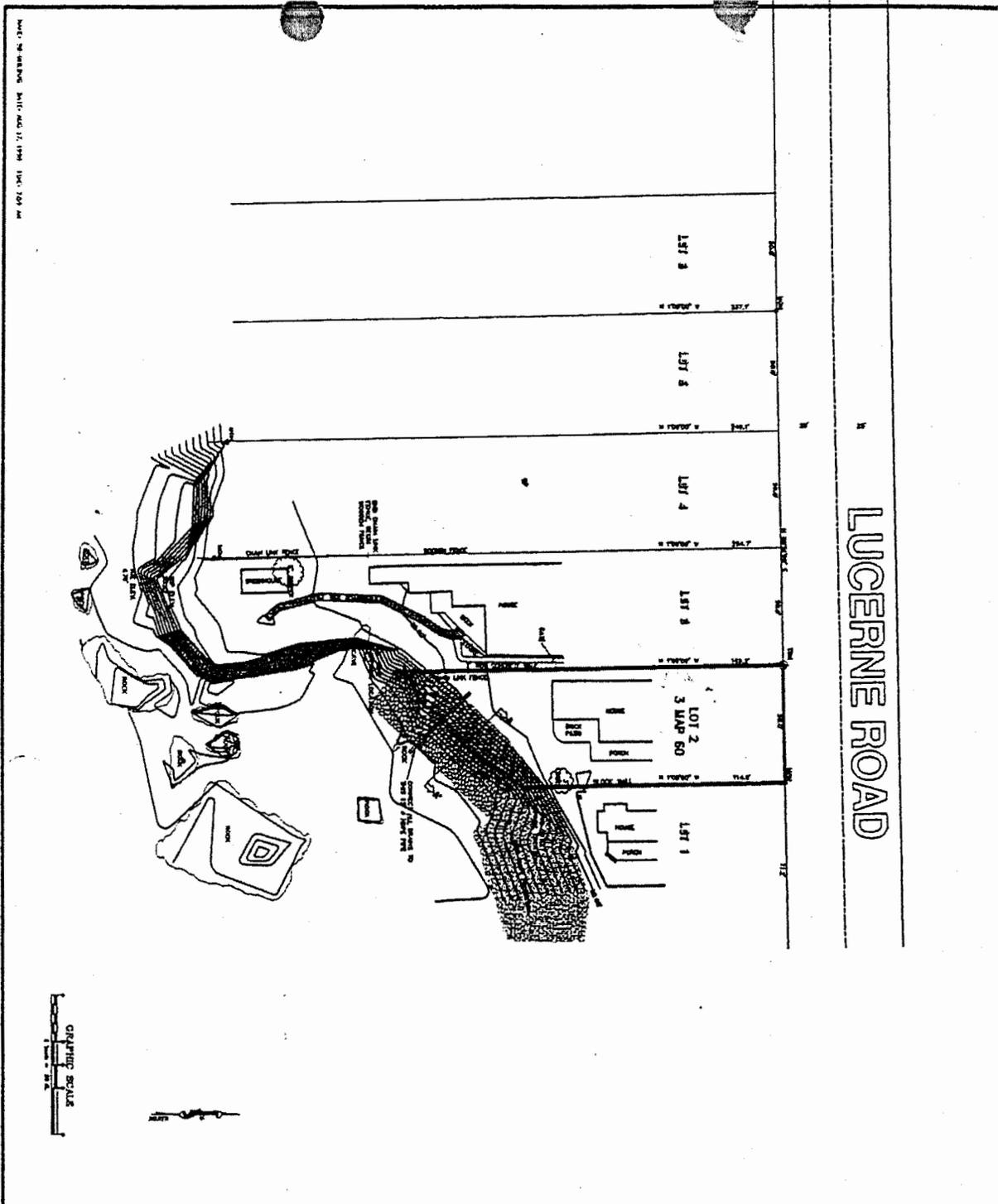


PROJECT
 Hearing Officer
 Brett (D980047P)



EXHIBIT
 Vicinity Map



PROJECT

Hearing Officer
Brett (D980047P)



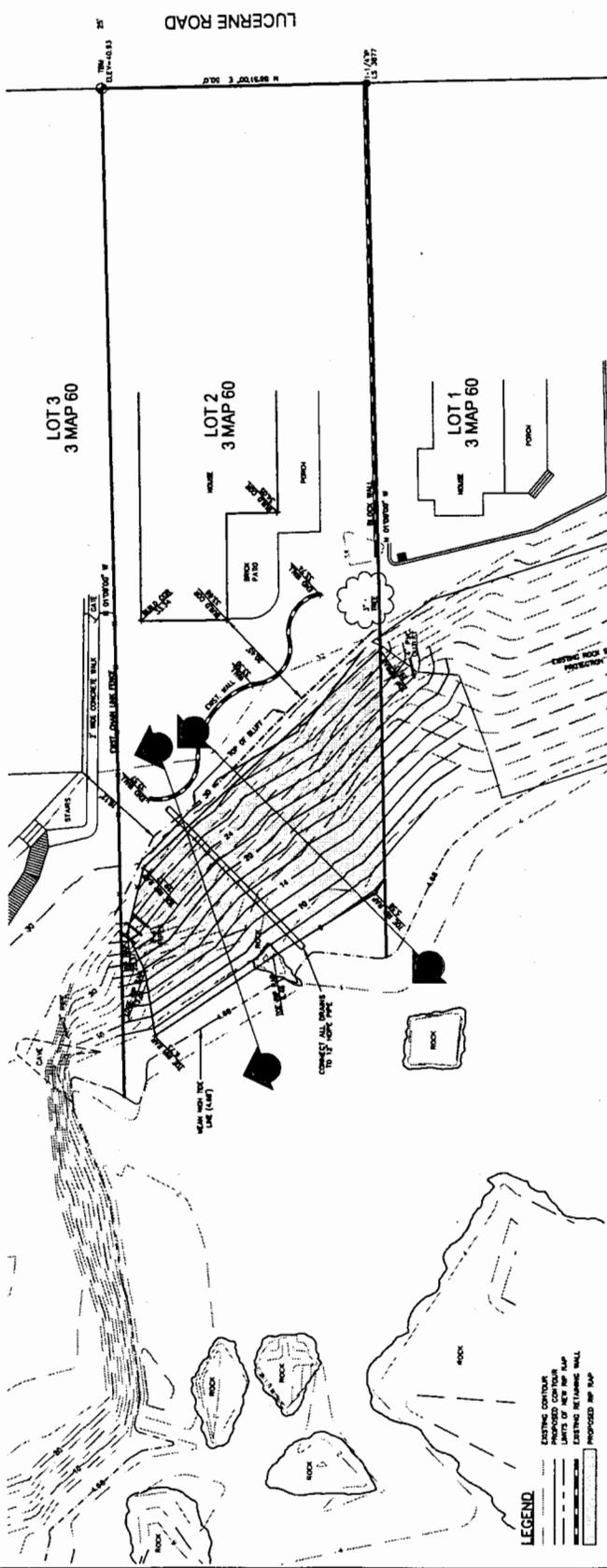
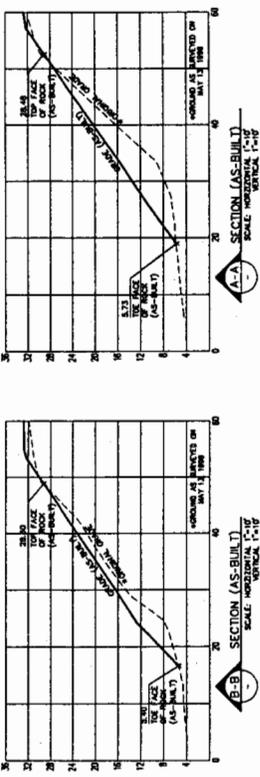
EXHIBIT

Site Plan

WESTLAND ENGINEERING INC.
 CIVIL ENGINEERING - SURVEYING - PLANNING
 1000 UNIVERSITY AVENUE, SUITE 100, WESTLAND, CALIFORNIA 94593
 INCORPORATED IN CALIFORNIA

AS-BUILT PLAN
LOT 2 OF LOCARNO TRACT

Project No. 21 718 E 1132
 SHEET NO. 1 OF 1



CCC Exhibit B
 (page 3 of 3 pages)

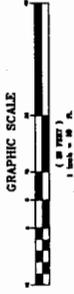
- LEGEND**
- EXISTING CONTOUR
 - EXISTING GROUND
 - EXISTING RETAINING WALL
 - PROPOSED GRASS

BENCH MARK
 THE PROPERTY LINES SHOWN ON THIS MAP ARE FROM RECORD INFORMATION AND ARE NOT TO BE CONSIDERED AS A GUARANTEE OF ACCURACY. THE PROPERTY LINES MAY VARY FROM THOSE SHOWN HEREON.

TEMPORARY BENCH MARK
 THE BENCH MARKS SHOWN ON THIS MAP ARE FROM RECORD INFORMATION AND ARE NOT TO BE CONSIDERED AS A GUARANTEE OF ACCURACY. THE BENCH MARKS MAY VARY FROM THOSE SHOWN HEREON.

NOTES

1. THE PROPERTY LINES SHOWN ON THIS MAP ARE FROM RECORD INFORMATION AND ARE NOT TO BE CONSIDERED AS A GUARANTEE OF ACCURACY. THE PROPERTY LINES MAY VARY FROM THOSE SHOWN HEREON.
2. THE DIMENSIONS MEASURED AT FOUR FEET ABOVE GROUND LEVEL AND DIMENSIONS SHOWN HEREON ARE NOT TO BE CONSIDERED AS A GUARANTEE OF ACCURACY. THE DIMENSIONS SHOWN HEREON ARE BASED ON THE FOUR FOOT LEVEL.



ROCK SLOPE PROTECTION

CAYUCOS, CALIFORNIA

GRADING NOTES

1. ALL GRADING SHALL BE IN ACCORDANCE WITH THE CALIFORNIA GRADING AND CONSTRUCTION ACT, CHAPTER 14, DIVISION 91, AND THE CALIFORNIA GRADING AND CONSTRUCTION REGULATIONS, CHAPTER 14, DIVISION 91.5, AND THE CALIFORNIA GRADING AND CONSTRUCTION REGULATIONS, CHAPTER 14, DIVISION 91.5.1.

2. ALL GRADING SHALL BE IN ACCORDANCE WITH THE CALIFORNIA GRADING AND CONSTRUCTION ACT, CHAPTER 14, DIVISION 91, AND THE CALIFORNIA GRADING AND CONSTRUCTION REGULATIONS, CHAPTER 14, DIVISION 91.5, AND THE CALIFORNIA GRADING AND CONSTRUCTION REGULATIONS, CHAPTER 14, DIVISION 91.5.1.

3. ALL GRADING SHALL BE IN ACCORDANCE WITH THE CALIFORNIA GRADING AND CONSTRUCTION ACT, CHAPTER 14, DIVISION 91, AND THE CALIFORNIA GRADING AND CONSTRUCTION REGULATIONS, CHAPTER 14, DIVISION 91.5, AND THE CALIFORNIA GRADING AND CONSTRUCTION REGULATIONS, CHAPTER 14, DIVISION 91.5.1.

4. ALL GRADING SHALL BE IN ACCORDANCE WITH THE CALIFORNIA GRADING AND CONSTRUCTION ACT, CHAPTER 14, DIVISION 91, AND THE CALIFORNIA GRADING AND CONSTRUCTION REGULATIONS, CHAPTER 14, DIVISION 91.5, AND THE CALIFORNIA GRADING AND CONSTRUCTION REGULATIONS, CHAPTER 14, DIVISION 91.5.1.

5. ALL GRADING SHALL BE IN ACCORDANCE WITH THE CALIFORNIA GRADING AND CONSTRUCTION ACT, CHAPTER 14, DIVISION 91, AND THE CALIFORNIA GRADING AND CONSTRUCTION REGULATIONS, CHAPTER 14, DIVISION 91.5, AND THE CALIFORNIA GRADING AND CONSTRUCTION REGULATIONS, CHAPTER 14, DIVISION 91.5.1.

