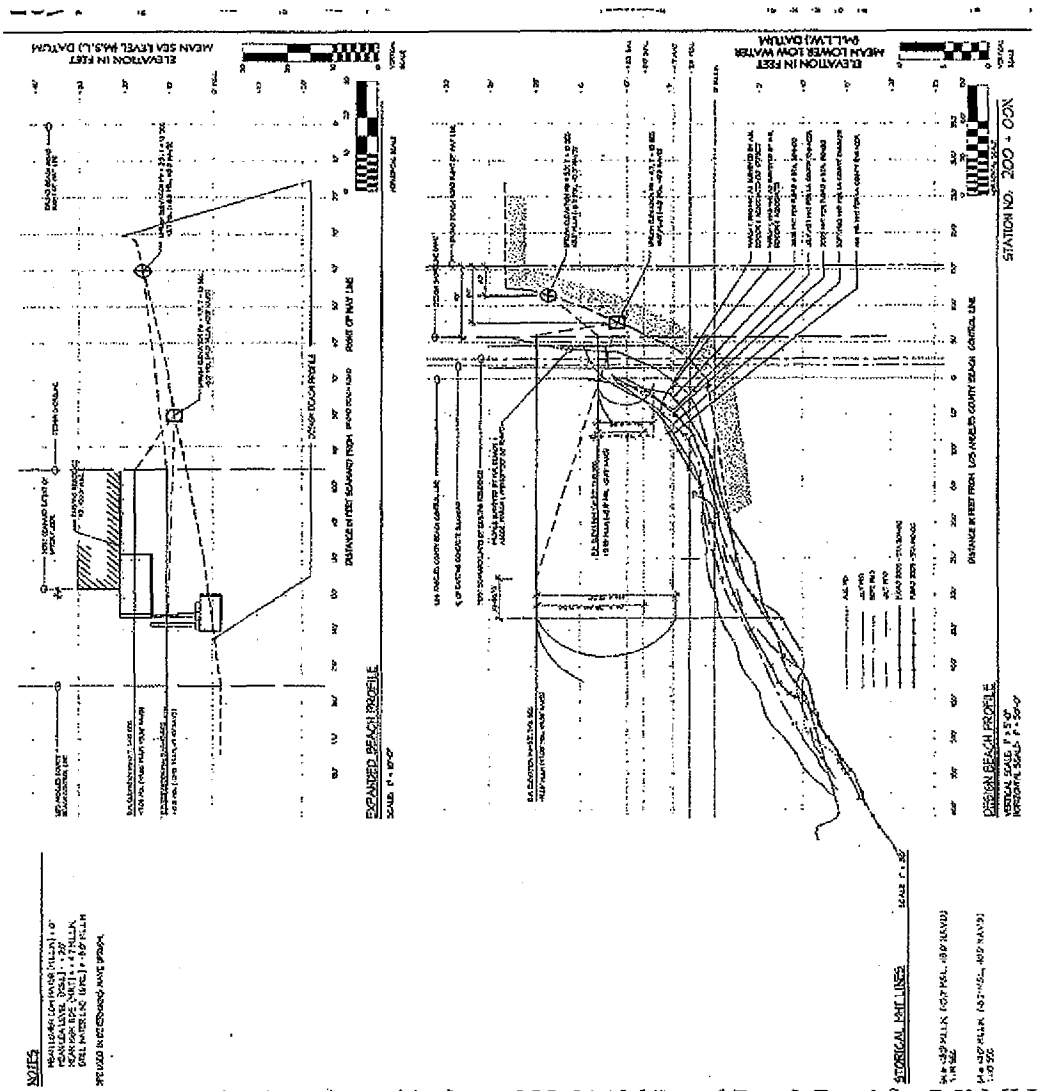


Figure Number Seven: Design Beach Profile for 31388-31406 Broad Beach Road for 7.5' MLLW Design Tide

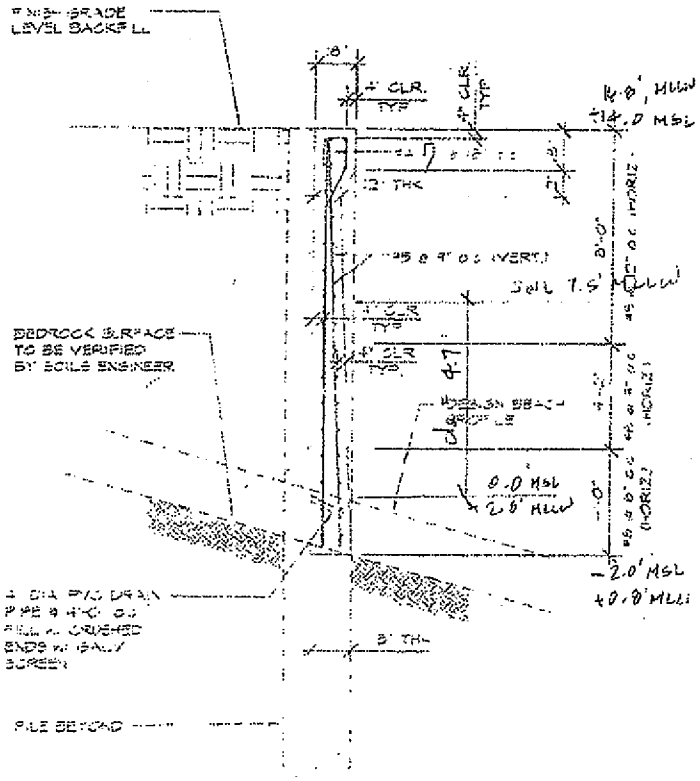


Figure Number Eight: Wall section for $d_s = 4.7'$

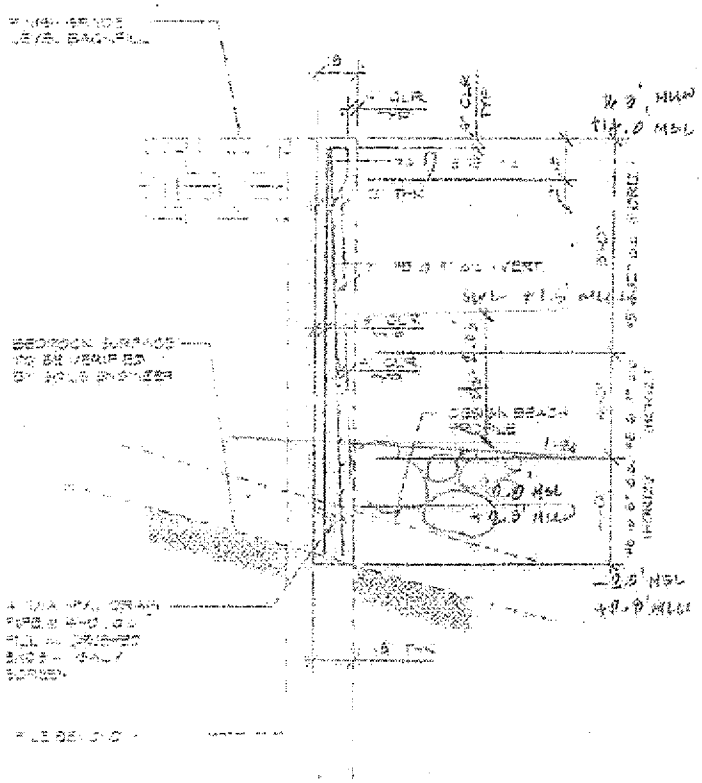


Figure Number Nine: Wall section for $d_s = 2.03'$

David C. Weiss
Structural Engineer & Associates, Inc.
24372 Vanowen Street, Suite 104
Woodland Hills, CA 91367
818-227-8040(P) 818-227-8841(F)

Client : Kenterra VI LP
Job Add.: 31388 Broad Beach Road
Malibu, CA
Job Num.: KEN4.112
File: Maximum Breaker Heights
Date: 2/13/2012

FOR S.W.L. = 7.5' MLLW, ds = 2.03'

ds = 2.03 ft.
m= 0.05
g= 32.2 ft/sec^2

1 T(sec.)	2 ds/gT^2	3* Hb/ds	4 Hb	5 Hb/gT^2	6** Hb/H'o	7 H'o	H'o	Elevation (MLLW)
6	0.0018	1.325	2.69	0.0023	1.710	1.57	2.0980	9.598
7	0.0013	1.358	2.75	0.0017	1.920	1.43	2.1471	9.647
8	0.0010	1.350	2.74	0.0013	2.130	1.29	2.1376	9.638
9	0.0008	1.365	2.77	0.0011	2.360	1.17	2.1613	9.661
10	0.0006	1.375	2.79	0.0009	2.600	1.12	2.1772	9.677
11	0.0005	1.385	2.81	0.0007	2.780	1.01	2.1930	9.693
12	0.0004	1.395	2.83	0.0006	2.780	1.02	2.2088	9.709
13	0.0004	1.395	2.83	0.0005	2.780	1.02	2.2088	9.709
14	0.0003	1.400	2.84	0.0005	2.780	1.02	2.2168	9.717
15	0.0003	1.400	2.84	0.0004	2.780	1.02	2.2168	9.717
16	0.0002	1.410	2.86	0.0003	2.780	1.03	2.2326	9.733
17	0.0002	1.410	2.86	0.0003	2.780	1.03	2.2326	9.733
18	0.0002	1.410	2.86	0.0003	2.780	1.03	2.2326	9.733

* Hb/ds based on 1:19.67 Bottom Slope - Fig 7-4 USACE Shore Protection Manual
** Hb/H'o based on 1:16.67 Bottom Slope - Fig 7-5 USACE Shore Protection Manual
*** R/H'0 based on 2:5 Uprush Slope - & Interpolating between Fig. 7-10(ds/H'o=.8) & Fig 7-11(ds/H'o=2.0) USACE Shore Protection Manual
**** k Runup Correction Factor - Fig 7-13 USACE Shore Protection Manual

FOR S.W.L. = 7.5' MLLW, ds = 4.7'

ds = 4.7 ft.
m= 0.05
g= 32.2 ft/sec^2

1 T(sec.)	2 ds/gT^2	3* Hb/ds	4 Hb	5 Hb/gT^2	6** Hb/H'o	7 H'o	H'o	Elevation (MLLW)
6	0.0041	1.213	5.70	0.0049	1.340	4.25	4.4450	14.28
7	0.0030	1.250	5.88	0.0037	1.460	4.02	4.5826	14.42
8	0.0023	1.300	6.11	0.0030	1.570	3.89	4.7656	14.60
9	0.0018	1.313	6.17	0.0024	1.700	3.63	4.8116	14.64
10	0.0015	1.318	6.29	0.0020	1.820	3.45	4.8033	14.74
11	0.0012	1.350	6.35	0.0016	1.980	3.20	4.9491	14.78
12	0.0010	1.363	6.40	0.0014	2.080	3.08	4.8949	14.83
13	0.0009	1.369	6.43	0.0012	2.230	2.88	5.0180	14.85
14	0.0007	1.375	6.46	0.0010	2.420	2.67	5.0408	14.87
15	0.0006	1.381	6.49	0.0009	2.520	2.58	5.0637	14.90
16	0.0006	1.381	6.49	0.0008	2.640	2.46	5.0637	14.90
17	0.0005	1.388	6.52	0.0007	2.790	2.34	5.0866	14.92
18	0.0005	1.388	6.52	0.0006	2.790	2.34	5.0866	14.92

Figure Number Ten: Calculations for heights of waves breaking on the seawall at 31388-31406 Broad Beach Road.