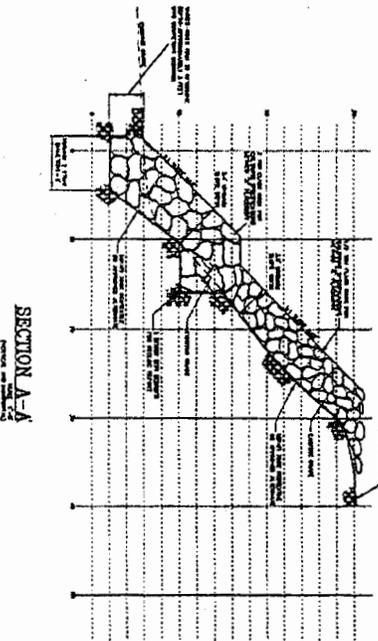
6. ALL GRADING SHALL BE IN ACCORDANCE WITH THE CALIFORNIA GRADING AND CONSTRUCTION ACT, CHAPTER 14, DIVISION 91, AND THE CALIFORNIA GRADING AND CONSTRUCTION REGULATIONS, CHAPTER 14, DIVISION 91.5, AND THE CALIFORNIA GRADING AND CONSTRUCTION REGULATIONS, CHAPTER 14, DIVISION 91.5.1.

7. ALL GRADING SHALL BE IN ACCORDANCE WITH THE CALIFORNIA GRADING AND CONSTRUCTION ACT, CHAPTER 14, DIVISION 91, AND THE CALIFORNIA GRADING AND CONSTRUCTION REGULATIONS, CHAPTER 14, DIVISION 91.5, AND THE CALIFORNIA GRADING AND CONSTRUCTION REGULATIONS, CHAPTER 14, DIVISION 91.5.1.

8. ALL GRADING SHALL BE IN ACCORDANCE WITH THE CALIFORNIA GRADING AND CONSTRUCTION ACT, CHAPTER 14, DIVISION 91, AND THE CALIFORNIA GRADING AND CONSTRUCTION REGULATIONS, CHAPTER 14, DIVISION 91.5, AND THE CALIFORNIA GRADING AND CONSTRUCTION REGULATIONS, CHAPTER 14, DIVISION 91.5.1.

9. ALL GRADING SHALL BE IN ACCORDANCE WITH THE CALIFORNIA GRADING AND CONSTRUCTION ACT, CHAPTER 14, DIVISION 91, AND THE CALIFORNIA GRADING AND CONSTRUCTION REGULATIONS, CHAPTER 14, DIVISION 91.5, AND THE CALIFORNIA GRADING AND CONSTRUCTION REGULATIONS, CHAPTER 14, DIVISION 91.5.1.

10. ALL GRADING SHALL BE IN ACCORDANCE WITH THE CALIFORNIA GRADING AND CONSTRUCTION ACT, CHAPTER 14, DIVISION 91, AND THE CALIFORNIA GRADING AND CONSTRUCTION REGULATIONS, CHAPTER 14, DIVISION 91.5, AND THE CALIFORNIA GRADING AND CONSTRUCTION REGULATIONS, CHAPTER 14, DIVISION 91.5.1.



EARTHWORK

Excavation: 1,200 cu yd

Fill: 1,200 cu yd

Gravel: 1,200 cu yd

Rock: 1,200 cu yd

WESTLING ENGINEERING COMPANY	
GRADING PLAN	
LOT 2 OF LOCARNIO TRACT	
CAYUCOS, CALIFORNIA	
DATE: 10/15/11	
DRAWN BY: [Name]	
CHECKED BY: [Name]	
SCALE: 1" = 10' (VERTICAL)	
SCALE: 1" = 40' (HORIZONTAL)	
SHEET NO. 1 OF 3	

PROJECT

Hearing Officer
Brett (D980047P)



EXHIBIT

Cross Section

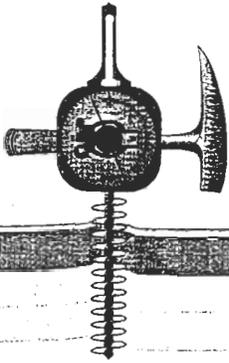


CA Coastal Records Project Photo

Project Site



CCC Exhibit c
(page 2 of 2 pages)



GeoSolutions, LLC

220 High Street

San Luis Obispo, CA 93401
(805) 543-8539 543-2171-fax

October 20, 1998
Project SL00345-1

San Luis Obispo County
Department of Building and Planning
Attn: Ms. Lauren LaJoie
County Government Center
San Luis Obispo, California 93408

Subject: Emergency Permit for Bluff Support
473 Lucerne Avenue, Cayucos Area
San Luis Obispo County, California

Reference: 1) Geologic Assessment of Bluff Erosion and Sea Cliff Retreat,
473 Lucerne Road, Cayucos Area, San Luis Obispo County,
California, dated July 16, 1998.

2) Letter regarding Emergency Permit for Brett Property, by
Westland Engineering Company, dated October 13, 1998

Dear Ms. LaJoie:

As indicated in the above referenced Geologic Assessment and described in the letter issued by Westland Engineering Company, site conditions associated with the sea cave and rear yard "sink hole" demonstrate the extent of bluff erosion. The undermined area identified in the referenced letter could widen dramatically this coming winter, threatening the loss of support to the foundation. It is imperative that the bluff be re-supported and protected as recommended in the referenced Geologic Assessment at the earliest possible date.

Thank you for the opportunity to have been of service. If there should be any questions regarding this report, please contact me at 805-543-8539.

Sincerely,

GEOSOLUTIONS LLC

Richard A. Pfof
Senior Engineering Geologist

CCC Exhibit D
(page 1 of 4 pages)

RECEIVED OCT 21 1998

N 88°51'00" E

TBM

MON

50.0'

50.0'

50.0'

254.7'

169.5'

114.8'

N 1°09'00" W

N 1°09'00" W

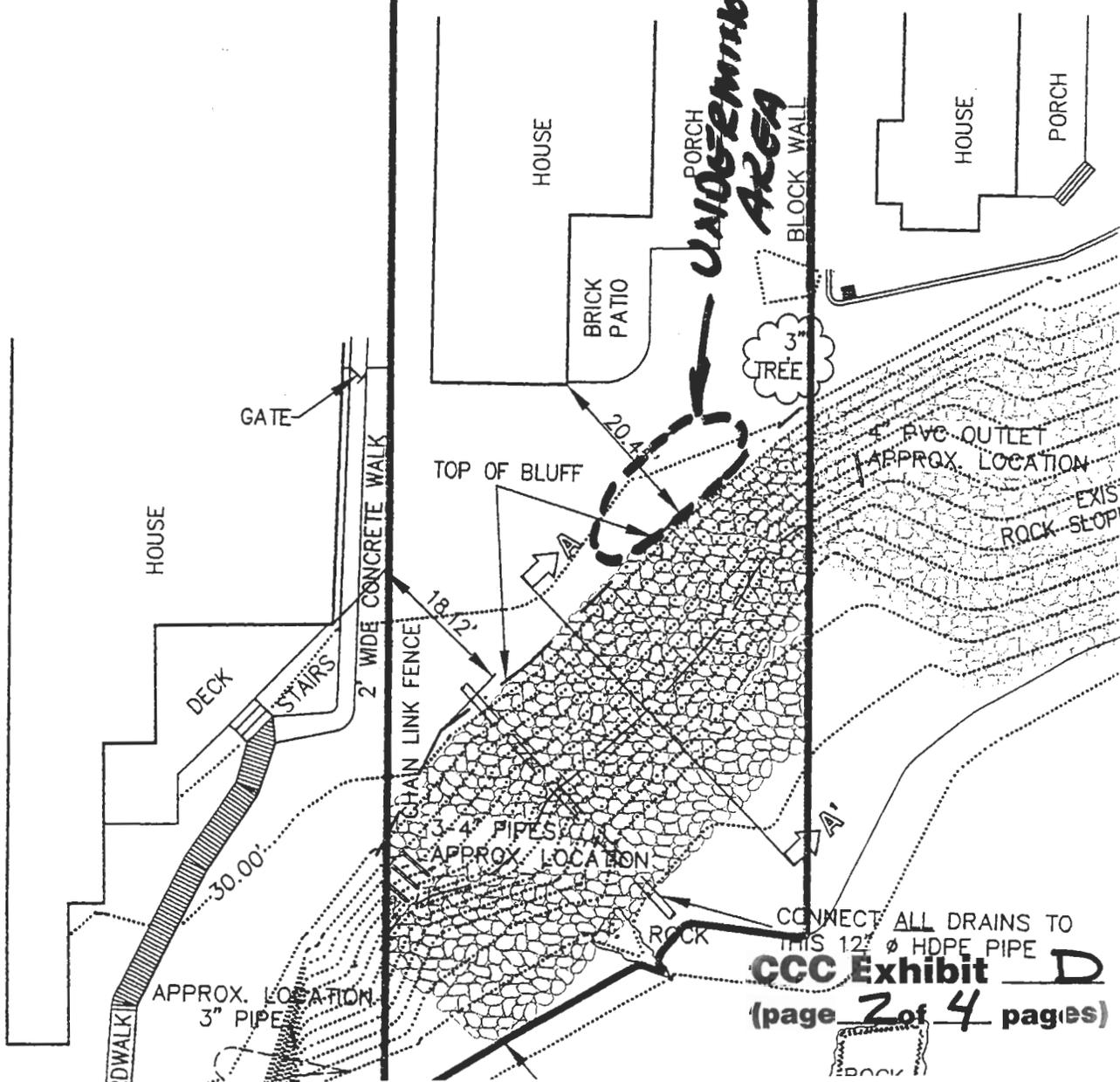
N 1°09'00" W

LOT 4

LOT 3

LOT 2
3 MAP 60

LOT 1



UNDEVELOPED AREA

3" TREE

4" PVC OUTLET APPROX. LOCATION

EXIST. ROCK SLOPE

CONNECT ALL DRAINS TO THIS 12" Ø HDPE PIPE

CCC Exhibit D
(page 2 of 4 pages)

END CHAIN LINK FENCE, BEGIN WOODEN FENCE

October 13, 1998

Ms. Lauren LaJoie
County Planning Department

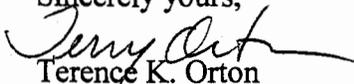
RE: EMERGENCY PERMIT FOR BRETT PROPERTY

Dear Ms. LaJoie:

I wanted to mention again to you that the property in question has a problem that can not be quantified. Mr. Brett went into his yard, near the location I have circled on the map, and nearly fell into an hole. Mr. Brett used a long pole and stuck it into the earth, he indicated the pole went down very deep. This area is undermined and could not be accurately identified by our survey crew.

You can understand that Mr. Brett is very concerned that the yard could give way. Please take this into advisement when considering the emergency permit.

Sincerely yours,


Terence K. Orton

encl.

RECEIVED

APR 17 2001

CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

'98 OCT 13 AM 7 51

DEPT. OF BUILDING

Volume

Emergency Permit Request

San Luis Obispo County Department of Planning and Building

P180250E

Date: **October 27, 1998**

Applicant Information: **Westland Engineering**

75 Zaca Lane, Ste. 100

San Luis Obispo, CA 93401

541-2394

Phone

Applicant (Caller) Is:

- Property owner
- Authorized representative
- Government official
- Other (specify)

Harold Brett
Agency or firm represented (if applicable)

Property other information (if different):

Harold Brett
Name
763 Lucerne Road
Street Address
Cayucos, Ca. 93403
City, State, Zip
(805) 995-1748
Phone

Location of site:

Address: **403 Lucerne Road, Cayucos, Ca.**

D930047P

Applicant's parcel No. (if available): **064-281-013**

Project from erosion and undermining of bank

RECEIVED

APR 27 2001

CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

CCC Exhibit D
(page 4 of 4 pages)

12199657-M

San Luis Obispo, CA 93408 - (805) 549-5600



SAN LUIS OBISPO COUNTY

DEPARTMENT OF PLANNING AND BUILDING

RECEIVED

APR 04 2001

CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

COPY

VICTOR HOLANDA, AICP
DIRECTOR

BRYCE TINGLE, AICP
ASSISTANT DIRECTOR

ELLEN CARROLL
ENVIRONMENTAL COORDINATOR

FORREST WERMUTH
CHIEF BUILDING OFFICIAL

TERENCE ORTON/WESTLAND ENG
75 ZACA LN, STE 100
SAN LUIS OBISPO CA 93401

NOTICE OF FINAL COUNTY ACTION

HEARING DATE: MARCH 16, 2001

SUBJECT: ZA2001-051

BRETT - D980047P. Minor Use Permit/Coastal Development Permit to permit an existing engineered rip-rap revetment, which was authorized and constructed in October 1998 under an emergency permit (P980250E), in the Residential Multiple Family Land Use Category. The property is located in the county at 463 Lucerne Road, approximately 100 feet west of North Ocean Avenue, in the community of Cayucos; APN: 064-281-013, in the North Coast Planning Area.