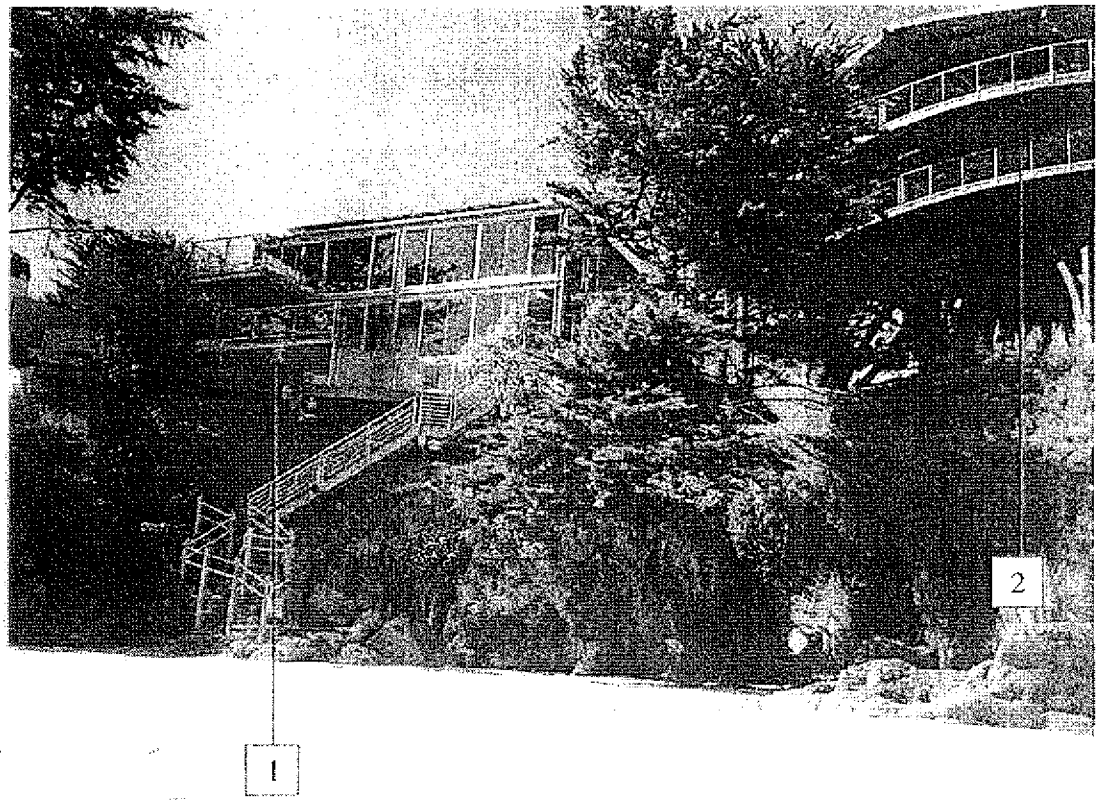


Figure 11: Structure #1 & #2 elevated above on rock

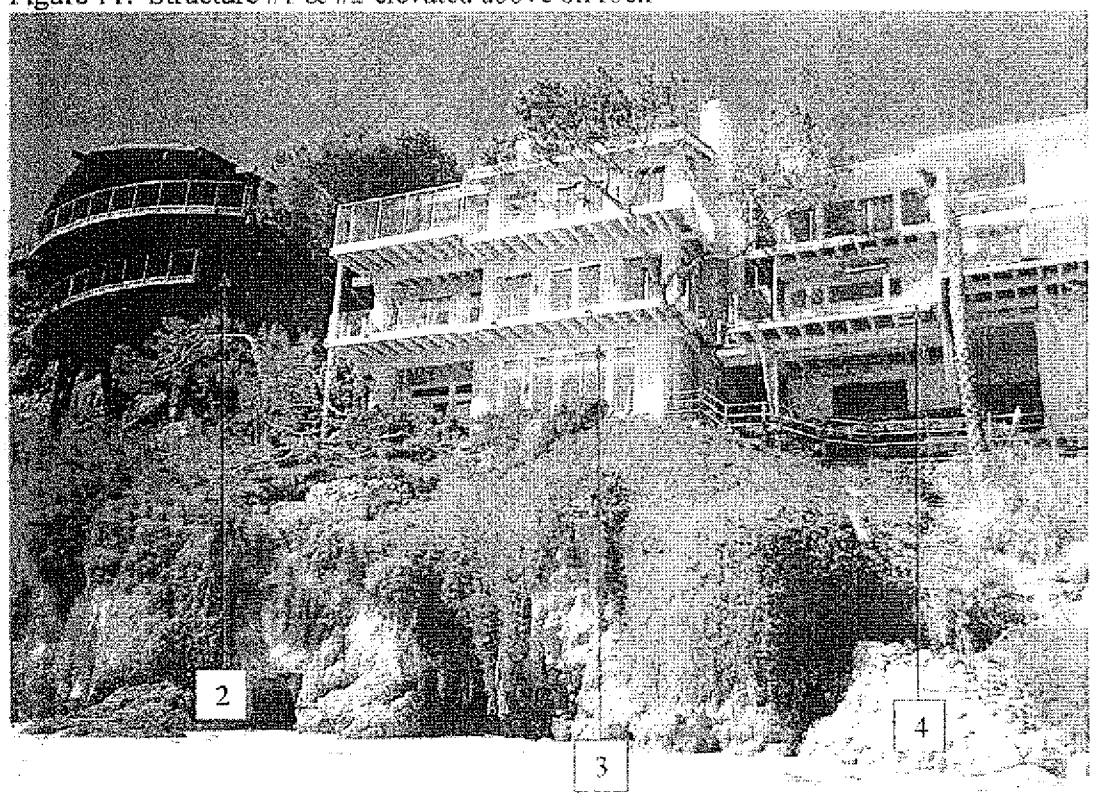


Figure 12: Structure #2, #3 & #4 elevated above on rock

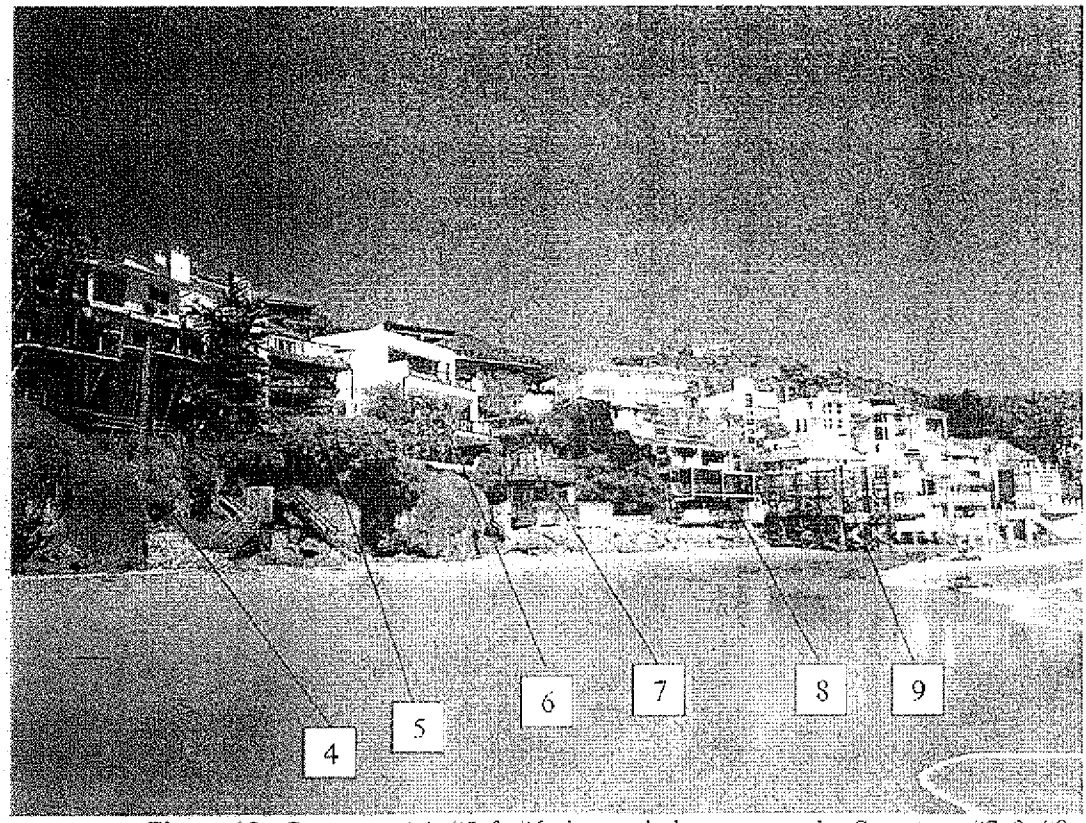


Figure 13: Structure #4, #5 & #6 elevated above on rock. Structure #7 & #8 with rock revetment.

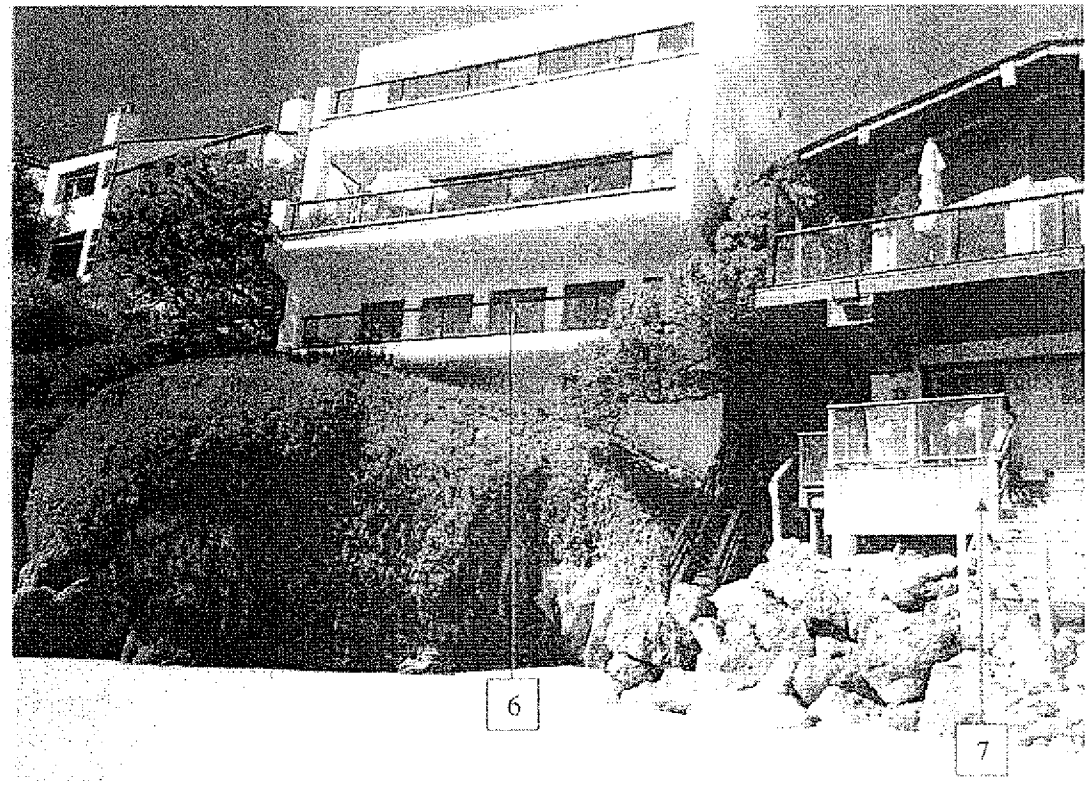


Figure 14: Structure #6 elevated above on rock. Structure #7 with existing rock revetment.

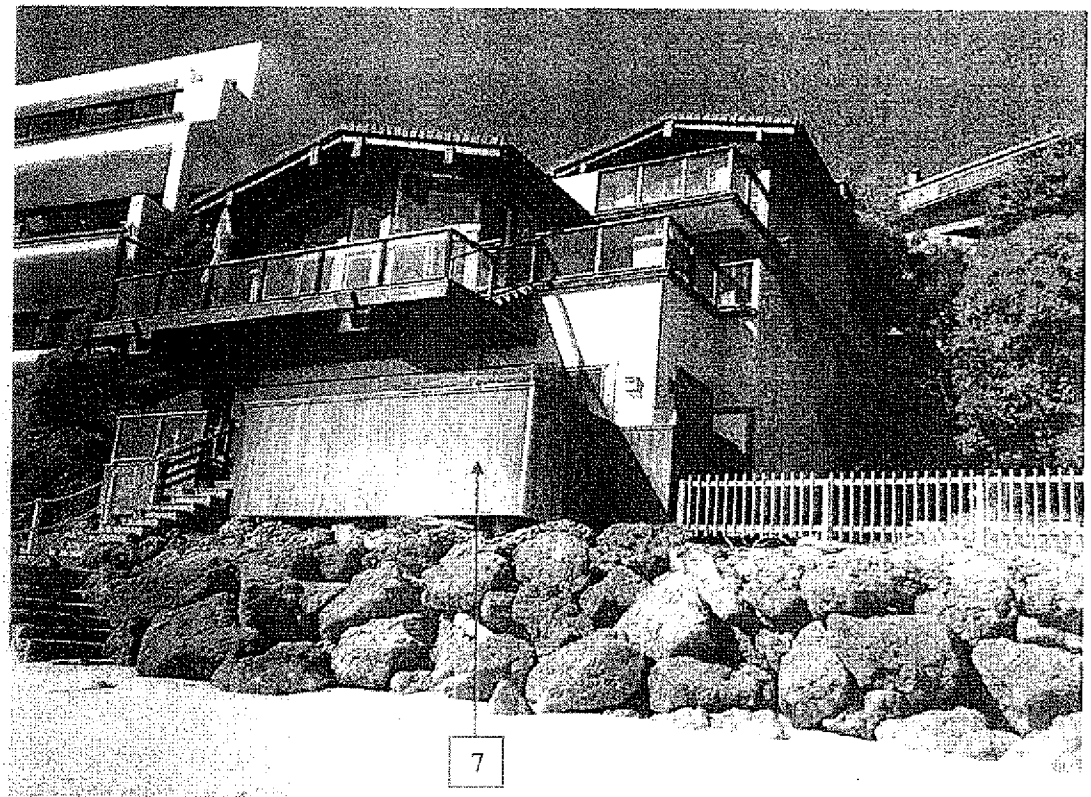


Figure 15: Structure #7 with existing rock revetment.

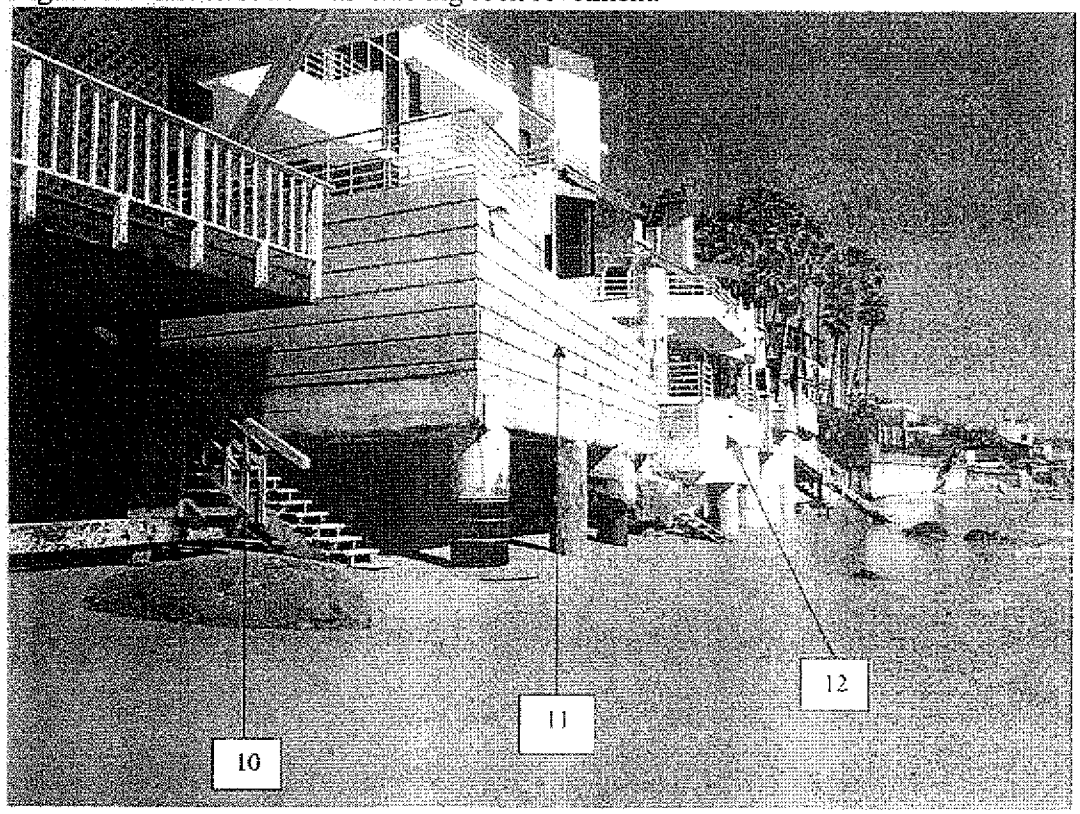


Figure 16: Structure #10, #11 & #12 elevated on piles, socketed into bedrock.

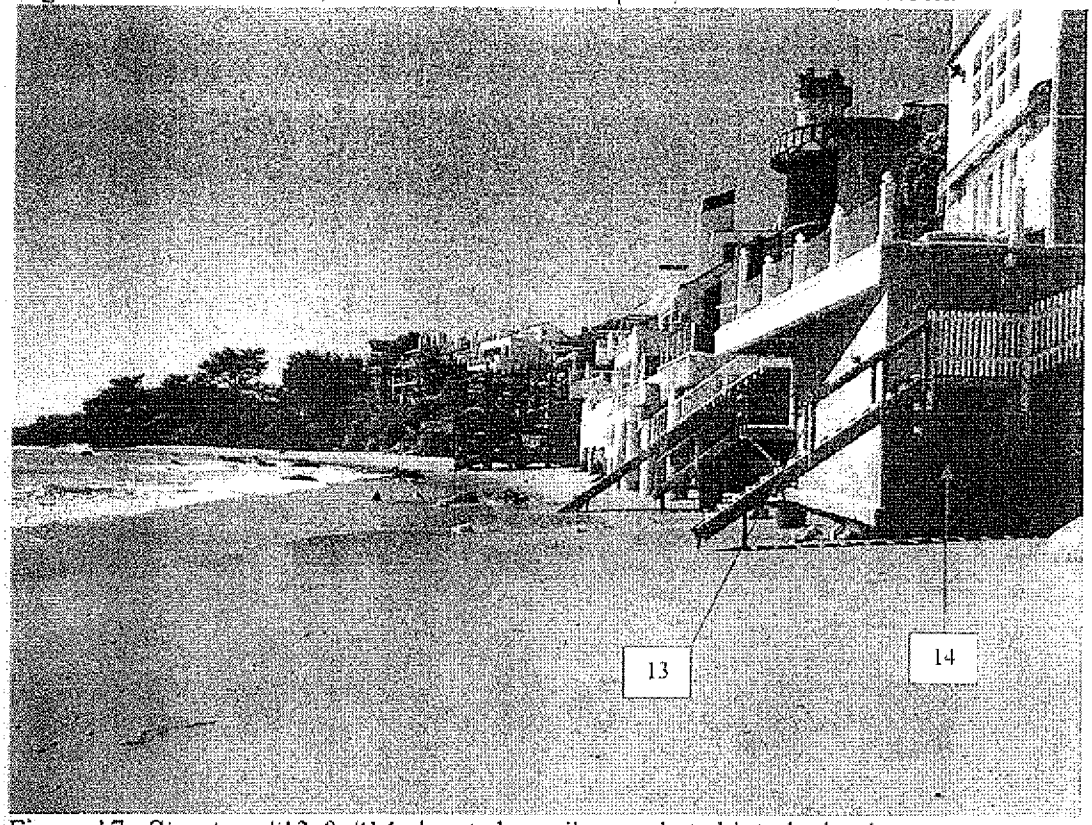


Figure 17: Structure #13 & #14 elevated on piles, socketed into bedrock.

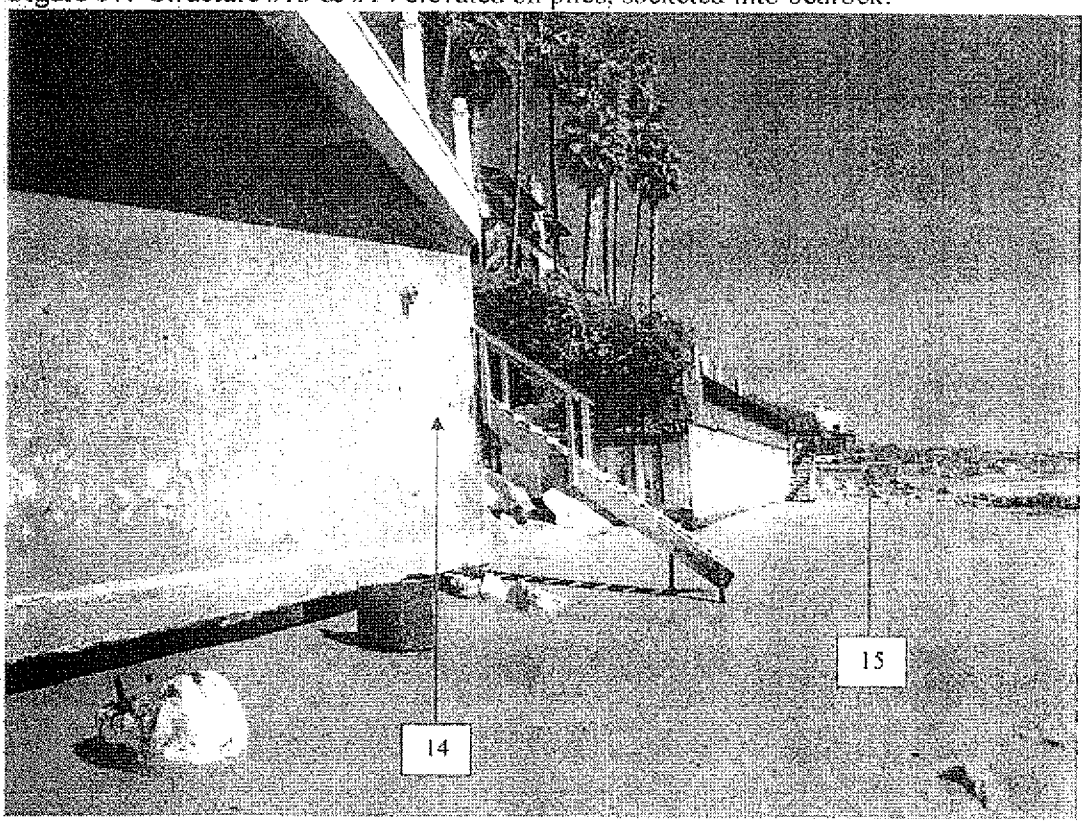


Figure 18: Structure #14 elevated on piles, socketed into bedrock. Existing timber bulkhead protecting structure #15.

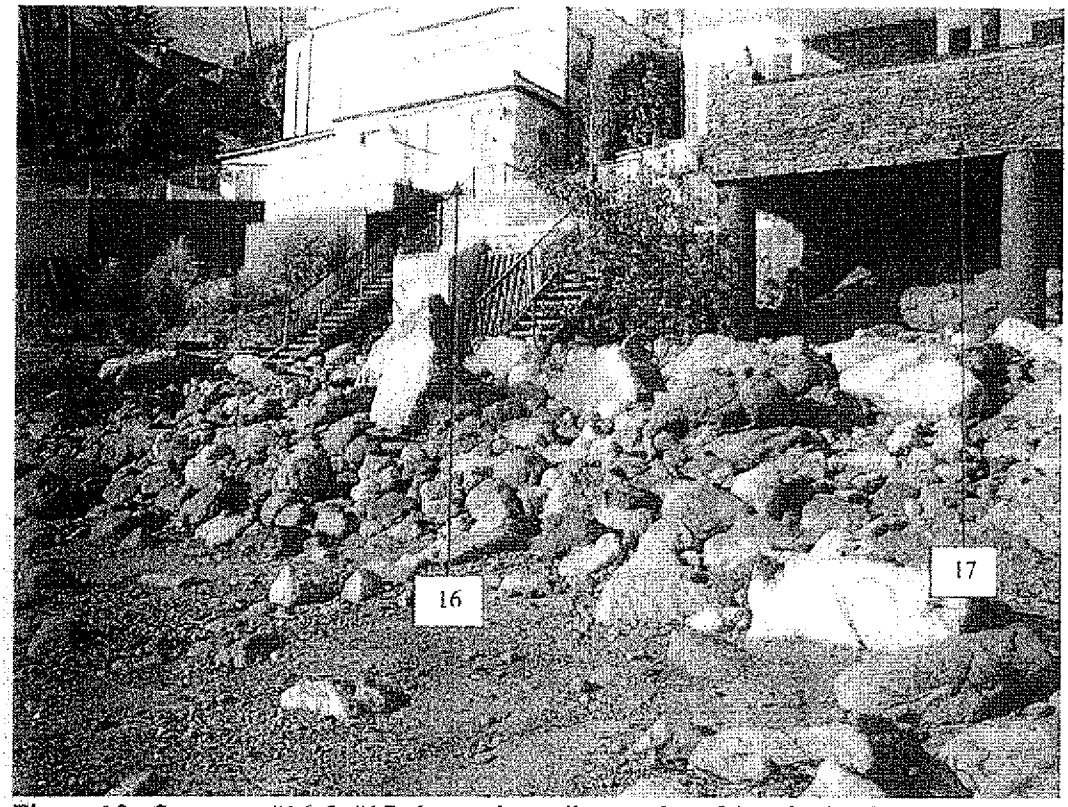


Figure 19: Structure #16 & #17 elevated on piles, socketed into bedrock.

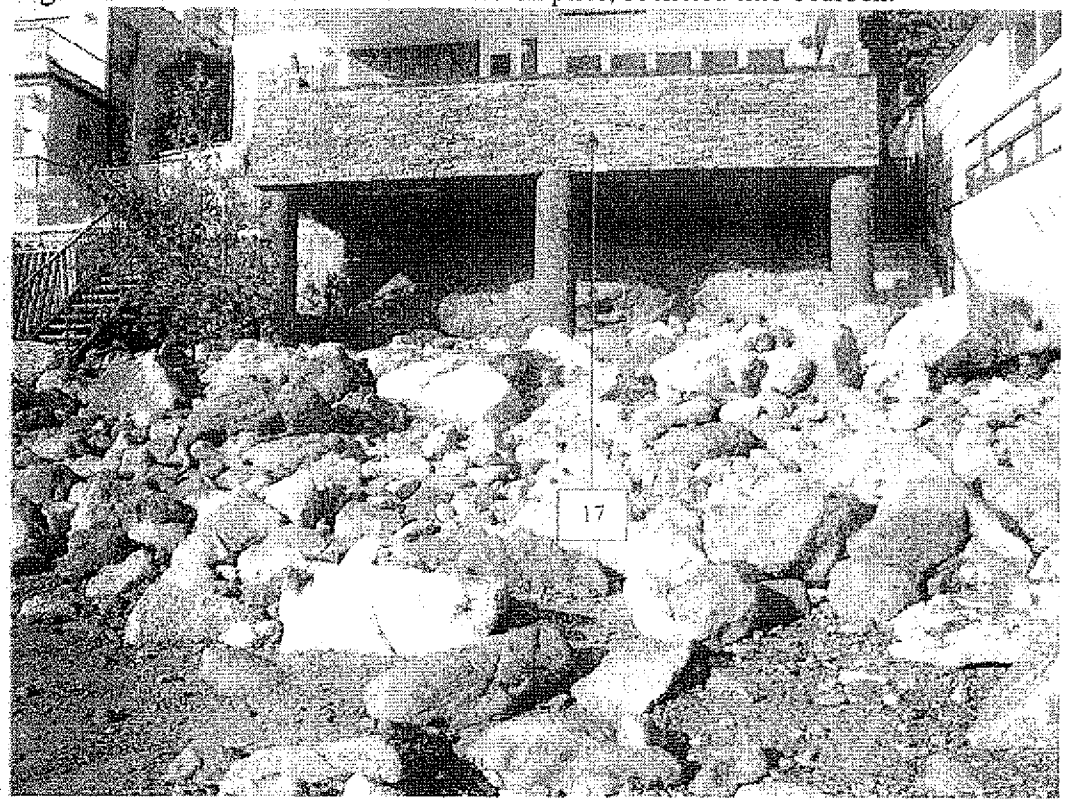


Figure 20: Structure #17 elevated on piles, socketed into bedrock.