LOCATED WITHIN COASTAL ZONE: YES

The above-referenced application was approved on MARCH 16, 2001 by the Zoning Administrator. Copies of the Final *Findings and Conditions* are attached. The conditions of approval must be completed as set forth in this document.

If the use authorized by this Permit approval has not been established or if substantial work on the property towards the establishment of the use is not in progress after a period of twenty-four (24) months from the date of this approval or such other time period as may be designated through conditions of approval of this Permit, this approval shall expire and become void unless an extension of time has been granted pursuant to the provisions of Section 23.02.050 of the Land Use Ordinance.

If the use authorized by this Permit approval, once established, is or has been unused, abandoned, discontinued, or has ceased for a period of six (6) months or conditions have not been complied with, such Permit approval shall become void.

This action is appealable to the Board of Supervisors within 14 days of this action. If there are Coastal grounds for the appeal there will be no fee. If an appeal is filed with non coastal issues there is a fee of \$474.00. This action may also be appealable to the California Coastal Commission pursuant to

CCC Exhibit E

Coastal Act Section 30603 and the County Coastal Zone Land Use Ordinance 23.01.043. These regulations contain specific time limits to appeal, criteria, and procedures that must be followed to appeal this action. The regulations provide the California Coastal Commission 10 working days following the expiration of the County appeal period to appeal the decision. This means that no construction permits can be issued until both the County appeal period and the additional Coastal Commission appeal period have expired without an appeal being filed.

Exhaustion of appeals at the county is required prior to appealing the matter to the California Coastal Commission. This appeal must be made directly to the California Coastal Commission Office. Contact the Commission's Santa Cruz Office at (831) 427-4863 for further information on appeal procedures. If you have questions regarding your project, please contact your planner MARTHA NEDER, at (805) 781-5600. If you have any questions regarding these procedures, please contact me at (805) 781-5718

Sincerely,



Chris Macek, Secretary
MINOR USE PERMITS

(Planning Department Use Only)

Date NOFA original to applicant MARCH 20, 2001

Mailed Hand-delivered

Date NOFA copy mailed to Coastal Commission: MARCH 30, 2001

Enclosed: x Staff Report
 Resolution
 x Findings and Conditions

CCC Exhibit E
(page 2 of 14 pages)

A-2

Staff Report

San Luis Obispo County Department of Planning and Building

Tentative Notice of Action

APPROVAL DATE: March 16, 2001

LOCAL EFFECTIVE DATE: April 3, 2001

FINAL EFFECTIVE DATE: April 20, 2001

TO: Hearing Officer

FROM: Martha Neder, Planner I

SUBJECT: Brett/ Minor Use Permit/ Coastal Development Permit (D980047P)

SUMMARY

A request by Harold Brett to permit an engineered rip-rap revetment which was constructed in October 1998 under an emergency permit (P980250E).

RECOMMENDATION

Approve the Negative Declaration in accordance with applicable provisions of the California Environmental Quality Act, Public Resource Code Section 21000 et seq., and approve the minor use permit based on the findings listed in Exhibit A and conditions listed in Exhibit B.

PROJECT DESCRIPTION

Location: The proposed project is located at 463 Lucerne Road, approximately 100 feet west of North Ocean Avenue, in the community of Cayucos. (APN 064-281-013) Estero Area Plan. **Supervisory District #2.**

General Plan: Residential Multi Family/Local Coastal Program/Geologically Sensitive/Coastal Appealable Zone/Archaeologically Sensitive

Area Standards: COMMUNITYWIDE 2a. Bluff Setbacks - 25 foot minimum unless a geologic report indicates that a larger setback is necessary.

CCC Exhibit E
(page 3 of 14 pages)

ENVIRONMENTAL SETTING

Existing Uses and Improvements: Single family residence

Surrounding Zoning and Uses:

North: Single family residence
South: Single family residence
East: Single family residence
West: Pacific Ocean

Parcel Size: Approximately 7,500 square feet

Topography: Steeply sloping bluff face

Vegetation: Ruderal, ornamental landscaping

Acceptance Date: May 26, 1999

Env. Determination: Negative Declaration issued March 24, 2000 (ED98-580)

DISCUSSION/ORDINANCE COMPLIANCE

On October 22, 1998, an Emergency Permit (P980250E) was granted for the installation of an engineered rip-rap revetment at 463 Lucerne Drive in the community of Cayucos. The seawall was installed to provide rock slope protection for the retreating bluff along the face of the cliff. The top of the bluff was actively eroding at the site and along adjacent properties at a rate of six inches per year and a rock fall of approximately 10 cubic yards of surface material was present at the toe of the bluff. A 'sink hole' was observed by the owner that could not be accurately quantified by a survey crew. According to a letter dated October 12, 1998 from GeoSolutions, "the site conditions associated with the sea cave and rear yard "sink hole" demonstrate the extent of bluff erosion. The undermined area could widen dramatically this coming winter, threatening the loss of support to the foundation. It is imperative that the bluff be re-supported and protected at the earliest possible date."

Based on the bluff erosion conditions, a 10 cubic yard rock fall, and the discovery of the sink hole, the County of San Luis Obispo determined that immediate action was necessary to prevent loss or severe damage to the primary structure on the property. These conditions also required actions to be taken more quickly than permitted by the procedures for regular permits administered pursuant to the Coastal Zone Land Use Ordinance (please see the attached "Special Environmental Considerations" section of the Negative Declaration for a more detailed description of the pre- and post-seawall conditions). Before the issuance of the Emergency Permit, there was no shoreline protection device in place for the existing single family residence.

Risk to Structure

The existing single family residence is located approximately 20 feet from the top of bluff. A rip-rap revetment is normally not allowed when a 20 foot bluff setback exists. However, due to site specific bluff erosion conditions, including the rock fall of 10 cubic yards and rear yard sink hole immediate action was necessary to prevent loss or damage to life, health, and property. The top of the bluff was actively eroding at the site and along adjacent properties at the rate of 6 inches per year, and was expected to continue this erosion (GeoSolutions, LLC, 1998). The Geologic Assessment estimates that for a period of 75 years, the top of bluff will retreat approximately 37.5 feet from its current location if no bluff protection structure is constructed. However, the Geologic Assessment notes that the assumed bluff retreat rates are considered an average, whereas in nature, erosional processes are often episodic and irregular. Short-term (yearly) bluff retreat rates may vary significantly from the long-term average. Accelerated erosion was occurring during periods of rainfall, storm activity, seismic activity, and direct wave action. According to a letter dated October 12, 1998 from GeoSolutions, "the site conditions associated with the sea cave and rear yard "sink hole" demonstrate the extent of bluff erosion. The undermined area could widen dramatically this coming winter, threatening the loss of support for the foundation. It is imperative that the bluff be re-supported and protected at the earliest possible date."

Because of the unique characteristics of this site, specifically the sink hole, the construction of the emergency bluff protection structure is not considered to be setting a precedent for other ocean front property owners to request a similar solution to bluff top erosion.

Analysis of Alternatives

Due to the bluff erosion conditions, 10 cubic yards of rock fall, and discovery of the rear yard sink hole, immediate action was necessary to prevent loss or damage to life, health, and property. As a result, an emergency permit was issued prior to completion of an extensive alternatives analysis.

Non-structural methods of protection (artificial sand nourishment or replacement) are impractical or infeasible because the beach in the most northerly portion of Cayucos consists of exposed bedrock and very little sand. This is in contrast with the remainder of the community south of the Cayucos Pier. Currently there is no comprehensive sand nourishment program in this area. Given current beach conditions and the small number of applications for bluff protection devices in the area, it is neither necessary nor feasible to initiate a sand renourishment program at this time.

The geologic report prepared by the project by GeoSolutions indicates that a retaining wall is cost prohibitive with significant beach disturbance during foundation excavation (Geologic Assessment 1998). The report finds the rip-rap structure option to be the most appropriate for the subject property because it would protect the entire sea cliff from erosion, be the most cost efficient structure, be able to protect the cliff during periods of high surge associated with high

tides, and be least intrusive to beach access, the environment and neighboring properties (the easterly adjacent property has a similar rip-rap structure). As conditioned, the project was designed and constructed to ensure that the proposed improvements would not accelerate the erosion of the bluff and beach on properties in the vicinity.

Impacts of Revetment

As part of the Emergency Permit process, the engineer recommended mitigation measures to reduce drainage, erosion and sedimentation impacts. In addition, the geologist recommended measures to control excess surface and subsurface water from the site. As conditioned, the project includes groundwater and surface water control and landscaping measures to work in concert with the engineered rip-rap revetment. These measures serve to lessen the impacts of the project, reduce future risk, increase stability, and potentially avoid additional protective devices in the future.

According to the geologic assessment, assuming final design and construction of a bluff protection structure which would extend to elevation 17 feet (NGVD Datum) or 20 feet (MLLW Datum) the bluff retreat rate would be nearly zero at the base of the bluff and less than 1.0 inch per year for the top of the bluff unless subjected to unknown catastrophic conditions.

According to John Kammer of GeoSolutions, the beach consists of exposed bedrock and very little sand, so impacts to sand supply are minimal. As designed, this rip-rap revetment also promotes stability on both of the adjoining properties. The proposed rip-rap revetment ties with the existing rip-rap revetment structure to the east (The rip-rap revetment structure to east was permitted on July 13, 1983 with an addition and improvements permitted on Dec 5, 1992). The property to the west (no seawall) was stabilized because of the engineered revetment's support for the vertical bluff, thus reducing the potential need for a bluff protection structure on the western parcel (personal communications with Mr. Kammer, GeoSolutions, paraphrased from Negative Declaration).

Because of the unique characteristics of this site, specifically the sink hole, the construction of the emergency bluff protection structure is not considered to be setting a precedent for other ocean front property owners to request a similar solution to bluff top erosion.

Professional construction monitoring was performed by GeoSolutions during the construction period from November 11, 1998 through November 20, 1998. Based on this monitoring, John Kammer, a Certified Hydrogeologist, and Richard Pfost, a Certified Engineering Geologist, found that the rip-rap revetment structure was constructed in accordance with recommendations of the Geologic Assessment and Coastal Bluff Study by GeoSolutions, June 26, 1998, as well as the requirements of regulating agencies (see attached GeoSolutions letter, December 1, 1998).

Although the applicant incorporated mitigation measures discussed at the time of issuance of the Emergency Permit, there remains the potential for residual significant erosion due to maintenance of the residence and seawall. The applicant has amended the current project to include measures to reduce erosion and potential growth inducing impacts to a level of insignificance (condition 1).

Planning Area Standards

The community-wide standard for bluff-top setbacks is 25 feet minimum. The setback from the existing residence to the edge of the bluff is 20 feet. Because this project is intended to prevent further erosion of the bluff, this standard will not apply.

Local Coastal Plan Policies and Land Use Ordinance

STRUCTURAL DESIGN

Hazards Policy 1: New Development. *All new development ... shall be designed to minimize risks to human life and property.*

Hazards Policy 4: Limitations on the Construction of Shoreline Structures. *Construction of shoreline structures that would substantially alter existing landforms shall be limited to projects necessary for:*

- a. *Protection of existing development (new development must ensure stability without depending upon shoreline protection devices)*

Where shoreline structures are necessary to serve the above, siting shall not preclude public access to and along the shore and shall be sited to minimize the visual impacts, erosive impacts on adjacent, unprotected property, encroachment onto the beach and to provide public overlooks where feasible and safe. The area seaward of the protective devices shall be dedicated for lateral public access.