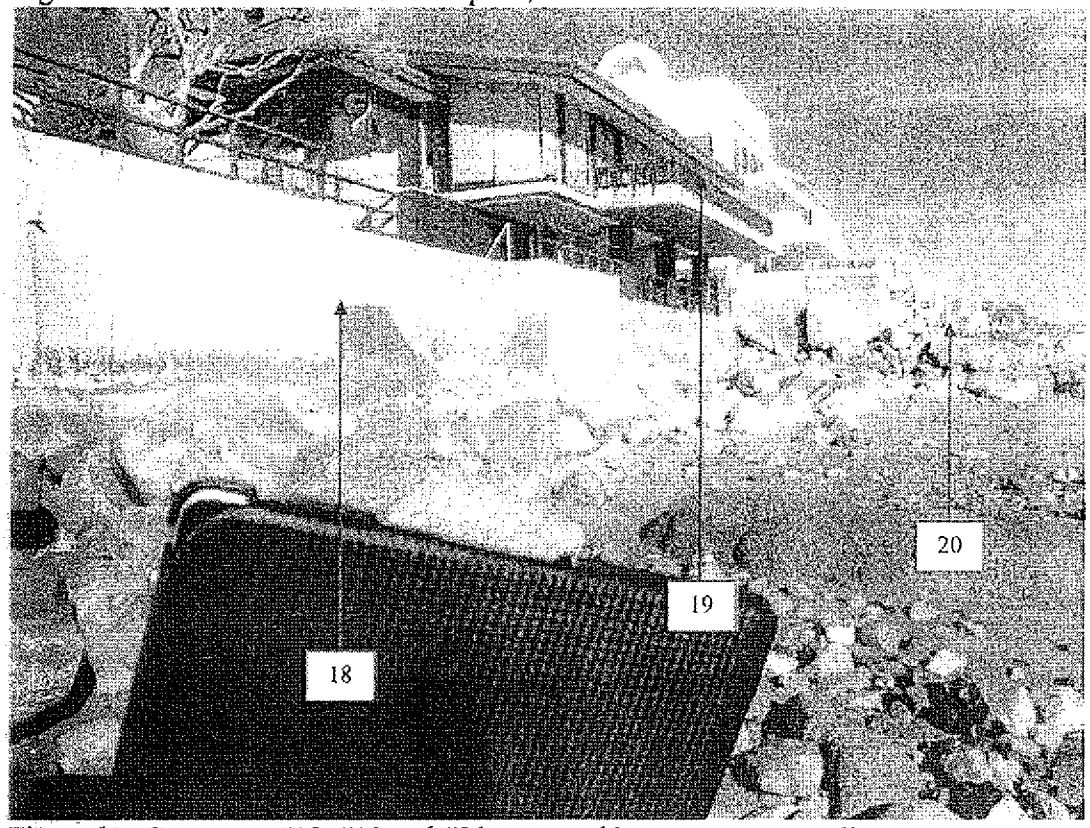


Figure 21: Structures #18, #19 and #20 protected by concrete sea walls.

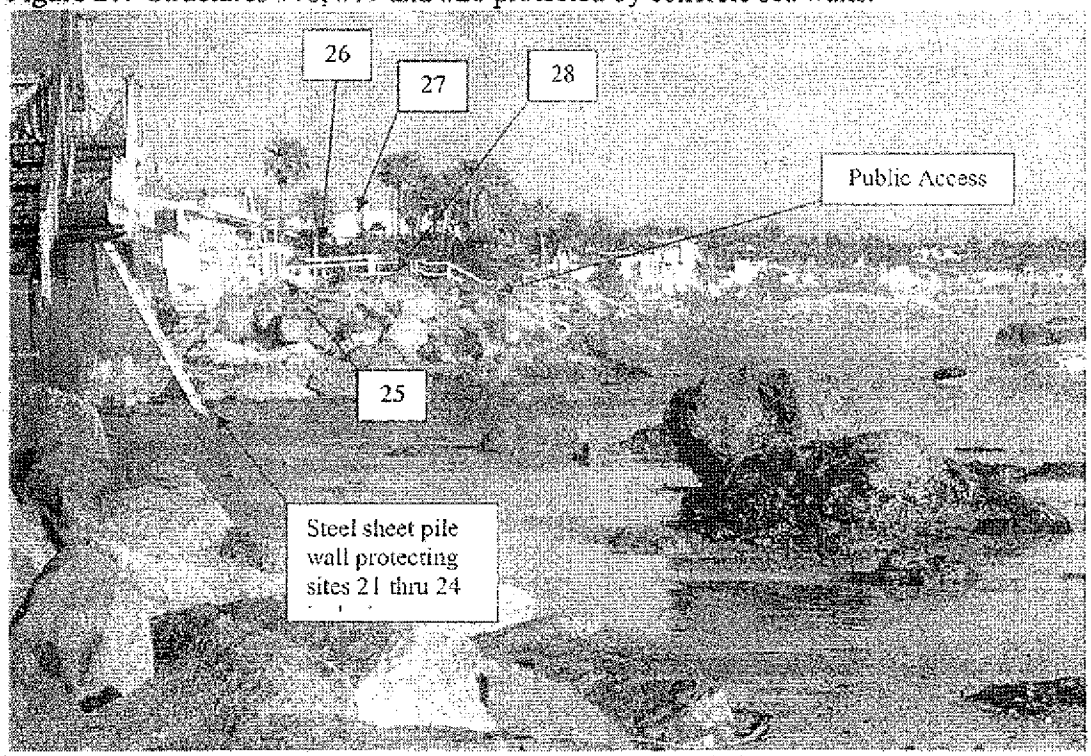


Figure 22: Structures #21 – #24 protected by existing steel sheet pile wall.

References:

Number One

Broad Beach Restoration Project Phase One Draft Report
By: Moffatt & Nichol
Dated: April 2010

Number Two

Sand Loss Estimates If Artificial Fill Is Placed At Broad Beach, Malibu California
By: Everts Coastal
Dated: 15 December 2009

Number Three

Engineer's Report for Broad Beach Geologic Hazard Abatement District for the Establishment of an Assessment Limit
ENGEO Incorporated
Dated: January 18, 2012

Number Four

Broad Beach Geologic Hazard Abatement District
Resolution No. 2011/05
Dated: December 11, 2011

Number Five

Broad Beach Geologic Hazard Abatement District
Dated: January 18, 2012

Number Five

Broad Beach Geologic Hazard Abatement District
Notice of Adoption of Resolution Declaring Intent to Impose Assessment Ballots and Related Documents
Dated: December 16, 2011

Number Six

Broad Beach Restoration Project Coastal Engineering Appendix to the Broad Beach Geologic Hazard Abatement District Engineers report
By: Moffatt & Nichol
Dated: December 2011

Number Seven

Coastal Engineering Manual
By: U.S. Army Corps of Engineers
Date: 1984

Number Eight

A Semi-Empirical Approach to Projecting Future Sea Level Rise
From: Science Magazine
19 January 2007, Vol. 315
By: Stefan Rahmstorf

Number Nine

Global Sea Level Linked to Global Temperature
From: Proceedings of the National Academy of Sciences
Early Edition
By: Martin Vermeer and Stefan Rahmstorf

Number Ten

Historic Mean High Tide Lines
Map By: Moffat & Nichol
For:Trancas Property Owners Association
Dated: Aug. 2011

EXHIBIT 2

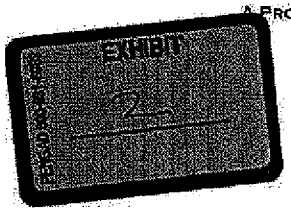
ARTHUR H. BARENS
A PROFESSIONAL CORPORATION
LAWYERS

ARTHUR H. BARENS*
JOE HARITON
PAUL J. KOSSITCH
& ASSOCIATES

*A PROFESSIONAL CORPORATION

BARENS LAW BUILDING
10209 SANTA MONICA BLVD.
LOS ANGELES, CALIFORNIA 90067

TEL (310) 557-0444
FAX (310) 557-1432



March 9, 2012

Board of Directors
Broad Beach Geological Hazard Abatement District
c/o Marquis Property Company, Ltd.
29169 Heathercliff Road, Suite 212
Malibu, CA 90265

Re: Proposed Broad Beach GHAD Assessment

Dear Board Members:

This office represents Chad McQueen, who is the owner of the property located at 31516 Victoria Point Road, Malibu, CA 90265.

Please consider this as formal notice that we object to the proposed GHAD assessment and we respectfully request that the Broad Beach Geological Hazard Abatement District (GHAD) Board refrain from adopting it. Accordingly, we are enclosing Mr. McQueen's Ballot indicating a "NO" vote.

As we understand it, by law, the GHAD is a limited purpose agency whose only purpose is to prevent, mitigate, abate or control geologic hazards. The boundaries of the Broad Beach GHAD primarily include privately owned properties, including improvements to those 78 properties behind the temporary emergency revetment. The expenditures for the assessment exclusively benefit the 78 emergency revetment properties. Simply stated, the purpose of the project pertains to the 78 properties located behind the temporary emergency revetment, and irrespective of the merit and value of the project for those 78 homes, the GHAD improperly includes and proposes to assess - on the same basis as the 78 emergency revetment homes - lots that are not behind the temporary emergency revetment without any evidence showing whatsoever that the GHAD's project is necessary to protect such lots or that the special benefit, if any, conferred on those lots is equal to the special benefit conferred on the temporary emergency revetment lots.

Mr. McQueen's property is one of those properties that will <u>not</u> benefit by this project as it is situated in a location already protected by more than sufficient sand and rocky bluffs, well above the beach. My client will have no benefit whatsoever from the revetment and accordingly, a tax is being imposed on my client simply because he lives in the general area of the improvement. My client is being unfairly assessed a tax to benefit others but not himself as a property owner.

My client further objects to the improvement along the westerly stretch of Broad Beach as a result of the environmental damage that will be caused by filling the nearby beach and inter-tidal areas along the westerly stretch of Broad Beach as proposed by the Board's GHAD project.

In summary, the assessment requires my client and other unwilling property owners to subsidize costs that should be bourne by the 78 temporary emergency revetment homeowners, the County of Los Angeles and State of California, and no others. As you are aware, the California Constitution protects property owners from being compelled to pay an assessment unless the assessment meets various stringent requirements. We submit that the assessment proposed by the GHAD Board does not comply with the requirements of Proposition 218 on its face.

Furthermore, there has been no showing by any report submitted by any engineering agency or any other report, that the "special benefit" is of any relevance or benefit for my client's property. No determination has been made or submitted to your Board that there is any amount of special benefit actually conferred by the GHAD Board's temporary project that would benefit my client's property. Furthermore, there is no analyses confirming that there is a geologic hazzard to be abated for our client's property that is served within the purpose of GHAD enabling statute and that the amount of the assessment for our client's lot does not exceed the reasonable value, if any, of the benefit received by his property.

Our client's property is naturally protected by Victoria Point, where the property is located, which is a rocky bluff and there is cobble and bedrock underlying the beach that is not subject to the type of erosion that threatened the 78 homes and to be protected by the temporary emergency revetment. The land in front of our client's residence is more than sufficient to protect his property. Accordingly, the GHAD project is not necessary to protect the property given its location. Any additional protection that my client might wish for his property would certainly cost much less than the accumulative cost of the annual assessment that would be imposed by the GHAD.

In conclusion, for all the foregoing reasons, we object to, and urge the Board not to adopt, the proposed assessment.

Very truly yours,

ARTHUR H. BARENS

AHB:am
Enclosure
cc: Chad McQueen (via fax)
Larry Rogers, CPA (via e-mail)

EXHIBIT 3

moffatt & nichol

3780 Kilroy Airport Way, Suite 600
Long Beach, CA 90806

(562) 426-9551 Fax (562) 424-7489

EXHIBIT 15

March 11, 2012

Broad Beach Geologic Hazard Abatement District (BBGHAD)
c/o Mr. Zan Marquis, BBGHAD Board
Marquis Property Company, Ltd.
29169 Heathercliff Road
Malibu, CA 90265

Sub: Broad Beach Restoration Project – Technical Response to Kenterra VI, L.P. Opposition to BBGHAD Formation
M&N File: 6935

Dear Mr. Marquis:

The purpose of this letter is to provide responses to the key technical issues raised in the March 9, 2012 letter prepared by Katten Muchin Rosenman LLP and appended March 9, 2012 letter prepared by David C. Weiss.

Issue: Primary purpose of project is to obtain permanent Coastal Development Permit to allow the temporary emergency revetment to be retained.

Response: Project was well underway to develop a long term restoration of Broad Beach including the beach nourishment and dune restoration before winter of 2009-2010 which necessitated construction of temporary emergency revetment to protect residences and on-site wastewater treatment systems (OSWTs).

Issue: Disproportionate benefit to 78 homes behind temporary emergency revetment.

Response: More detailed discussion below citing the benefits to all within the District. All properties within the District will garner special benefits associated with the greater shore protection provided by the project. Historically it has been the westerly portion of Broad Beach that has been subject to the majority of coastal storm-related damages.

Issue: Kenterra property and many lots located on the westerly stretch of Broad Beach require no additional protection within the 20-year project period. The David C. Weiss letter subdivides the westerly stretch of 28 residences into three general groups from west to east.

> Group 1 – 31554 through 31500 Victoria Point Road – These are homes located on the bluff above the beach and described to be situated on rock which is not subject to significant erosion especially during the next 20 years of the project.

Group 2 – 31460 through 31412 Broad Beach Road – These homes are located on the steep slope between Broad Beach Road and the beach.

Group 3 – 31406 through 31346 Broad Beach Road – These homes include those located on Little Broad Beach Road.

Response: Most of the coastal storm damage to residences along Broad Beach has occurred within this westerly region. Each of these groups of residences directly benefit from the protection afforded by the proposed project as follows:

Group 1 - 31554 through 31500 Victoria Point Road – The western-most 6 residences are elevated and founded on the existing bluff. There is evidence of historic erosion of the bluff base along this reach as evidenced by observations of the bluff material (Photo 1 and 2) as well as the existence of revetment material at various locations along the bluff base, for the apparent purpose of stemming bluff base erosion (Photo 2, 3 and 4). One key benefit from the project is that it will greatly reduce this erosive effect. Why the protection of erodible bluff base material is so important is that once it has eroded, it does not come back. Furthermore, observations of these properties indicate many of the residential structures are located in close proximity to the bluff base (See Photo 5). The next few residences are protected by rock revetment that was constructed in the 1980s or 1990s in response to coastal storm related damages (per telecom with Alan Mark on March 10, 2012).

Group 2 – 31460 through 31412 Broad Beach Road – Within this next group of 7 residences, all but 31430 Broad Beach Road are described to have concrete foundations that are embedded deep into bedrock strata; 31430 is protected by a high timber bulkhead wall. This group of homes is also subject to coastal storm-related damages that could be reduced or eliminated by a sand beach fronting the seawalls. For example:

- 31430 Broad Beach Road recently completed a $40,000 seawall repair project (Max Factor personal communication to Chris Webb at (date) BBGHAD meeting.
- The seawall at 31444 Broad Beach Road was recently inspected and a large volume of backfill behind the seawall has been lost due to apparent wave action, thereby warranting significant repair cost. A fronting beach would eliminate the hydraulic pumping action that is the typical cause of this type of damage.
- The timber bulkhead that protects 31430 Broad Beach Road was constructed in response to the 1997-1998 El Niño winter storms (per telecom with Alan Mark on March 10, 2012).

Group 3 – 31406 through 31346 Broad Beach Road – This remaining group of 11 homes have various forms of shore protection. This group is also subject to period coastal storm damages that would be reduced or eliminated with a fronting beach. Examples include:

- The Kenterra properties at 31406 and 31388 Broad Beach Road are protected by a seawall designed to protect the two properties after the severe 1997-1998 El Niño

winter storms – again clear evidence that residences within this westerly reach are subject to significant coastal storm damage that could have been reduced or eliminated if the residence was fronted by a sand beach. Even if the sand beach is damaged during the storm events, much of the sand is moved offshore to create a winter berm that helps break waves farther offshore and thereby reduces the dynamic wave breaking directly on structures fronting properties on a beach that would otherwise have been denuded of sand.

31360-31364, 31365 and 31372

- The seawall at 31372 Broad Beach Road failed in January 2010.
- The January 2010 winter storms also caused foundation damage at 31346 Broad Beach Road.
- In the telephone conversation with Alan Mark on March 10, 2012, Mr. Mark also indicated a number of homes were having their steel sheetpile walls coated to inhibit damage and corrosion since these walls when designed were not intended to be exposed, but rather buried under sand. Photo 6 is an illustration of excessive scour of sand away from structure foundations.

Issue: Kenterra and other property owners along the westerly stretch of Broad Beach object to and oppose the environmental damage that would be caused by filling near-beach and intertidal areas along the westerly stretch of Broad Beach.

Response: Environmental impacts to the marine habitat at the west end are not anticipated because the project was designed to be sensitive and not impact biological resources. This was done by tailoring its footprint to avoid direct placement on sensitive resources. They are accustomed to regular sand burial naturally during seasonal changes, and will continue to experience that after the project. This successful approach was taken in the San Diego region that possesses similar sensitive biology where no environmental impacts occurred from that project in 2000. A similar effort will occur later this year in San Diego using the same approach. The design team has extensive experience working with resource agencies to be protective of habitat while still nourishing the beach.

Issue: The Western Beach is naturally protected by Victoria Point, which is a rocky bluff, and there is cobble and bedrock closely underlying the beach that is not subject to the type of scour erosion that threatened the 78 homes now protected by the temporary emergency revetment.

Response: The real shore protection benefit that Victoria Point (Lechuza Point) provides is to properties west of the point. The point is a promontory that acts like a groin. Groins are sand blocking structures that collect sand on their updrift (west) sides. Groins can also negatively impact the downdrift side by deflecting sand offshore in the immediate downdrift region. Furthermore, coastal headlands are also typically subject to increased wave energy than a beach with straighter and more parallel offshore contours, due to wave refraction effects.

The attached aerial photographs clearly illustrate these points. Photo 7 is a 2010 photo illustrating a wide updrift beach and narrow beach eastof the point. Conversely, Photo 8 illustrates historic wider beach east of the point in 1972.

We hope the information provided herein is useful in the decision-making process.

Best regards,

MOFFATT & NICHOL

Russell H. Boudreau, PE
Project Manager

Photo 1 – Toe Erosion Along Existing Coastal Bluffs

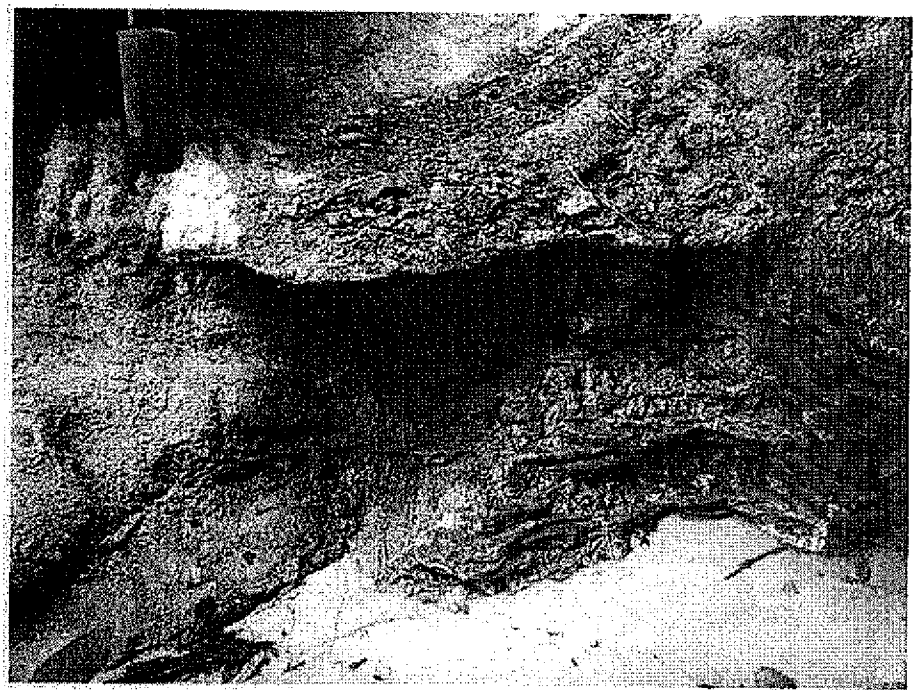


Photo 2 – Bluff Toe Erosion

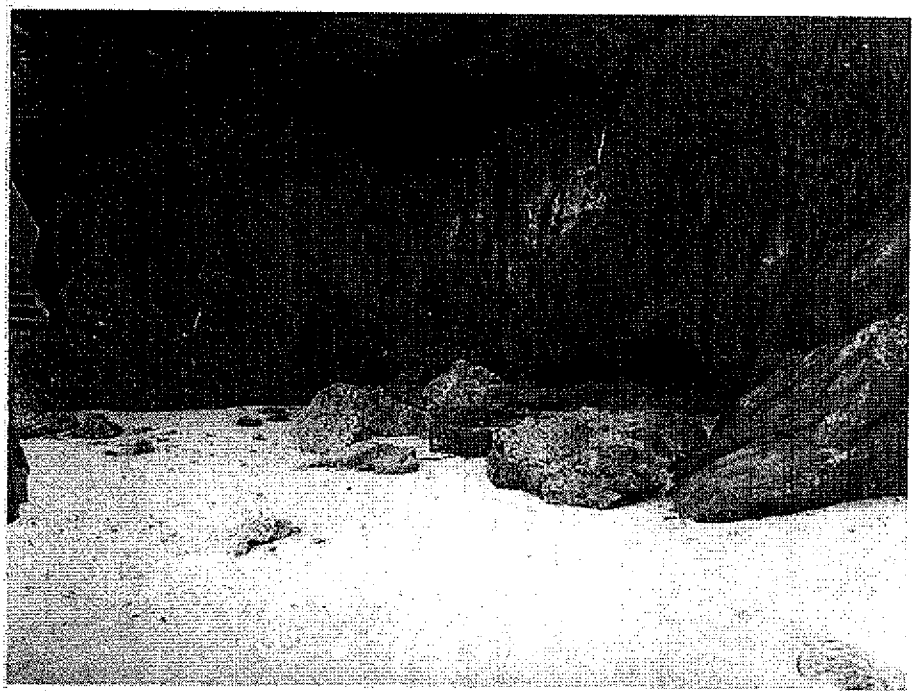


Photo 3 – Revetment Added for Bluff Toe Protection

Photo 4 – Revetment Bluff Toe Protection (in background)

Photo 5 – Proximity of Westernmost Residences to Bluff Toe

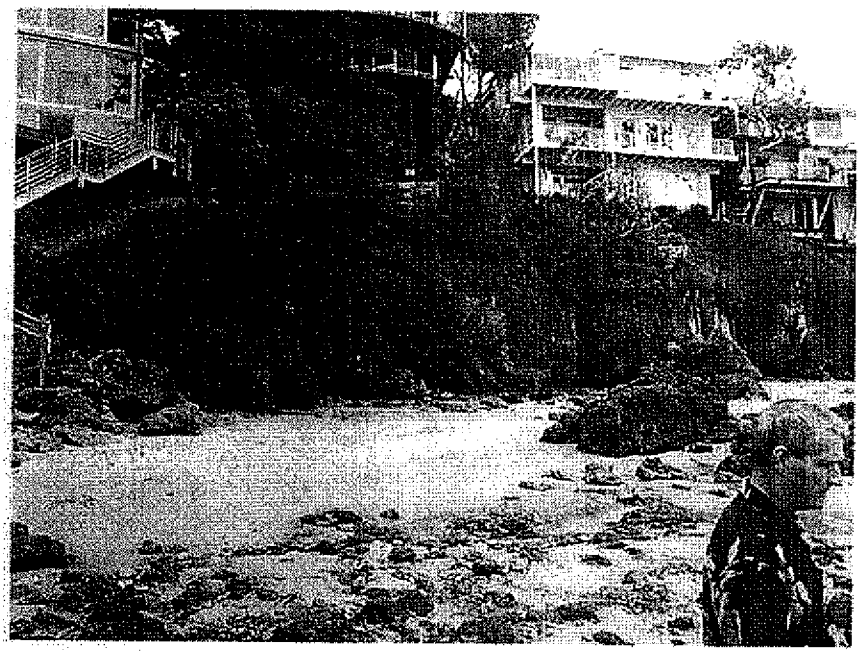


Photo 6 – Sand Scour Below Historic Elevation

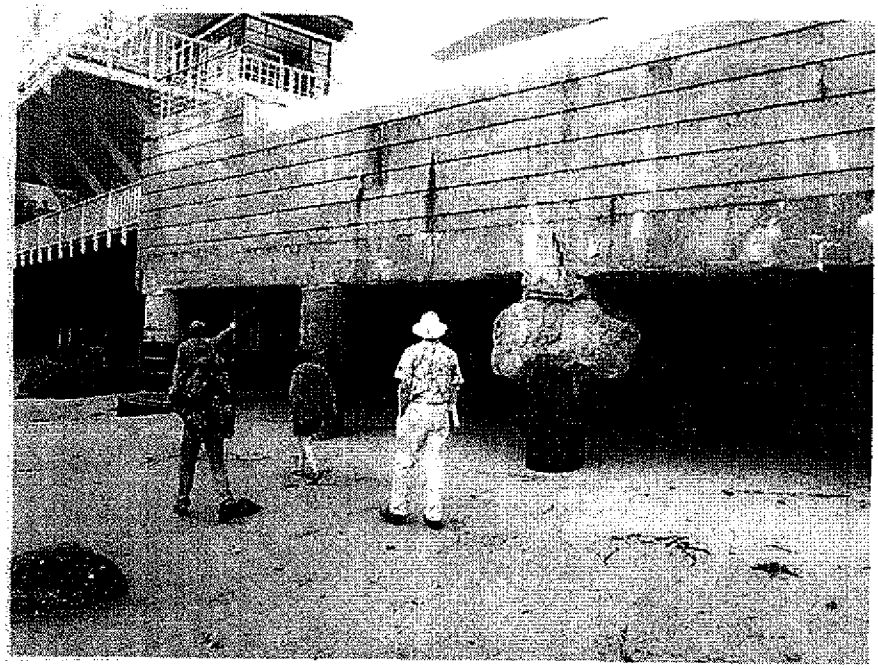


Photo 7 – Aerial Photograph of Victoria Point 2010 (California Coastal Records Project)

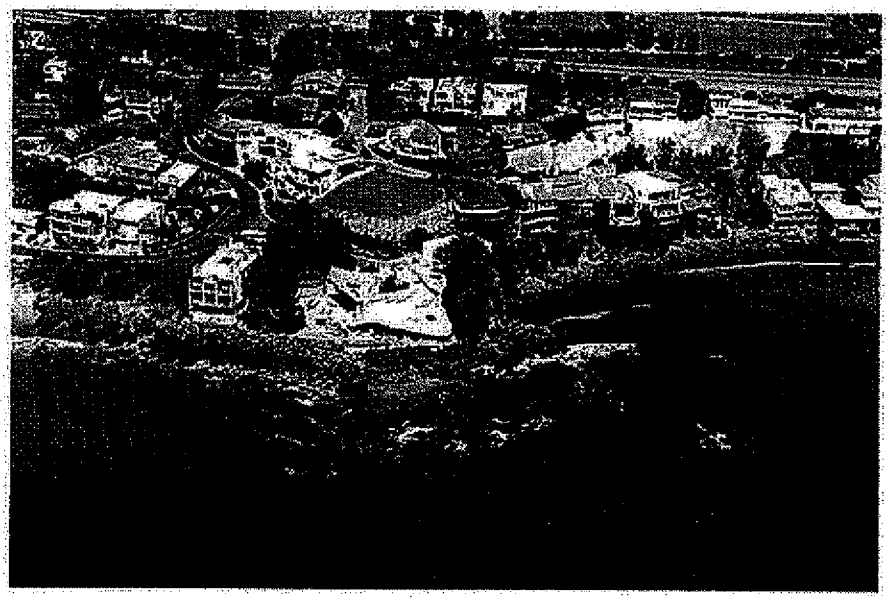


Photo 8 – Aerial Photograph of Victoria Point in 1972 (California Coastal Records Project)