Hazards Policy 5: Design and Construction of Shoreline Structures. *Shoreline structures shall be designed and constructed to mitigate or eliminate effects on local shoreline sand movement and supply. Construction activities shall be carefully managed to minimize unnecessary effects on natural landforms and shoreline processes.*

CZLUO Section 23.05.090: Shoreline Structures.

- a. *Where allowed. Protection of existing coastal development*
- c. *Required Findings. In order to approve a land use permit for a shoreline structure, the ... applicable review body shall first find that the structure is designed and sited to:*
 - (1) *Eliminate or mitigate adverse impacts on the local shoreline sand supply as determined by a registered civil engineer or other qualified professional; and*
 - (2) *Not preclude public access to and along the coast where an accessway is consistent with provisions of section 23.04.420; and*
 - (3) *Be visually compatible with adjacent structures and natural features to the maximum extent feasible; and*
 - (4) *Minimize erosion impacts on adjacent properties that may be caused by the structure; and*
 - (5) *Not adversely impact fish and wildlife; and*
 - (6) *That non-structural methods of protection (artificial sand nourishment or replacement) have been proven impractical or infeasible.*

CCC Exhibit E
(page 7 of 14 pages)

Analysis

The proposed shoreline structure is necessary for the protection of an existing principal residence that cannot be relocated. According to the geologic assessment, the rip-rap structure option is considered to be the most appropriate for the subject property because it would protect the entire sea cliff from erosion, be the most cost efficient structure, be able to protect the cliff during periods of high surge associated with high tides, and be least intrusive to beach access, the environment and neighboring properties. Non-structural methods of protection (artificial sand nourishment or replacement) are impractical or infeasible because the beach consists of exposed bedrock and very little sand. Currently there is no comprehensive sand nourishment program in this area. Given current beach conditions and the small number of applications for bluff protection devices in the area, it is neither necessary nor feasible to initiate a sand renourishment program at this time. The bluff protection plan/engineered rip-rap revetment was designed by Terence Orton, a registered civil engineer.

The structure is designed and sited to be visually compatible with adjacent structures and natural features to the maximum extent feasible because the rock material used for bluff protection is a similar geologic type and appearance as the existing rocks within the bluff face and in the immediate area.

Condition 6 requires the applicant to provide a lateral access dedication of 25 feet of beach available at all times during the year. Where topography limits the beach to less than 25 feet, lateral access shall extend from the mean high tide to the toe of the bluff.

GEOLOGIC STABILITY

Hazards Policy 2: Erosion and Geologic Stability. *New development shall ensure structural stability while not creating or contributing to erosion or geological instability.*

Hazards Policy 3: Development Review in Hazard Areas. *Development proposed within the geologic study area shall be reviewed by a qualified registered and/or certified engineering geologist. The review shall be adequately detailed to provide recommendations and conclusions consistent with this plan.*

CZLUO Section 23.07.080 thru 23.07.086 - Geologic Study Area (GSA). *A Geologic Study Area combining designation is applied to areas where geologic and soil conditions could present new developments and their users with potential hazards to life and property. All land use permit applications for projects located within a GSA shall be accompanied by a report prepared by a certified engineering geologist and/or registered civil engineer, pursuant to Section 23.07.084.*

Analysis

The applicant submitted a Geologic Assessment of Bluff Erosion and Sea Cliff Retreat prepared

by John Kammer, a certified hydrologist, and Richard Pfof, a certified engineering geologist, of GeoSolutions for the property located at 463 Lucerne Road. This report gives recommendations to insure structural stability while not creating or contributing to erosion, sedimentation or geologic instability. In addition, the bluff protection plan/engineered rip-rap revetment was designed by Terence Orton, a registered civil engineer.

ARCHAEOLOGY

Archaeology Policy 4: Preliminary Site Survey for Development within Archaeologically Sensitive Areas. *Development shall require a preliminary site survey by a qualified archaeologist knowledgeable in Chumash culture prior to a determination of the potential impacts of the project.*

CZLUO Section 23.07.104 - Archaeologically Sensitive Areas. *Before issuance of a land use or construction permit for development within an archaeologically sensitive area, a preliminary site survey shall be required.*

Analysis

Due to the bluff erosion conditions, 10 cubic yards of rock fall, and discovery of the rear yard sink hole, immediate action was necessary to prevent loss or damage to life, health, and property. As a result, an emergency permit was issued prior to completion of a preliminary site survey. However, condition 4 requires that the exposed bluff surrounding the shoreline structure be examined by an archaeologist familiar with the area and an evaluation of the exposed soil and review of the potential for buried deposits be conducted.

ACCESS

CZLUO Section 23.04.420: Coastal Access Required. *Development within the Coastal Zone between the first public road and the tidelands shall protect and/or provide coastal access as required by this section...*

d. Type of Access Required:

(1) Vertical access

(i) within an urban village area where no dedicated public access exists within one-quarter mile of the site..

(3) Lateral Access Dedication. All new development shall provide a lateral access dedication of 25 feet of dry sandy beach available at all times during the year. Where topography limits the dry sandy beach to less than 25 feet, lateral access shall extend from the mean high tide to the toe of the bluff.

Analysis

The shoreline within the community of Cayucos is highly accessible to the public as a result of a series of beachwalks and stairways leading to Cayucos and Morro Strand state beaches. Vertical

access to the shore is obtained through 22 access lanes and 13 stairways maintained by the county. The project site is within an urban or village area and 1,200 feet from Cayucos State Beach, a public access area. The proposed project provides 25 feet of dry sandy beach available at all times during the year for public access and use along the shoreline. Where topography limits the dry sandy beach to less than 25 feet, lateral access shall extend from the mean high tide to the toe of the bluff (see condition 6). Where topography limits the beach to less than 25 feet, lateral access shall extend from the mean high tide to the toe of the bluff.

Emergency Permits

Hazards Policy 10: Emergency Provisions. *The requirements for obtaining a Land Use Permit may be waived in case of emergency as provided in the Coastal Zone Land Use Ordinance.*

CZLUO Section 23.03.045 - Emergency Permits. *In cases of a sudden, unexpected occurrence demanding immediate action to prevent or mitigate loss or damage to life, health, property, or essential public services, the Planning Director may issue an emergency permit in accordance to the provisions of this section.*

Analysis

Based on the bluff erosion conditions, 10 cubic yard rock fall, and discovery of the sink hole, the County of San Luis Obispo determined that immediate action was necessary to prevent loss or damage to life, health, and property. P980250E was issued on October 22, 1998. Construction of the rip-rap revetment took place from November 11, 1998 through November 20, 1998. The minor use permit is required to authorize the engineered rip-rap revetment which was constructed under the emergency permit.

FINAL ACTION

This tentative decision will become the final action on the project; unless the tentative decision is changed as a result of information obtained at the administrative hearing or is appealed to the County Board of Supervisors pursuant to Section 23.01.042 of the Coastal Zone Land Use Ordinance; effective on the 10th working day after the receipt of the final action by the California Coastal Commission. The tentative decision will be transferred to the Coastal Commission following the required 14 calendar day local appeal period after the administrative hearing.

The applicant is encouraged to call the Central Coast District office of the Coastal Commission to verify the date of final action. The County will not issue any construction permits prior to the end of the Coastal Commission process.

CCC Exhibit E
(page 10 of 14 pages)

Findings (Exhibit A)

- A. As conditioned, the proposed project or use is consistent with the Local Coastal Program and the Land Use Element of the San Luis Obispo County General Plan because rip-rap revetments are structures only used to stabilize the bluff and are allowed by the Local Coastal Program provided they are needed to protect existing development.
- B. As conditioned, the proposed project or use satisfies all applicable provisions of Title 23 of the County Code.
- C. As conditioned, the establishment and subsequent operation or conduct of the use will not, because of the circumstances and conditions applied to this particular case, be detrimental to the health, safety or welfare of the general public or persons residing or working in the neighborhood of the use, or be detrimental or injurious to properties in the vicinity because the installation and operation of such a facility does not generate activity that presents a potential threat to the surrounding property and buildings. This project is subject to Ordinance and Building Code requirements designed to address health, safety and welfare concerns.
- D. As conditioned, the proposed project or use will not be inconsistent with the character of the immediate area or contrary to the orderly development because the rip-rap revetment ties in with the existing rip-rap revetment structure to the east. The property to the west (no seawall) was stabilized because of the engineered rip-rap revetment's support for the vertical bluff.
- E. The proposed project or use will not generate a volume of traffic beyond the safe capacity of all roads providing access to the project, either existing or to be improved with the project because the project is located on Lucerne Road, a local road constructed to a level able to handle any additional traffic associated with the project.
- F. Natural features and topography have been considered in the design and siting of all proposed physical improvements because as designed, the rip-rap revetment will protect the entire sea cliff from erosion, be able to protect the cliff during periods of high surge associated with high tides, and be least intrusive to beach access.
- G. The soil and subsoil conditions are suitable for any proposed excavation, site preparation and drainage improvements have been designed to prevent soil erosion, and sedimentation of streams through undue surface runoff, because improvements including debris removal, preparation of original slope, keyway excavation, installation of geotextile fabric, installation of rip-rap, and installation of drain pipes, were conducted in accordance with GeoSolutions Geologic Assessment dated July 16, 1998.
- H. On the basis of the Negative Declaration (ED98-580) prepared for the project, there is no substantial evidence that the project will have a significant effect on the environment.

- I. The structure is designed and sited to eliminate or mitigate adverse impacts on the local shoreline sand supply as reviewed by the certified engineering geologist. The beach consists of exposed bedrock and very little sand.
- J. The proposed use is in conformity with the public access and recreation policies of Chapter 3 of the California Coastal Act and structure will not preclude public access to and along the coast where an accessway is consistent with the provisions of Section 23.04.420 (Coastal Access Required) because as conditioned the applicant will provide a lateral access dedication of 25 feet of beach available at all times during the year. Where topography limits the beach to less than 25 feet, lateral access shall extend from the mean high tide to the toe of the bluff and the existing coastal access ways nearest to the site are currently located approximately 1,200 feet to the east at Cayucos State Beach.
- K. The structure is designed and sited to be visually compatible with adjacent structures and natural features to the maximum extent feasible because the rock material used for bluff protection are of similar geologic type and appearance as the existing rocks within the bluff face and in the immediate area.
- L. The structure is designed and sited to minimize erosion impacts on adjacent properties that may be caused by the structure.
- M. The structure will not adversely impact fish and wildlife because the project will not directly impact sensitive species or habitats and the footprint of the rip-rap revetment was limited to highly disturbed areas with no species of special concern. Though subtidal and intertidal zones could be indirectly affected, the affects are limited to periodic mineral increase from increased wave refraction. These zones are highly resistant to disturbance and wave refraction.
- N. Non-structural methods of protection (artificial sand nourishment or replacement) have been proven to be impractical or infeasible because the beach consists of exposed bedrock and very little sand. Also, there is no comprehensive sand nourishment program in this area. Given current beach conditions and the small number of applications for bluff protection devices in the area, it is neither necessary nor feasible to initiate a sand renourishment program at this time
- O. Significant archeological resources will not be affected by the project because the project has been designed and adequate measures have been taken to ensure protection of these resources, if any exist.
- P. The revetment is necessary to prevent loss or damage to the principal structure on the property due to unexpected bluff erosion.

Staff report prepared by Martha Neder
and reviewed by Matt Janssen

CCC Exhibit E
(page 12 of 14 pages)

Exhibit B- Conditions

Development

s approval authorizes the installation of a riprap bluff protection structure and minor ding.

Site development shall be consistent with the approved site plan and elevations. All work shall be done consistent with the GeoSolutions Geologic Assessment dated July 16, 1998, as well as specific conditions of this permit approval.

The project shall be designed and constructed in order to ensure that the proposed improvements will not accelerate the erosion of the bluff and beach on properties in the vicinity.

Drainage

Prior to issuance of construction permits, the applicant shall submit for the review approval by the Environmental Coordinator, a Seawall/Blufftop Maintenance and Inspection Plan. The purpose of the Plan is to ensure that drainage structures to prevent surface runoff from flowing over the bluff face in an erosive manner are maintained functioning as originally intended. The Plan shall include:

- A. An annual inspection schedule;
- B. Maintenance recommendations and timeline;
- C. Items to be inspected include:
 - Rain gutters installed on all rooflines. All gutters should have downspouts that connect to a central drain that diverts water to the base of the bluff onto non-erosive rip-rap or bedrock
 - Run-off collected from hardscape and vegetated areas should be collected in drains and plumbed into the central drain
 - A drainage system installed and functioning to collect surface or subsurface drainage near the top of the bluff
 - Bluff area between house and bluff edge shall not be landscaped with lawn or other water intensive landscaping. No vegetation shall use water other than drip irrigation
 - Seawall conditions including dislodged rip-rap, or erosion that would undermine or jeopardize the seawall integrity

The inspection report shall include recommended actions necessary to prevent further erosion of the bluff and to maintain proper drainage control. The applicant agrees to abide by and implement future drainage and maintenance recommendations necessary to ensure that the existing plan and structures function as intended.

CCC Exhibit E
(page 13 of 14 pages)

Archaeology

4. **Prior to issuance of construction permit**, the exposed bluff surrounding the shoreline structure shall be examined by an archaeologist familiar with the area and an evaluation of the exposed soil and review of the potential for buried deposits be conducted. In the event archaeological resources are unearthed or discovered during any construction activities, the following standards apply:
- Construction activities shall cease, and the Environmental Coordinator and the Planning Department shall be notified so that the extent and location of discovered material may be recorded by a qualified archaeologist, and disposition of artifacts may be accomplished in accordance with state and federal law.
 - In the event archaeological resources are found to include human remains, or in any other case when human remains are discovered during construction, the County Coroner is to be notified in addition to the Planning Department and the Environmental Coordinator so the proper disposition may be accomplished.

Bluff Setback Landscaping Material

5. Any landscaping material placed within the bluff top setback shall be drought tolerant and not require the use of irrigation or watering with the exception of natural rainfall.

Coastal Access

6. **Prior to issuance of construction permits**, in a form acceptable to County Counsel, the applicant shall provide a lateral access dedication of 25 feet of beach available at all times during the year. Where topography limits the beach to less than 25 feet, lateral access shall extend from the mean high tide to the toe of the bluff.

Miscellaneous

7. Applicant agrees not to oppose formation of a beach renourishment program if such program is developed in the future.
8. **Prior to issuance of construction permits**, the applicant shall provide to the California State Lands Commission necessary information to make a jurisdiction determination.
9. **Prior to issuance of construction permits**, the applicant shall provide evidence of a valid California State Lands Commission lease or evidence that California State Lands Commission has determined the project is outside state jurisdiction.

CCC Exhibit E
(page 14 of 14 pages)

CALIFORNIA COASTAL COMMISSION

CENTRAL COAST DISTRICT OFFICE
725 FRONT STREET, SUITE 300
SANTA CRUZ, CA 95060
(831) 427-4863



APPEAL FROM COASTAL PERMIT
DECISION OF LOCAL GOVERNMENT

Please review attached appeal information sheet prior to completing this form.

SECTION I. Appellant(s):

Name, mailing address and telephone number of appellant(s):

Commissioner Sara J. Wan

Commissioner Dave Potter

45 Fremont Street, Suite 2000

San Francisco, CA 94105

(415) 904-5200

SECTION II. Decision Being Appealed

Area Code Phone No.

1. Name of local/port government:

San Luis Obispo County

2. Brief description of development being appealed:

Minor Use Permit/Coastal Development Permit to permit an existing engineered rip-rap
revetment, which was authorized and constructed in October, 1998 under an emergency
permit (P980250E)

3. Development's location (street address, assessor's parcel number, cross street, etc.):

463 Lucerne Road, Cayucos (San Luis Obispo County) APN(s) 064-281-013

4. Description of decision being appealed:

- a. Approval; no special conditions:
b. Approval with special conditions: X
c. Denial:

Note: For jurisdictions with a total LCP, denial decisions by a local government cannot be
appealed unless the development is a major energy or public works project. Denial decisions
by port governments are not appealable.

TO BE COMPLETED BY COMMISSION:

APPEAL NO: A-3-SLO-01-040

DATE FILED: 4/18/01

DISTRICT: Central Coast

CCC Exhibit F
(page 1 of 5 pages)

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT (PAGE 2)

5. Decision being appealed was made by (check one):

a. Planning Director/Zoning Administrator

c. Planning Commission

b. City Council/Board of Supervisors

d. Other: _____

6. Date of local government's decision: 03/16/01

7. Local government's file number: D980047P

SECTION III Identification of Other Interested Persons

Give the names and addresses of the following parties: (Use additional paper as necessary.)

a. Name and mailing address of permit applicant:

Harold Brett
463 Lucerne Road
Cayucos CA

b. Names and mailing addresses as available of those who testified (either verbally or in writing) at the city/county/port hearings (s). Include other parties which you know to be interested and should receive notice of this appeal.

(1) Westland Engineering Company
Attn: Terrance Orton
75 Zaca Lane, Suite 100 San Luis Obispo CA 93401

(2) _____

(3) _____

(4) _____

SECTION IV. Reasons Supporting This Appeal

Note: Appeals of local government coastal permit decisions are limited by a variety of factors and requirements of the Coastal Act. Please review the appeal information sheet for assistance in completing this section which continues on the next page.

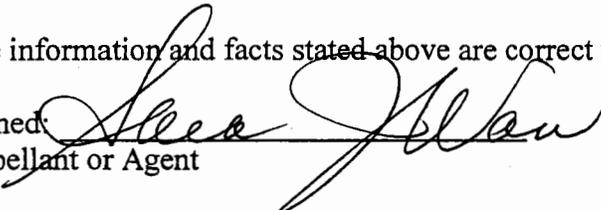
State briefly your reasons for this appeal. Include a summary description of Local Coastal Program, Land Use Plan, or Port Master Plan policies and requirements in which you believe the project is inconsistent and the reasons the decision warrants a new hearing. (Use additional paper as necessary.)

SEE ATTACHED

Note: The above description need not be a complete or exhaustive statement of your reasons of appeal; however, there must be sufficient discussion for staff to determine that the appeal is allowed by law. The appellant, subsequent to filing the appeal, may submit additional information to the staff and/or Commission to support the appeal request.

SECTION V. Certification

The information and facts stated above are correct to the best of my/our knowledge.

Signed: 
Appellant or Agent

Date: 04-18-01

Agent Authorization: I designate the above identified person(s) to act as my agent in all matters pertaining to this appeal.

Signed: _____

Date: _____

(Document2)

State briefly your reasons for this appeal. Include a summary description of Local Coastal Program, Land Use Plan, or Port Master Plan policies and requirements in which you believe the project is inconsistent and the reasons the decision warrants a new hearing. (Use additional paper as necessary.)

SEE ATTACHED

Note: The above description need not be a complete or exhaustive statement of your reasons of appeal; however, there must be sufficient discussion for staff to determine that the appeal is allowed by law. The appellant, subsequent to filing the appeal, may submit additional information to the staff and/or Commission to support the appeal request.

SECTION V. Certification

The information and facts stated above are correct to the best of my/our knowledge.

Signed: Dave Potter
Appellant or Agent

Date: 04-18-01

Agent Authorization: I designate the above identified person(s) to act as my agent in all matters pertaining to this appeal.

Signed: _____

Date: _____

(Document2)

CALIFORNIA COASTAL COMMISSION

CENTRAL COAST DISTRICT OFFICE
725 FRONT STREET, SUITE 300
SANTA CRUZ, CA 95060
(831) 427-4863



**Reasons for Appeal: San Luis Obispo County Coastal Development Permit D980047P
(Brett Seawall, 463 Lucerne Road, Cayucos)**

Approval of the revetment installed under San Luis Obispo County Emergency Permit P980250E is inconsistent with the San Luis Obispo County certified Local Coastal Program (LCP) for the following reasons:

Section 23.05.090a(1) of the Coastal Zone Land Use Ordinance (CZLUO), as well as LCP Hazards Policy 4a, limit shoreline structures to those projects necessary for the protection of existing development. In this case, the threat to existing development was not adequately established. Moreover, the approved project extends beyond the minimum project necessary to abate the alleged threat to existing development.

Section 23.05.090b of the CZLUO recognizes that shoreline structures located below the mean high tide line require a permit from the Coastal Commission. The location of the approved structure in relationship to the mean high tide line is not addressed in the local approval, and there is no condition requiring evidence of Coastal Commission approval or that no such approval is required. Based on the description of the project contained in the information attached to the local permit (e.g., "The seawall extends approximately 10 feet beyond the existing sea cave ..."), there appears to be a high likelihood that the project extends into the Commission's permit jurisdiction.

Section 23.05.090c(2) of the CZLUO and LCP Hazards Policy 4 require shoreline structures to be designed and sited to not preclude public access to and along the coast. The County conditioned the project to require a lateral access dedication of 25 feet of beach, or between the mean high tide and the toe of the bluff where topography limits the beach to less than 25 feet. This condition does not ensure adequate lateral access because the mean high tide may extend to the toe of the bluff (revetment) during much of the year.

Section 23.05.090c(5) of the CZLUO and LCP Hazards Policy 4 prohibit shoreline structures unless non-structural methods of protection (e.g., artificial nourishment) have been proven impractical or infeasible. While the County's analysis determined that beach nourishment would not be feasible, it did not address the option of relocating the structure, or portion of the structure, as a means to abate the alleged hazard.

CCC Exhibit F
(page 5 of 5 pages)

CALIFORNIA COASTLINE CONSERVATION COMMISSION
SOUTH CENTRAL COAST REGION

PERMIT 52-1

BRETT

Pursuant to Public Resources Code Section 27400 and following, and provisions of the California Administrative Code enacted pursuant thereto, a permit is hereby issued to perform the development described in the above-cited Permit Application.

This Permit is subject to the terms and conditions of the Commission resolution approving this project, set forth on the back of this Permit Form and incorporated herein by reference, and to the following terms and conditions: Before any construction can begin an adequate drainage plan must be presented to staff for their approval. This plan shall use as a guideline Section A-2 of the Bluff Guidelines; also Section A-4 shall be complied with.

The project shall be commenced and completed by the following dates:

(If none are stated, then at option of Permittee.)

Failure of Permittee to conform to the provisions of this Permit shall subject him to the penalties provided by Public Resources Code Sections 27500 and 27501.

This Permit is not intended to, nor shall it be interpreted to have any effect on rights and obligations under private contracts or agreement, nor is it intended to take the place of any permit to be issued by any other public body.

This Permit is assignable upon assumption of the Permittee's obligations by the Assignee.

The Permittee shall file a notice of completion of the activities authorized hereby with the Executive Director of the Regional Commission

This Permit shall not be valid until the following requirements have been met:

- 1) A copy of the Permit Form must be signed by all Permittees in the space provided below and returned to the Commission.
- 2) The complete Permit fee of \$ 50.00 must be submitted to the Commission. You have previously submitted \$ 50.00. PLEASE ENCLOSE THE REMAINDER (\$ -0-) WITH YOUR SIGNED COPY OF THE PERMIT FORM.

F. C. Buchter

F. C. Buchter
Executive Director

I/We acknowledge that I/we have received a copy of this Permit, have read it and understand its contents.

CCC Exhibit 
(page 1 of 3 pages)

CALIFORNIA COASTLINE CONSERVATION COMMISSION
SOUTH CENTRAL COAST REGION

CONSENT CALENDAR RESOLUTIONS

1. Projects Approved: Consent Calendar, as set forth in the published Agenda of the meeting of June 26, 1975 with the exception of the Items 56-32

2. The Regional Commission finds that the projects proposed will not have any substantial adverse environmental or ecological effect and are consistent with the findings set forth in Public Resources Code Section 27001 and with the objectives set forth in Public Resources Code Section 27302.
3. The findings of Paragraph 2 are based upon each application, the Staff summary and report thereon, and any relevant statements made at the aforesaid meeting, all of which are available in the Commission files and are incorporated herein by reference.
4. Projects approved hereby shall be subject to such terms and conditions as are set forward in the Staff summary and as were adopted by the Commission at the aforesaid meeting. Such terms and conditions shall be expressly set forth in each permit issued pursuant hereto.