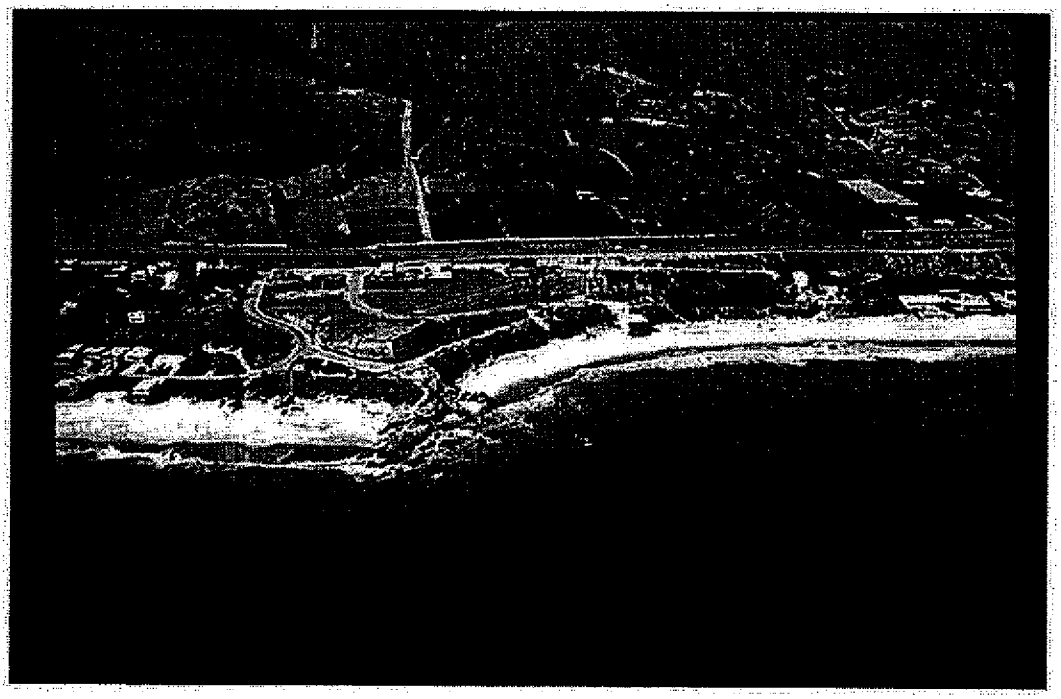
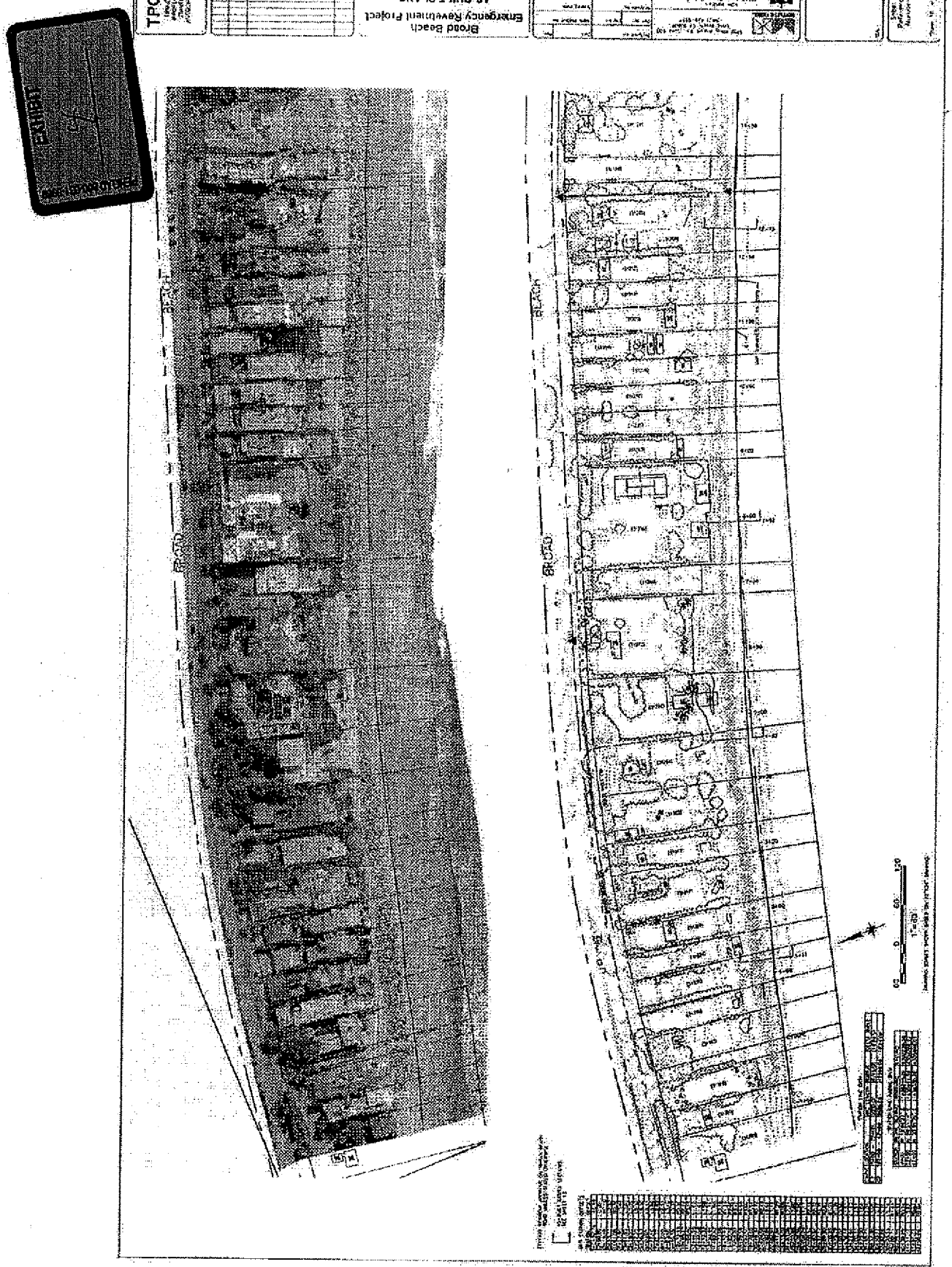


EXHIBIT 4



EXHIBIT
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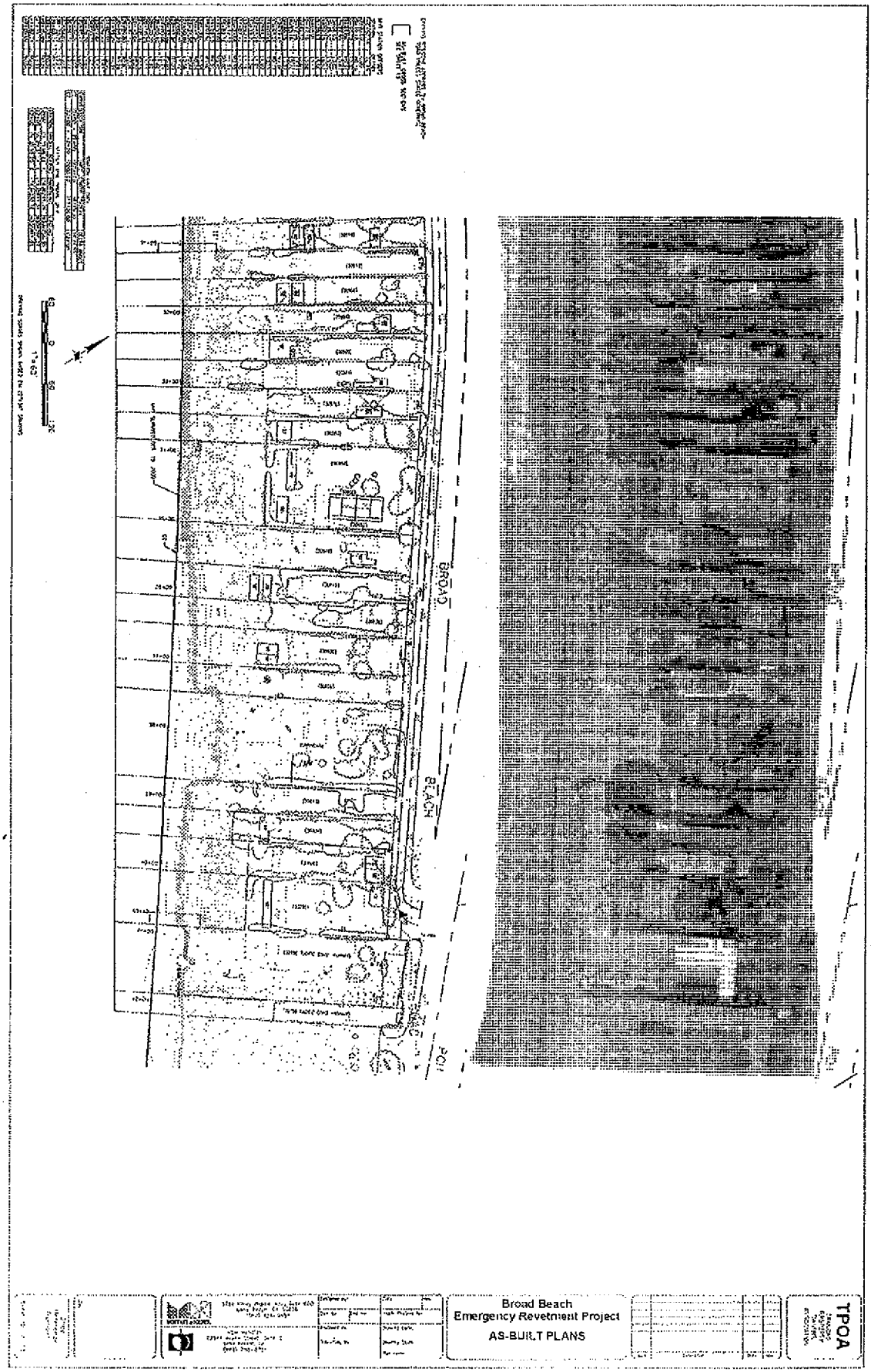
Broad Beach
Emergency Revetment Project
AS-BUILT PLANS
BROAD

BBGHAD0040267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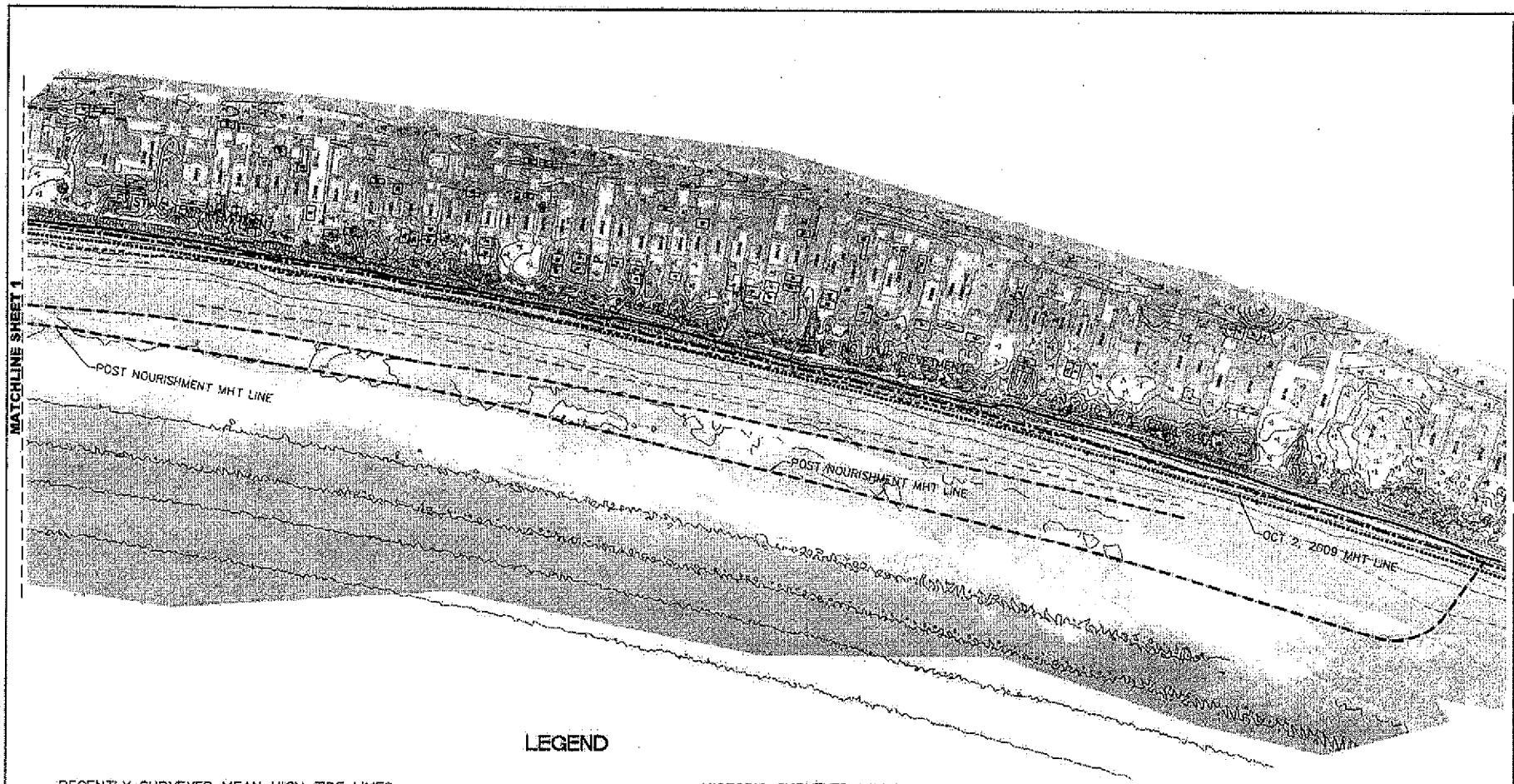
Broad Beach
Emergency Revetment Project
AS-BUILT PLANS
TPOA