Approved and adopted June 26 . 19 75 .
by the following vote;

AYES: Commissioners Schwartz, Willeford, Fletcher, Kallman, Newdell, Blake, Wullbrandt and Chairman Wright.

NOES: None.

ABSTAIN: None.

ABSENT: Commissioners Laufer, Terry, Ghitterman and Bennett.

HAROLD BRETT, 640 Chaparral Rd., Sierra Madre, CA. 91024.
LOCATION: Lucern Rd., Cayucos, County of San Luis Obispo.
PROJECT: Single family, 2 story, bluff front residence.

A great deal of correspondence has been transmitted in regard to this application, dating back to November 8, 1974. The application was filed February 24, 1975 but was not complete until early this month.

The rear setback will be 25 ft. from the nearest section of the bluff front top. From the top to the toe of the bluff the horizontal distance is 15-20 ft. with the bluff height being about 25 feet. The lot has been examined by Central Coast Laboratories (April 1, 1975). The report summarized by John Wiese concludes the lot has "an adequate foundation for residential construction" and "a total sea cliff retreat of 10 feet would be expected in 50 years." In addition the foundation plan has been certified by Robert Williams for a .75:1 slope design utilizing standard UBC requirements with a 24" minimum footing depth.

This project will result in adverse but not substantial visual impact on the coastal zone. Located on the northern edge of Cayucos this 27 foot house will dominate the bluff front view. On the westerly lot line the side yard setback is only 5 feet (County minimum) with an additional 3 ft. of roof overhang. The first home to the west is 6 lots away with the Borradori garage being approximately 3 lots to the east. This large box-like structure, seen from such points as the pier and State beach in Cayucos, illustrates the current visual impact which has resulted from such a large structure.

The adjacent lot to the west (No. 3) is owned by Mr. Brett. He plans to sell this lot due to excessive tax burdens. The applicant intends to add a carport after the home is completed. This will require a County variance if Cal Trans does not abandon the 25 feet right-of-way along Lucern Road, which was the original highway right-of-way.

CONDITION: Before any construction can begin an adequate drainage plan must be presented to staff for their approval. This plan shall use as a guideline Section A-2 of the Bluff Guidelines; also Section A-4 shall be complied with.

RECEIVED RECEIVED

STATE OF CALIFORNIA

MAY 31 2001

EDMUND G. BROWN JR., Governor

California Coastal Commission
SOUTH CENTRAL COAST REGIONAL COMMISSION
700 STATE STREET
BALBOA BUILDING, SUITE 612
SANTA BARBARA, CA 93101

CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

JUL 16 1980



COASTAL DEVELOPMENT PERMIT

2 absent COMMISSIONERS
SOUTH CENTRAL COAST REGION
to 1

On March 7, 1980, by a vote of 9 to 1, the California Coastal Commission granted to HAROLD BRETT Permit # 411-17, subject to the conditions set forth below, for development consisting of a 320 sq. ft. one-story addition on a bluff top lot to an existing two-story single family residence and garage; addition is between the existing residence and the bluff top.

more specifically described in the application file in the Commission offices.

The development is within the coastal zone in San Luis Obispo County at 3 Lucerne Road (Locarno Tract), Cayucos.

After public hearing held on March 7, 1980, the Commission found that, as conditioned, the proposed development is in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976; will not prejudice the ability of the local government having jurisdiction over the area to prepare a local coastal program that is in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976; if between the sea and the public road nearest the sea, is in conformity with the public access and public recreation policies of Chapter 3 of the California Coastal Act of 1976; and either (1) will not have any significant adverse impact on the environment, or (2) there are no feasible alternatives or feasible mitigation measures available that would substantially lessen any significant adverse impact that the development as approved may have on the environment.

Issued on behalf of the South Central Coast Regional Coastal Commission on March 7, 1980,

gc
7-17-90
AM

Carl C. Hetrick
Executive Director

The undersigned permittee acknowledges receipt of the California Coastal Commission Permit # 411-17, and fully understands its contents, including all conditions imposed. (Please return one signed copy to the South Central Coastal Commission as soon as possible; upon receipt of same, the permit card will be mailed to you to post on project property.

7-14-80
DATE

Harold G. Brett
PERMITTEE

CCC Exhibit H
(page 1 of 3 pages)

Permit # 411-17, is subject to the following conditions:

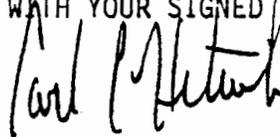
I. STANDARD CONDITIONS

1. Assignment of Permit This permit may not be assigned to another person except as provided in Cal. Admin. Code, Title 14, Section 13170.
2. Notice of Receipt and Acknowledgement Construction authorized by this permit shall not commence until a copy of this permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of its contents, is returned to the Commission.
3. Expiration If construction has not commenced, this permit will expire two (2) years from the date on which the Commission voted on the application. Application for extension of this permit must be made prior to the expiration date.
4. Construction All construction must occur in accord with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviations from the approved plans must be reviewed by the Commission pursuant to Cal. Admin. Code, Title 14, Sections 13164 - 13168.

II. SPECIAL CONDITIONS

SEE ATTACHED SHEET

The complete Permit Fee of \$ _____ must be submitted to the Commission. You have previously submitted \$ _____
PLEASE ENCLOSE THE REMAINDER (\$ _____) WITH YOUR SIGNED COPY OF THE PERMIT FORM.



CARL. C. HETRICK
Executive Director

RECEIVED

MAY 31 2001

CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

This permit is subject to the following conditions:

1. Prior to the issuance of a coastal development permit, the applicant shall record an irrevocable offer to dedicate to a public agency or to a private association approved by the Regional Commission an easement for public access and recreational use running from the mean high tide line to the toe of the bluff. Such easement shall be free of prior liens or encumbrances except tax liens. The offer shall be made in a manner and form approved in writing by the Executive Director. The offer shall be irrevocable for a period of 21 years, running from the date of recordation and shall run with the land in favor of the people of the State of California, binding successors and assigns of the applicant or landowner.
2. The applicant shall, by accepting the terms and conditions of the permit, agree that the issuance of this permit and completion of the authorized development shall not prejudice any subsequent assertion of a public right e.g. prescriptive rights, public trust, etc.
3. Prior to the issuance of a coastal development permit, the applicant shall submit to the Executive Director a deed restriction for recording free of prior liens except for tax liens, that binds the applicant and any successor in interest. The form and content of the deed restriction shall be subject to the review and approval of the Executive Director. The deed restriction shall provide (a) that the applicants understand that the site is subject to extraordinary hazards from waves during storms and from erosion and the applicants assume the liability from those hazards; (b) the applicants unconditionally waive any claim of liability on the part of the Commission or any other regulatory agency for any damage from such hazards; and (c) the applicants understand that construction in the face of these known hazards may make them ineligible for public disaster funds or loans for repair, replacement, or rehabilitation of the property in the event of storms & landslides. Further, the deed restriction shall provide:
 - d. Acknowledgement that: any addition to the permitted structure or the construction of a non-attached structure (e.g. stairway) which is located between the residence and the top of the bluff, shall require a valid Coastal Development Permit. This does not exempt this project from other requirements regarding additions to the structure which require a Coastal Development Permit as set forth in the California Coastal Administrative Code.



**SAN LUIS OBISPO
COUNTY PARKS**

MEMO

TO: Jonathan Bishop (831-427-4877) *(18 pages w/ cover)*
FROM: Jan Di Leo
DATE: May 17, 2004
RE: 463 Lucerne, Cayucos

RECEIVED

MAY 17 2004

CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

Attached are the various documents I have in my file for 463 Lucerne. The certificate of acceptance is in there as well. Let me know if you need more. I can be reached via email (jdileo@co.slo.ca.us) or by phone (805-781-4089). THANKS!

CCC Exhibit I
(page 1 of 17 pages)

Return Original To and
Recording Requested By:
State of California
California Coastal Commission
631 Howard Street, 4th Floor
San Francisco, California 94105

RECEIVED
JUN 27 1980

DOC. NO. 25130
OFFICIAL RECORDS
SAN LUIS OBISPO CO., CAL

RECEIVED
JUN 02 1980

JUN 18 1980

CALIFORNIA
COASTAL COMMISSION

WILLIAM E. ZIMARIK
COUNTY RECORDER

TIME 4:55 PM

CALIFORNIA
COASTAL COMMISSION

IRREVOCABLE OFFER TO DEDICATE

I. WHEREAS, (1) HAROLD G. BRETT LAVON M. BRETT is/are
the record owner(s), hereinafter referred to as "owner(s)", of the real
property located at (2) 3 LUCERNE RD CAYUCOS SAN LUIS OBISPO
COUNTY

California, and legally described as particularly set forth in attached (3)
Exhibit A hereby incorporated by reference and hereinafter referred to as the
"subject property"; and

II. WHEREAS, the California Coastal Commission, (3a) SOUTH CENTRAL
Coast Regional Commission, hereinafter referred to as "the Commission", is
acting on behalf of the People of the State of California; and

III. WHEREAS, the People of the State of California have a legal interest in
the lands seaward of the mean high tide line; and

IV. WHEREAS, pursuant to the California Coastal Act of 1976, the owner(s)
applied to the Commission for a coastal development permit for (4)
A ROOM ADDITION

on the subject property; and

V. WHEREAS, a coastal development permit no. (5) 411-17 was granted on
(6) MARCH 18, 1980 by the Commission in accordance with
the provisions of the Staff Recommendation and Findings attached

1 in (7) Exhibit B hereby incorporated by reference and subject to the
2 following condition(s): (8)

3 1. Prior to the issuance of a coastal development permit, the applicant
4 shall record an irrevocable offer to dedicate to a public agency or
5 to a private association approved by the Regional Commission an ease-
6 ment for public access and recreational use running from the mean
7 high tide line to the toe of the bluff. Such easement shall be free
8 of prior liens or encumbrances except tax liens. The offer shall be
9 made in a manner and form approved in writing by the Executive
10 Director. The offer shall be irrevocable for a period of 21 years,
11 running from the date of recordation and shall run with the land in
12 favor of the people of the State of California, binding successors
13 and assigns of the applicant of landowner.

14 VI. WHEREAS, the subject property is a parcel located between the first
15 public road and the shoreline; and

16 VII. WHEREAS, under the policies of Sections 30210 through 31212 of the
17 California Coastal Act of 1976, public access to the shoreline and along the
18 coast is to be maximized, and in all new development projects located between
19 the first public road and the shoreline be provided; and

20 VIII. WHEREAS, the Commission found that but for the imposition of the above
21 conditions the proposed development could not be found consistent with the
22 public access policies of Section 30210 through 30212 of the California Coastal
23 Act of 1976 and that in the absence of such conditions a permit could not
24 therefore have been granted.

25 //

26 //

27 //

CCC Exhibit I
(page 3 of 17 pages)

1 NOW THEREFORE, in consideration of the granting of permit no. (9) 41-17
 2 to the owner(s) by the Commission, the owner(s) hereby irrevocably offer(s) to
 3 dedicate to the (10) PUBLIC AGENCY
 4 or any public agency of the State of California, or private association accept-
 5 able to the Executive Director of the California Coastal Commission, an easemen
 6 (11) FOR PUBLIC ACCESS AND PASSIVE RECREATION
 7
 8 located on the subject property (12) MEAN HIGH TIDE LINE TO TOE
 9 OF THE BLUFF
 10 as specifically described by attached Exhibit C (13) which is hereby
 11 incorporated by reference.

12 This offer of dedication shall be irrevocable for a period of twenty-one
 13 (21) years, measured forward from the date of recordation and shall be binding
 14 upon the owner(s), and their heirs, assigns or successors in interest to the
 15 subject property described above. The People of the State of California shall
 16 accept this offer through the local government in whose jurisdiction the
 17 subject property lies, or through a public agency or a private association
 18 acceptable to the Executive Director of the Commission or its successor in
 19 interest.

20 //
 21 //
 22 //
 23 //
 24 //
 25 //
 26 //
 27 //

CCC Exhibit I
 (page 4 of 17 pages)

1 Acceptance of the offer is subject to a covenant which runs with the
 2 land, providing that the first offeree to accept the easement may not abandon
 3 but must instead offer the easement to other public agencies or private
 4 associations acceptable to the Executive Director of the Commission for the
 5 duration of the term of the original offer to dedicate. The grant of easement
 6 once made shall run with the land and shall be binding on the parties, their
 7 heirs and assigns.

8 Executed on this 30 day of May, 1980, in the City of
 9 Cayucos, County of San Luis Obispo.

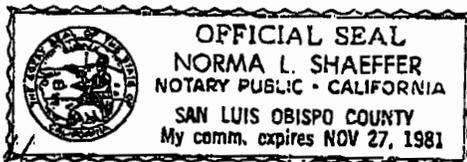
10 Dated: 5-30-80

11 Signed LaVon M. Brett
 (Owner)

12 Harold G. Brett
 13 (Owner)

14 STATE OF CALIFORNIA
 15 COUNTY OF San Luis Obispo

16 On May 30, 1980, before the undersigned, a Notary Public in and
 17 for said State, personally appeared Harold G. Brett and LaVon M. Brett
 18 _____, whose names are subscribed to the
 19 within instrument, and acknowledge that they executed the same.



20 Norma L. Shaeffer
 21 Notary Public in and for said County and State
 22 Norma L. Shaeffer

107 Ocean Avenue, Cayucos, CA 93430

23 //
 24 //
 25 //
 26 //
 27 //

CCC Exhibit I
 (page 5 of 17 pages)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

This is to certify that the offer of dedication set forth above dated May 30, 1980, and signed by Lavon and Harold Brett, owner(s), is hereby acknowledged by the undersigned officer on behalf of the California Coastal Commission pursuant to authority conferred by the California Coastal Commission when it granted Coastal Development Permit No. 411-17 on March 18, 1980 and the California Coastal Commission consents to recordation thereof by its duly authorized officer.

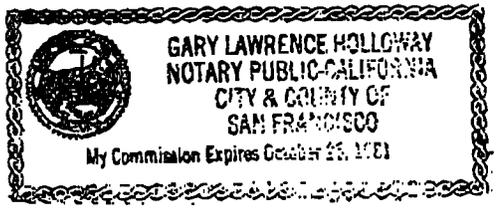
Dated: June 16, 1980

Linda L Breeden
Staff Counsel
California Coastal Commission

STATE OF CALIFORNIA
COUNTY OF SAN FRANCISCO

On 16 June 1980, before the undersigned, a Notary Public in and for said State, personally appeared Linda L. Breeden known to me to be the person who executed the within instrument on behalf of said California Coastal Commission

Witness my hand and official seal.



Gary Lawrence Holloway
Notary Public in and for said County and State

CCC Exhibit I
(page 6 of 17 pages)

MAY-17-2004 10:15

AMERICAN TITLE INSURANCE COMPANY

Order No.

Escrow No. SLO 786827 KS

Loan No.

EXHIBIT "A"

04779 5 000003.00

04779 5 000030.25

DOC. NO. 10658

OFFICIAL RECORDS

SAN LUIS OBISPO CO., CALIF.

WILLIAM E. ZIMARIK,

COUNTY RECORDER

04779 5 000033.25FA

APR 5 1973

TIME 3:00 PM

WHEN RECORDED MAIL TO:

Mr. and Mrs. Harold G. Brett
640 Chaparral Road
Sierra Madre, Calif. 91024

SPACE ABOVE THIS LINE FOR RECORDER'S USE

MAIL TAX STATEMENTS TO:

Same address as above:

DOCUMENTARY TRANSFER TAX \$ 30.25

XXX Computed on the consideration or value of property conveyed; OR
..... Computed on the acquisition value less liens or encumbrances
remaining at time of recording.

Signature of Recorder or Determining tax - Firm Name

For: First American Title Ins. Co.

Unincorporated

GRANT DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

REED A. QUESNELL and MARION E. QUESNELL, husband and wife

hereby GRANT(S) to

HAROLD G. BRETT and LAVON M. BRETT, husband and wife as Joint Tenants

the real property in the ~~XXXX~~
County of

SAN LUIS OBISPO

State of California, described as

Lot 2 of the LOCARNO TRACT in the County of San Luis Obispo, State of California,
according to map recorded July 30, 1925 in Book 3, page 60 of Maps in the office
of the County Recorder of said County.

AROLD BRETT
APPLICATION NO. 411-17

Page 2

3. Prior to the issuance of a coastal development permit, the applicant shall submit to the Executive Director a deed restriction for recording free of prior liens except for tax liens, that binds the deed restriction and any successor in interest. The form and content of the deed restriction shall be subject to the review and approval of the Executive Director. The deed restriction shall provide (a) that the applicant understands that the site is subject to extraordinary hazards from waves during storms and from erosion and the applicant assumes the liability from those hazards; (b) the applicant unconditionally waives any claim of liability on the part of the Commission or any other regulatory agency for any damage from such hazards; and (c) the applicant understands that construction in the face of these known hazards may make them infeasible for public disaster funds or loans for repair, replacement, or rehabilitation of the property in the event of storms & landslides. Further, the deed restriction shall provide:

d. Acknowledgment that: any addition to the permitted structure or the construction of a non-attached structure (e.g., stairway) which is located between the residence and the top of the bluff, shall subject to a valid Coastal Development Permit. This does not exempt this project from other requirements regarding additions to the structure which require a Coastal Development Permit as set forth in the California Coastal Administrative Code.

III. FINDINGS AND DECLARATIONS:

The Commission finds and declares as follows:

1. Project Description

The project is for the construction of a one-story 320 square foot addition on a bluff top lot to an existing two story residence in the Locarno Tract of Cayucos. (See Exhibit 1) The proposed addition will be located between the existing residence and the top of the bluff. It would preserve the 25 foot setback recommended by the original geology report dated April 1, 1975 and the addendum dated January 29, 1980. (See Exhibit 2) Design of the proposed addition is the same as that of the existing structures. The present drainage system is adequate to accommodate the proposed addition.

2. Surrounding Area

The neighborhood where this project is located is comprised predominantly of low-scale single family residences and is almost entirely developed. There is one multi-family residential development two lots to the east, but there are single family dwellings on either side of the existing single family residence.

STATE OF CALIFORNIA
California Coastal Commission
SOUTH CENTRAL COAST REGIONAL COMMISSION
235 STATE STREET
MARIPOSA, CALIFORNIA, 93601
JANITA SANDERS, CL 9101

March 18, 1980

TO: Regional Commission
FROM: Carl C. Heitrick, Executive Director
RE: REVISED FINDINGS OF FACT ON APPLICATION NO. 411-17, BRETT

At the meeting of March 7, 1980, the Commission approved APPLICATION NO. 411-17, submitted by Harold Brett. Since the staff recommendation had been for approval with conditions, one of which was deletion by the Commission, it is necessary to extract from the content of the hearing those factors which appeared to lead the Commission to its deletion of the condition and to submit to the Commission in writing revised findings of fact for adoption.

The Staff recommends that the Commission adopt the following resolution:

1. APPROVAL WITH CONDITIONS

The Commission hereby approves a permit for the proposed development, subject to the conditions below, on the grounds that, as conditioned, the proposed development is in conformity with the provisions of Chapter 3 of the Coastal Act of 1976. [with the public access and public recreation policies of Chapter 3 of the Coastal Act], will not prejudice the ability of the local government having jurisdiction over the area to prepare a local program that is in conformity with the provisions of Chapter 3 of the Coastal Act, and will have no significant adverse environmental impacts.

II. CONDITIONS

This permit is subject to the following conditions:

1. Prior to the issuance of a coastal development permit, the applicant shall record an irrevocable offer to dedicate to a public agency or to a private association approved by the Regional Commission an easement for public access and recreational use running from the mean high tide line to the top of the bluff. Such easement shall be free of prior liens or encumbrances except tax liens. The offer shall be made in a manner and form approved in writing by the Executive Director. The offer shall be irrevocable for a period of 21 years, running from the date of recordation and shall run with the land in favor of the people of the State of California, binding successors and assigns of the applicant or landowner.
2. The applicant shall, by accepting the terms and conditions of the permit, agree that the issuance of this permit and completion of the authorized development shall not prejudice any subsequent assertion of a public right e.g. prescriptive rights, public trust, etc.

CCC Exhibit I
(page 8 of 17 pages)

~~EXHIBIT B~~

ADMINISTRATIVE DIVISION
PLANNING AND ZONING DEPARTMENT
CITY OF LOS ANGELES
1200 GARDEN GROVE BLVD., SUITE 100
LOS ANGELES, CALIFORNIA 90015

JOHN H. WIESE, P.E.
CONSULTING ENGINEER
1858 LOS GARDEN VALLEY ROAD, 1A-C
LOS ANGELES, CALIFORNIA 90024
1001 550-2241

January 29, 1980
South Central Regional Coastal Commission
Balboa Bldg., Suite 612
735 State St.
Santa Barbara, Calif. 93101

Re: Construction of addition to Harold Brett residence, Lot 2,
Locarno Tract (3 Locarno Road), Cayucos, Calif.

This letter is in response to the letter of 24 January 1980 from Carla D. Frink to Harold Brett, requesting an updated addendum to my 1975 geologic report on the subject lot, prior to her making a recommendation regarding addition of a sunroom to the seaward side of an existing seafloor residence.

I reexamined the property and adjoining lots on January 28, 1980, including the seacliff and intertidal area, during a time of a minus tide. Mr. Brett was present, and discussed the location, size and design of the proposed addition with me. His proposal is to add a one-story sunroom, measuring 16 x 26' to the front of the existing building, at the same grade, on an area now occupied by lawn and shrubbery.

The geologic relationships described in my report of March 1975 have not changed. Four minor changes of surface conditions were noted. These are, 1) A small rockfall of about 1 cu. yd. of sandstone has dropped from a previous overhang along the fault zone in the seacliff on Lot 3, some 15' beyond the subject Lot 2 and of no significance to the stability of Lot 2) On Lot 1, loose fill piled on the seacliff face during construction of the residence there has sloughed to the beach, as expected, but this does not relate to the stability of the beach, as expected, but the past 5 years have removed the loose rubble at the base of the sea cliff at Lot 2, exposing a highly erosion-resistant platform of bedrock in the beach area there, increasing confidence in the stability of the seacliff at Lot 2) The planting of low shrubs on the cliff rim at Lot 2 has greatly retarded runoff erosion over this rim as well as restricting indiscriminate access to the beach over the cliff rim. An earlier rounding of the cliff rim, noted in the report 5 years ago, had been largely the result of uncontrolled runoff and root traffic, not by normal sea wave erosion. Earlier rim retreat was estimated at a maximum of 2.4 inches per year. In view of the experience of the past 5 years I would certainly not increase this estimate, and would decrease it to a rate of 1" per year or no as a maximum.