LEGEND

RECENTLY SURVEYED MEAN HIGH TIDE LINES

- JANUARY 19 & 20, 2010 – FROM SLC
- OCTOBER 15, 2009 – KDM MERIDIAN
- OCTOBER 2, 2009 – KDM MERIDIAN
- ESTIMATED POST NOURISHMENT MHTL

HISTORIC SURVEYED MEAN HIGH TIDE LINES

- OCTOBER 1928
- MARCH 1940
- SEPTEMBER 1944
- MAY 1972

N

0 100 200 300

SCALE: 1" = 100'

DRAWING SCALES SHOWN BASED ON 22"X34" DRAWING

TPOA
TRANCAS PROPERTY OWNERS ASSOCIATION

BROAD BEACH RESTORATION PROJECT

HISTORIC MEAN HIGH TIDE LINES

Morton & Pitalo

Sheet Reference Number 2

Sheet 2 of 3

EXHIBIT 5

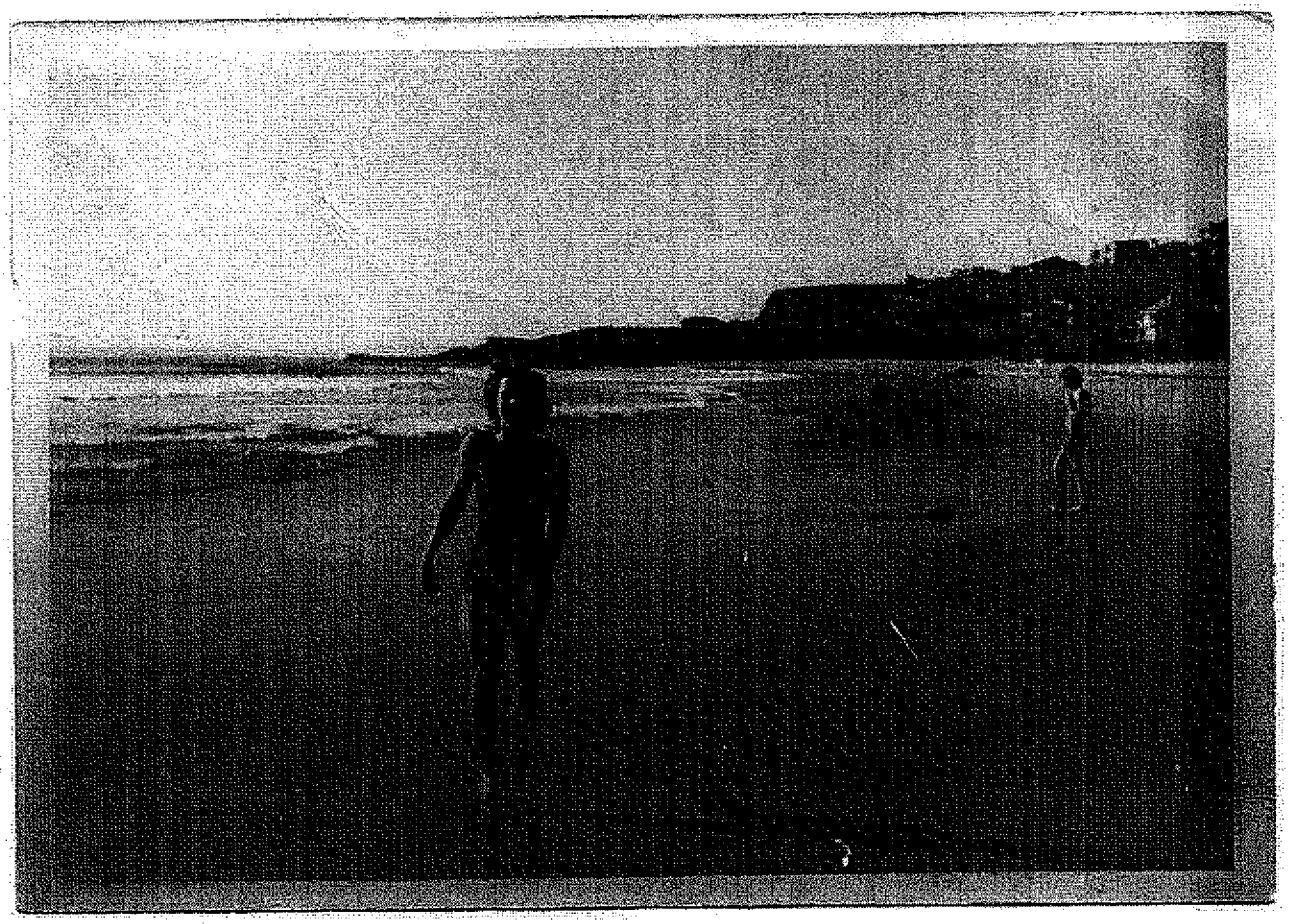
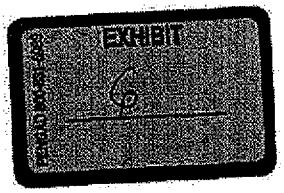


EXHIBIT 6



To: The Board of the Broad Beach GHAD
Interested GHAD Property Owners
Other interested parties

From: Jane Arnault, Homeowner
March 11, 2012

Many times in many meetings of the proposed GHAD, I have objected to being included in the GHAD. My home is on the western end of Broad Beach, the "Cove Area" and my home is already protected by a seawall. I am NOT against the GHAD for the people who need it, such as those homes behind the rock revetments. I am AGAINST the GHAD for those of us who do not want the sand nor need it.

Once again, **I hereby request that I be excluded from the GHAD.**

I vote No for the following reasons, among others:

1. This project is not necessary to protect my home. Nor is it necessary to protect the homes of my neighbors who have seawalls and cliff bluffs already protecting our homes.

2. My home is not at risk by wave action. Protection is already in place and is being fortified at great expense to me (i.e. the foundation columns being repaired and carbon fiber wrapped.)

3. The lovely tide pools, grasses, and sea life in the cove will be destroyed by the GHAD sand. We all – the public and homeowners – will suffer the loss of this natural environmental blessing.

4. In the Cove the sand comes and goes. When the tide and/or sand is low we have beautiful tide pools and recreational opportunities, including surfing. When the sand is high and/or the tides low we have a beautiful beach. Destroying this beach by covering it with tons of sand would be a shame. I am being forced to pay for the destruction of what is now in front of my home and so lovely and cherished.

5. The beach in the Cove is intended to be used as a reservoir to store sand for the benefit of the homes eastward and specifically behind the rock revetment. Natural forces move the sand east and south (most of the time), and the GHAD proponents have wanted this natural storage area (the Beach in the Cove and just eastward) to store sand for movement (gradual or otherwise) east.

6. The "Fair Share" reimbursement is entirely *unfair* to those homeowners not needing or wanting the GHAD and the sand.

7. The public is not participating in the cost of the GHAD sand and beach construction.

8. The eventual management of the beach is not known at this point. It is impossible to judge now whether the GHAD plans are in my interest or not.

9. I am subsidizing the 78 or so homes behind the rock revetment who need the GHAD while I do not need it. The cost to me is **$617,497.00** using the GHAD proponents numbers and projections.

10. Further unfairness occurs because I need to spend large sums, hundreds of thousands of dollars are the bids, to protect my house since I have a seawall and columns in the sand which need strengthening. The GHAD project does not cover any of my repairs -- it's just me helping protect their houses. The GHAD sand will not help my house in this repair as the sand could wash away anytime and I still need the seawall and columns in shape to do their job. This asymmetry of benefit arises from the fact that Broad Beach is really geologically two beaches with

different needs of homeowners in the Cove area behind seawalls and natural cliffs and of homeowners in the long stretch of beach which runs straight.

11. There are other solutions to the dilemma of the homes behind the rock revetment: one obvious solution entails applying for a permit to make permanent the rock revetment. This application has not been done. Instead, I and other Cove homeowners are being forced to subsidize the homeowners behind the revetment. Scare tactics have been used by the proponents of the GHAD to have homeowners believe that the GHAD and sand is the *only* solution.

12. The volume of sand which is proposed for my beach front is less than the volume for many other houses yet I am being assessed the same amount.

13. My assessment is for more linear square feet than I actually own per official documents and as previously communicated in detail by me to the GHAD Board.. This is discriminatory in that my home is in the cove and there was some curve to the frontage in linear square foot measurements (in the past not necessarily now) . Choice of this method of assessment and date of survey is arbitrary and discriminatory to me and my neighbors.

14. The beach in the Cove and Western End of Broad Beach is serving as a reservoir of sand for the homes behind the rock revetment and on down the beach. I do not need the proposed sand to protect my home, yet I am being forced to pay *not to benefit my home* but because this beachfront is needed to serve as a reservoir for the sand which natural forces will then move down the beach to others homes.

15. I hereby join in my reasons for voting NO on the GHAD the numerous reasons supplied by Attorney Allan Abshez for his client Kenterra and the Report by structural engineer David Weiss and his firm.

16. Other reasons which I include here by reference, some of which I have communicated to GHAD Board at numerous meetings and some of which I have written to our esteemed Malibu City Council.

Sincerely,

Jane Arnault
Homeowner, 31460 Broad Beach Road, Malibu, Ca 90265

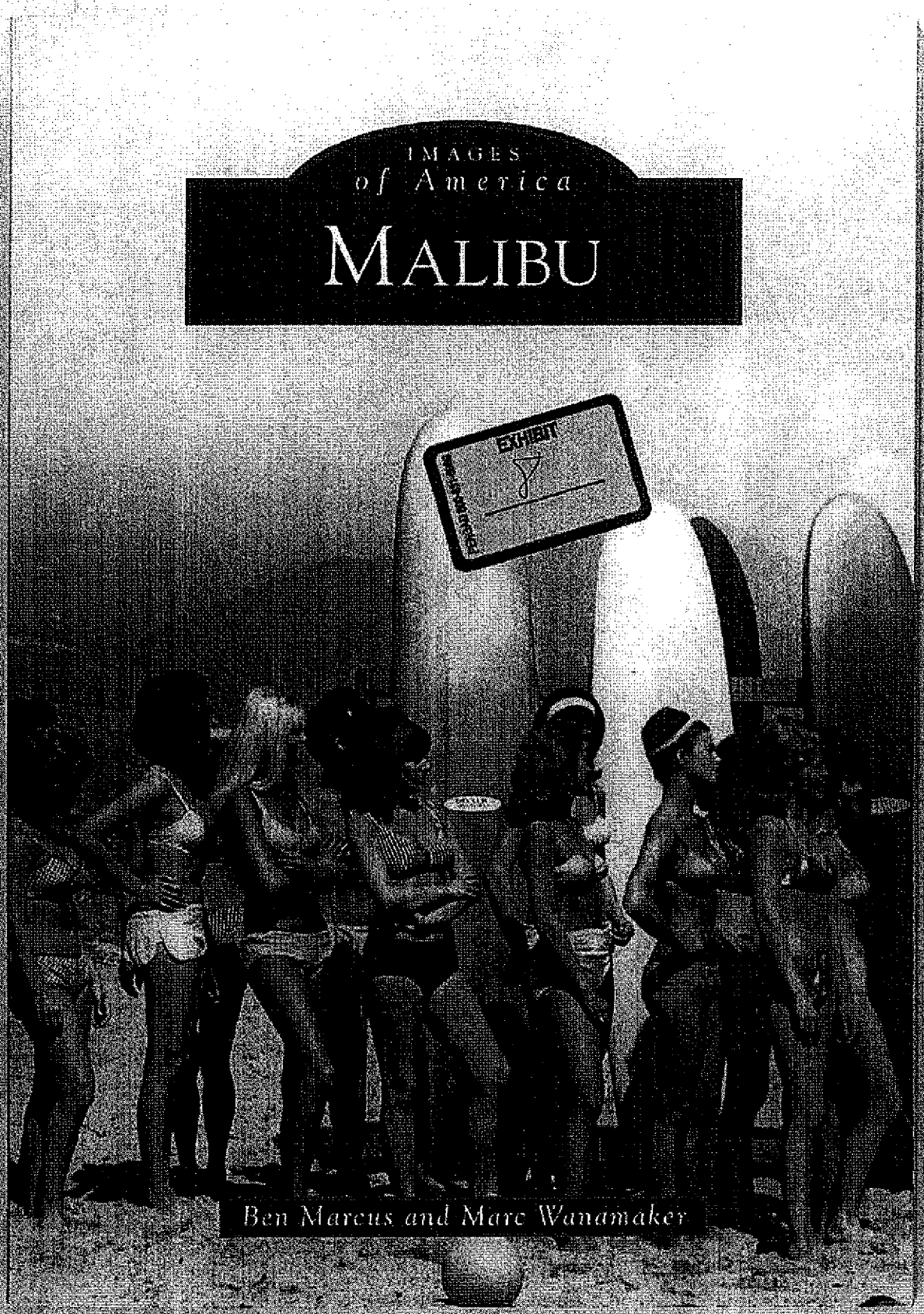
EXHIBIT 7

Feb 10, 2021

EXHIBIT 8

IMAGES
of America

MALIBU



Ben Marcus and Marc Wanamaker

"Frankie" Goes to Malibu. In 1968, Frank Sinatra starred with Jacqueline Bisset in *The Detective*. Sinatra played detective Joe Leland, who was investigating the murder of a homosexual and uncovers a web of deceit and corruption. *The Detective* is another movie set in New York City but somehow ended up on the beach at Malibu. Mia Farrow was supposed to costar with her husband, Frank Sinatra, in the movie, but she was caught up in another movie and refused. Sinatra became so angry, he served his wife divorce papers on the set of *Rosemary's Baby*. There is more trivia about the movie: *The Detective* was based on a book by Robert Thorp, and the sequel to that book, *Nothing Lasts Forever*, has detective Joe Leland trapped in a skyscraper after it is taken by German terrorists. In the film, he must also rescue his daughter and grandchildren. Sound familiar? *Nothing Lasts Forever* was made 20 years later under the title *Die Hard* with Bruce Willis.

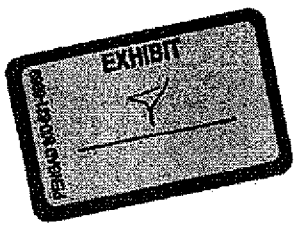
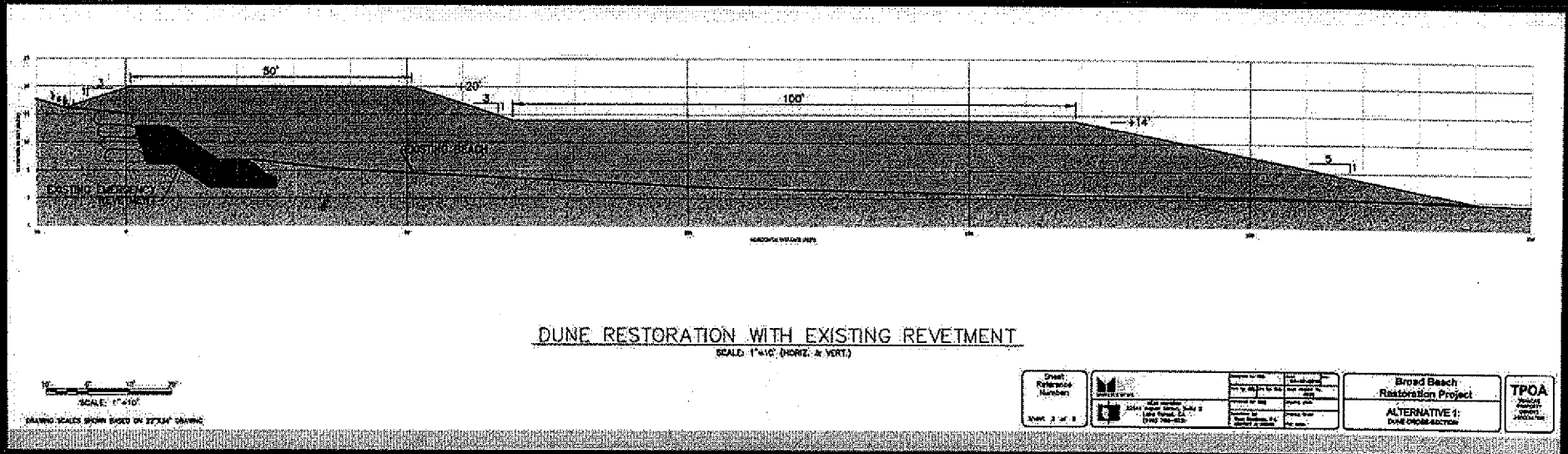


EXHIBIT 9

Cross Section View – Beach Nourishment and Dune Restoration with Buried Long-Term Revetment



BROAD BEACH

AGENDA ITEM - 8(b)

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

CURTIS L. FOSSUM, *Executive Officer*
(916) 574-1800 FAX (916) 574-1810
California Relay Service from TDD Phone 1-800-735-2929
from Voice Phone 1-800-735-2922

Contact Phone: **(916) 574-2555**
Contact FAX: **(916) 574-1835**

April 18, 2012

File Ref: W26420

Kenneth A. Ehrlich
Jeffer Mangels Butler & Mitchell LLP
1900 Avenue of the Stars, 7th Floor
Los Angeles, CA 90067-4308

SUBJECT: Status of the Broad Beach Geologic Hazard Abatement District Application for a New Lease of State Land for the Broad Beach Restoration Project, City of Malibu, Los Angeles County

Dear Mr. Ehrlich:

Staff of the California State Lands Commission (Commission) has reviewed the application you submitted on behalf of the Broad Beach Geologic Hazard Abatement District (BBGHAD) for the Broad Beach Restoration Project (Project) to determine if it contains sufficient information to be determined complete as provided by law and the Commission's application requirements. According to the information submitted, the application is incomplete and the following must be provided:

1. Dredging Activities –
   - Information identifying the exact locations of the potential offshore borrow sites, including: coordinates delineating the perimeter of each site; details regarding the maximum depth of cut and volume to be removed; whether the proposed sites have been dredged previously; the regulatory requirements associated with all dredge permitting applications submitted to other regulatory agencies (e.g., U.S. Army Corps of Engineers, Regional Water Quality Control Board, etc.); and plans for restoration of the proposed dredging areas if required by any regulatory authorizations.

   - Information detailing the set-up and movement of the dredge discharge line system, including: how the discharge line and other system components will be moved during beach and dune fill activities; whether multiple discharge lines will be installed; how the submerged portion of the dredge discharge line will be secured to the ocean floor and moved; what precautions will be taken during hazardous surf/weather conditions to avoid potential leakages/spills of

dredge slurry; and details of maintenance activities for the dredge discharge line, to include where such maintenance will occur, procedures, disposal of any waste materials, etc.

- A lighting plan detailing the location, arrangement, and timing of all proposed lighting to be used during construction activities, including lights for the dredge discharge pipeline, monobuoy, any other buoys, etc.

- A plan for managing traffic/recreation (including waterborne traffic such as motorized/non-motorized watercraft, surfing, etc.) during operation of the dredge discharge pipeline and beach/dune fill activities.

- A plan detailing any sewage/bilge pump-out and/or boat/barge washing activities for any vessels associated with the Project, including where such activities would occur if required.

2. Public Access –
   - A bona fide mitigation plan to offset or compensate for the loss of existing lateral public access easements.

   - A site plan and associated project design plans substantially representing the final project proposal, to include all existing vertical and lateral public access easements, and any new public access easements required for project approval.

   - A plan detailing how the existing vertical accessways from Broad Beach Road and the access stairways constructed over the revetment will be modified or incorporated into the proposed dune construction, and how such vertical access improvements will be maintained post-construction.

   - Information detailing proposed staging activities at the Zuma Beach parking lot near the east end of Broad Beach, including: the authorization process for use of the parking area; identification of any existing structures and/or proposed Best Management Practices (BMPs) to contain/treat runoff from the staging area (e.g., existing storm water detention/treatment systems, oil/grease/sand separators, etc.); and whether staging activities are proposed at this location for future backpassing and/or nourishment activities.

   - Information regarding the proposed use of an alternative staging area within a parcel located between 31212 and 31202 Broad Beach Road. Please clarify whether the site is still being considered for the project, and if so, provide a construction staging plan to include: details on the proposed access through the site; impacts affecting public areas (such as the area of public parking locations affected and the duration that such locations would be unavailable

for public use during the project); details for all proposed BMPs during staging activities; and a proposed restoration plan for the affected public areas upon Project completion.

3. Storm Drainage –
   - A plan set, to include at minimum a plot plan and elevation plan, identifying: any recorded easements for existing storm water conveyance structures; the owners and/or responsible parties for each and if any authorizations are required to modify such structures; the locations of all existing storm drain outlets along the project reach that will be modified and or affected by the Project; and a plan detailing how existing storm drain outlet structures will be extended/incorporated into the proposed dune and beach fill area, to include a representative detail of such drainage outlet.

4. Dune Restoration Plan –
   - A Landscaping Plan for the proposed dune restoration, including a dimensional Site Plan identifying the location of the dune system in relation to the existing temporary rock revetment along its length, and a list of proposed plant species.

5. Construction Schedule –
   - A construction schedule time line showing anticipated construction activities for the duration of the project, including information identifying which activities are expected to occur on a continuous 24-hour schedule and/or on weekends, and their duration.

Upon receipt and review of all of the above items, you will be notified if your application is complete. Once your application has been determined complete, the Commission must act on your application as provided by law.

While not required for a complete application, the following information must be submitted prior to consideration by the Commission:

Septic System Survey –
- Please provide the anticipated Septic System Survey at your earliest opportunity. Please note that additional information may be needed for any proposed modification and/or relocation of existing leach fields/septic systems for the residential properties along Broad Beach Road.

Authorizations for Future Dredging Activities –
- Please identify any future assurances/commitments that have been negotiated for authorization to dredge additional sand from potential borrow sites anticipated to be used for future re-nourishment events.

Please be advised that the Commission cannot consider your application until all the above items have been received, so you are encouraged to submit them as soon as possible in order for us to continue processing your application in a timely manner.

Please contact me via telephone at (916) 574-2555 or via email at Kenneth.Foster@slc.ca.gov if you have any questions on this matter.

Sincerely,

Kenneth Foster
Public Land Management Specialist

Cc: Broad Beach Geologic Hazard Abatement District
c/o Zan Marquis
Marquis Property Company, Ltd.
29169 Heathercliff Road, Suite 212
Malibu, CA 90265

Chris Webb
Moffatt & Nichol
3780 Kilroy Airport Way, Suite 600
Long Beach, CA 90806

Shelli Haaf – CSLC
Jason Ramos – CSLC
Grace Kato - CSLC

AGENDA ITEM - 11(a)

Broad Beach GHAD
Cash Flow

Cash in Bank : 2/29/12			453,091.56
Sources of Cash:			
Advances from Individual Homeowners (Actuals)-Mar			201,000.00
All Invoices Paid thru 2/12/12	***Oct/Nov Invoices***	***Paid***	
Morgan Miller Blair	13,189.25	6,689.25	
Moffatt & Nichols		8,958.50	
Jeffer Mangels		126,732.10	
ENGEO		7,559.44	
PSOMAS		8,137.00	
State Lands Comm-Staff Costs			
Wendel Rosen		15,999.00	
Bell, McAndrews & Hiltachk		1,456.56	
Verizon (Jan & Feb)		74.80	
Excelsior Digital-copying service		3,184.60	
Jeff Lotman-reimb Web site expenses		197.85	
Barbara Hamm-reimb Time & Expenses for Jan & Feb		3,092.18	
Bank charges-cks and endorsement stamp		-	
Cash Paid Out			(175,392.03)
Cash Balance as of 3/31/12			478,699.53
Sources of Cash:			
Advances from Individual Homeowners - Apr			47,200.00
(Have resubmitted request for 2012 FS funding to Homeowners)			
Current Payables in hand:			
ENGEO		4,029.00	
Jeffer Mangels		112,153.33	
Moffatt & Nichol		8,625.83	
Wendel Rosen		4,093.28	
TSG-transcript of vote meeting		1,207.10	
Barbara Hamm-reimb Mar		-	
Jeff Lotman-Website expenses		250.00	
Total Invoices Due			(130,358.54)
Forecasted Invoices thru APR-JUN			
Moffatt & Nichols		539,385.17	
Jeffer Mangels (their bills have exceeded the budget)		70,968.00	
ENGEO		8,665.00	
EIR Consultant- AMEC Earth & Environ		253,423.00	
Accounting Administration		5,400.00	
Total Forecasted			(877,841.17)
Estimated Net Cash Flow Needed thru 6/30/12			(482,300.18)

Broad Beach GHAD
Detail for the answer to the Questionaire
AS of: 3/31/12

	Costs/Cash Transferred, 2011	Actuals Paid Nov & Dec, 2011	Actuals Paid JAN,2012	Actuals Paid Feb, 2012	Projection Mar,2012	Projection Apr-Jun, 2012	Projection Jul-Sep, 2012	Projection Oct-Dec, 2012	Totals
Uses:									
Expenses transfered from FS acct-2011	2,332,211								2,332,211
Moffatt & Nichols-Approved		40,000	50,000	82,702					172,702
Moffatt & Nichols-Projected		64,063		106,243	8,959	277,011	53,000	25,000	534,276
Moffatt & Nichols-Final Engr & Constr Documents						271,000	45,000		316,000
Moffatt & Nichols-Constr Support/Mgmt/Monitor									-
Project Construction-Hard Cost									-
Project Construction-20% Contingency									-
GHAD Bond Legal								100,000	100,000
GHAD Bond Underwriting								300,000	300,000
Jeffer Mangels-Approved		75,000	25,000	24,752	126,732	70,968	42,917	21,250	386,619
ENGEO		16,077	12,385	2,650	7,559	12,694	14,000		65,365
Morgan, Miller & Blair			6,500	6,689					13,189
Bell,McAndrews & Hiltachk				1,043	1,457				2,500
Wendel Rosen				9,918	15,999				25,917
PSOMAS					8,137				8,137
Fee-City of Malibu									-
Fee- Coastal Commission									-
Fee-Water Board							40,000		40,000
Fee-Fish & Game									-
Fee-Army Corp of Engr ?									-
Fee- LA County Fees for using Bulldozer on beach?									-
Fee- State Lands Commission additional Permit fees									-
State Lands Comm-Staff Costs		10,067	9,160	15,738		45,038	10,000		90,000
EIR Consultant- AMEC Earth & Environ			36,059			208,385	122,222		366,666
Quality Mapping				1,176					1,176
Topanga Underground									-
AON-E&O Insurance									-
Office / Phone/Web Site/Coping/Transcripts			78	344	3,457				3,878
Accounting Administration				4,663	3,092	5,400	5,400	5,400	23,955
Soft Cost Contingency									-
Total Uses	2,332,211	205,207	139,181	255,916	175,392	890,496	332,539	451,650	4,782,592
Sources of Cash:									-
Advances from Individual Homeowners (Actuals)	1,580,278	66,250	91,500	636,000	201,000	47,200			2,622,228
Addtl Advances from Individual Revetment Homeowners	261,579								261,579
Advances from TPOA General Fund	550,000	200,000							750,000
GHAD Bond									-
GHAD ASSESMENTS									-
Additional Source of Cash-Possible line of Credit/loan									-
Repayment of Advances to Homeowners									-
Repayment of Advances to TPOA General Fund									-
Total Sources	2,391,857	266,250	91,500	636,000	201,000	47,200	-	-	3,633,807
Cummulative Running Balance	59,646	120,689	73,007	453,092	478,700	(364,596)	(697,135)	(1,148,785)	(1,148,785)

Budgeted Time Frames assume GHAD Bond closing in Dec, 2012 and Start of construction Feb, 2013
Assumes GHAD assessments to HO to start in 2012