Brett Int. 29 Jan 1980

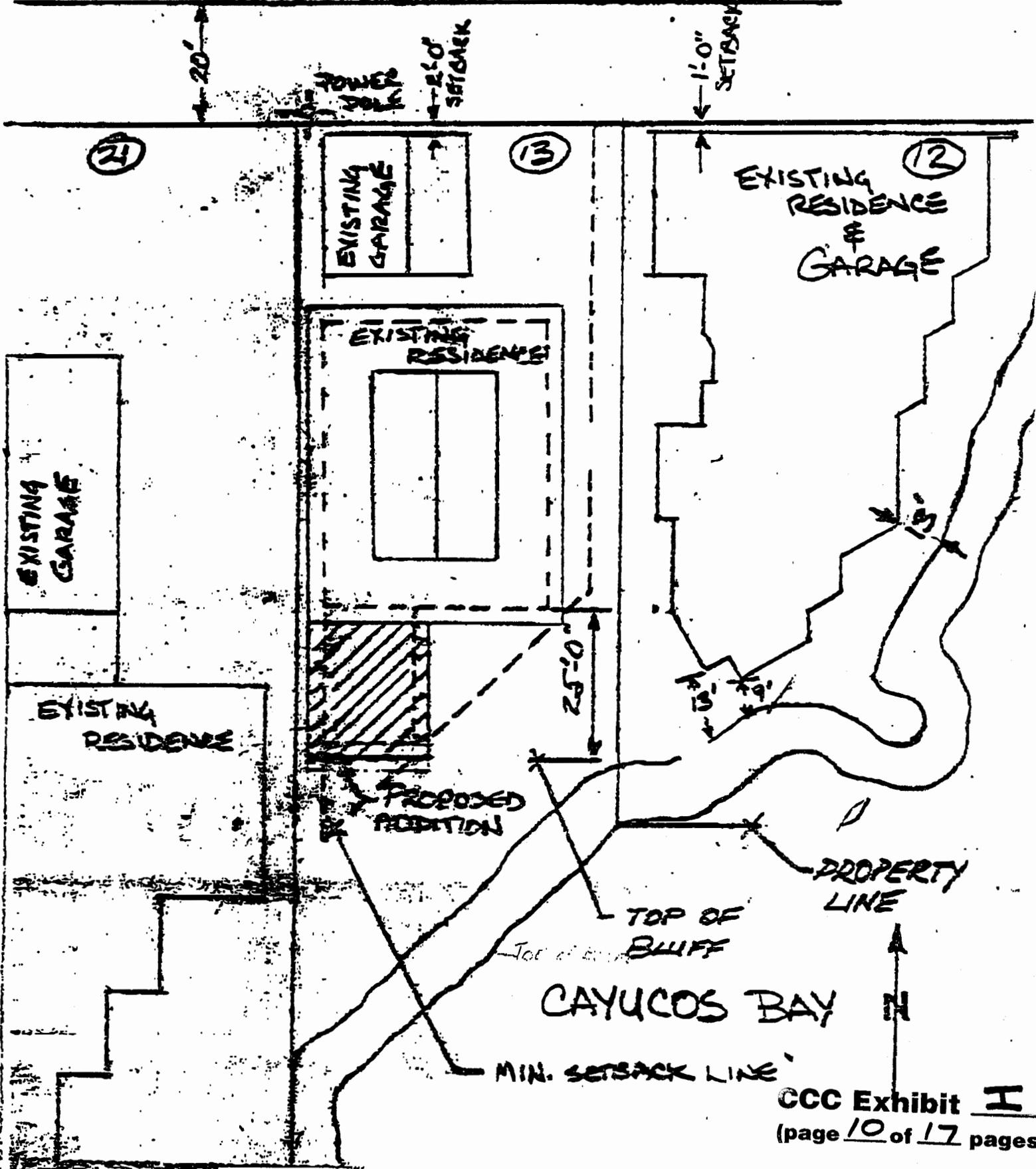
The proposed building will still have 25 to 50 feet of near-level terrace deposit between it and the seacliff rim. Foundation conditions are good, the same as beneath the existing residence. There will be no adverse geologic effect on the seacliff any submarine water conditions. The small water seepage, noted 5 years ago in the seacliff face, has since disappeared, probably because of surface runoff control measures taken since construction.

In summary, geologic conditions are at least as good and probably better than noted in the previous report, based on today's rock exposures and on the frequent inspections of the site made by the writer over the past 5 years. These geologic conditions are favorable for the construction of the proposed building during its economic life span, and probably for each longer than 100 years, under presently obtaining and expected conditions. There will be no additional hazards created by the construction, either to the site itself or to adjoining lands.

Respectfully,
John H. Wiese
John H. Wiese
CEG Calif. #279

CCC Exhibit H
(page 9 of 17 pages)

SCALE: 1" = 20'-0" LUCERNE ROAD

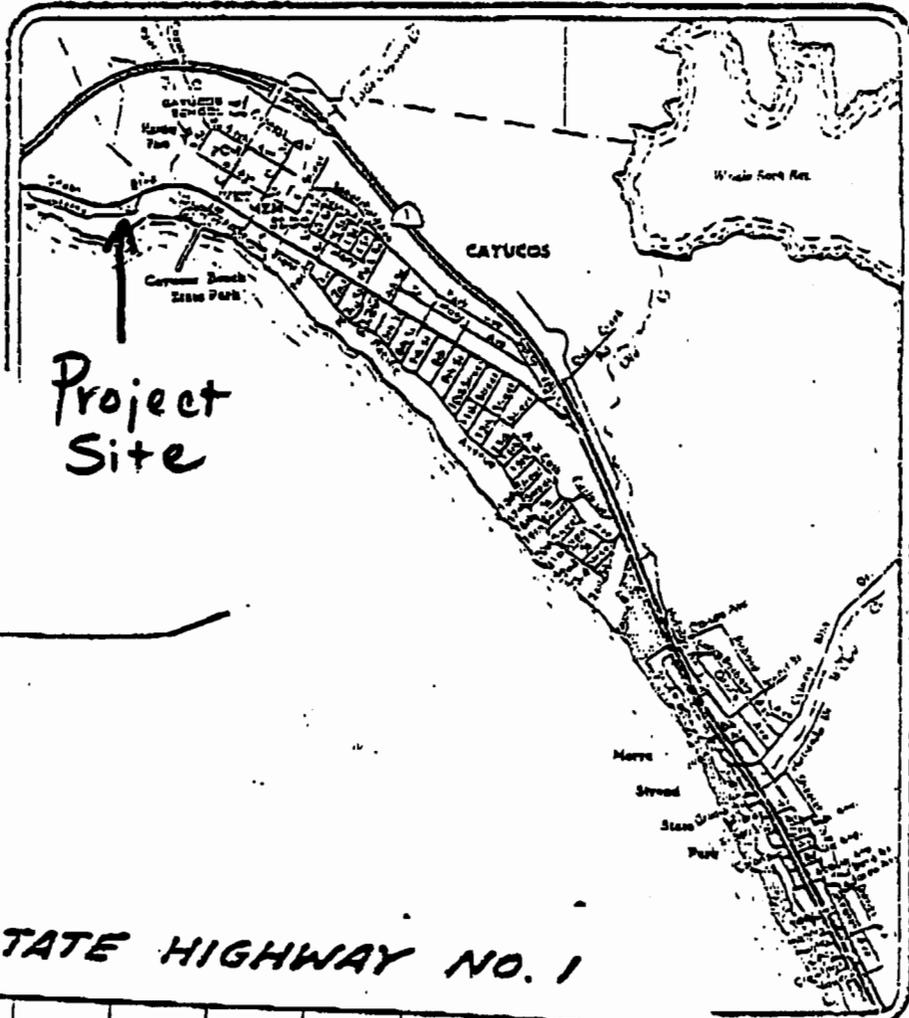


CCC Exhibit I
(page 10 of 17 pages)

RECORDERS MEMO:
POOR REPRODUCTION DUE TO
QUALITY OF ORIGINAL DOCUMENT.

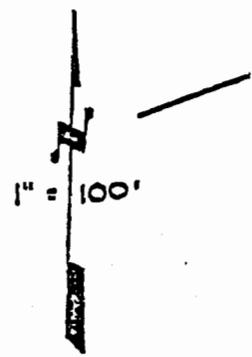
Exhibit 2
VOL 2287 PAGE 576

64-28



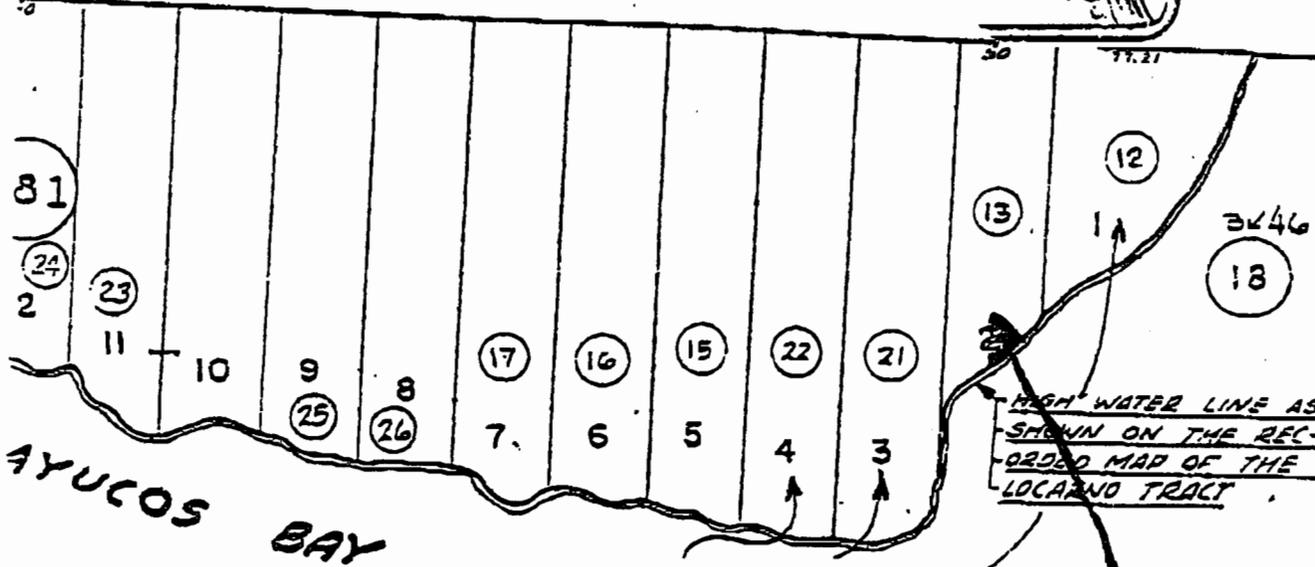
2446
20

Project Site



15/10/03 SEE 'FT

CALIF. STATE HIGHWAY NO. 1



HIGH WATER LINE AS SHOWN ON THE RECORDED MAP OF THE LOCARNO TRACT

RECORDERS MEMO:
POOR REPRODUCTION DUE TO
QUALITY OF ORIGINAL DOCUMENT.

Project Site

CCC Exhibit I
(page 11 of 17 pages)

END OF DOCUMENT

Exhibit 1
... 22A7... 577



SUPPLEMENTAL REPORT

SAFECO TITLE INSURANCE COMPANY

San Luis Obispo

(Office)

RECEIVED
JUL 07 1980

CALIFORNIA
COASTAL COMMISSION

- Harold G. Brett
- 175 North Ocean Avenue
- Cayucos, CA. 93430

Your No.
Our No. 122665

Attention:

Gentlemen:

Supplementing our original report dated May 16, 1980, we wish to report the following matters:

Dated as of June 24 1980 at 7:30 A.M. Margaret L. Cisco
Margaret L. Cisco

Title Officer

Please add the following to said report:

5. An Irrevocable and Perpetual Offer to Dedicate an easement for public access and passive recreation, executed by Harold G. Brett and LaVon M. Brett, affecting a portion of the herein described property, recorded June 18, 1980 in Book 2247 at page 568 of Official Records, and any other private easement of ingress and egress and other purposes, affecting said portion of the herein described property, as provided in said offer to Dedicate.

CCC Exhibit I
(page 12 of 17 pages)

**SAFECO****SAFECO TITLE INSURANCE COMPANY**1043 MARSH STREET, P.O. BOX 1145, SAN LUIS OBISPO, CALIFORNIA 93406
(805) 543-8211

PRELIMINARY REPORT

- Harold G. Brett
- 175 North Ocean Avenue
- Cayucos, CA 93430

Attention:

Your No.
Our No. 122665Dated as of May 16, 1980 at 7:30 A.M.

In response to the above referenced application for a policy of title insurance, **SAFECO TITLE INSURANCE COMPANY** hereby reports that it is prepared to issue, as of the date hereof, a California Land Title Association Standard Coverage Form Policy of Title Insurance describing the land and the estate or interest therein hereinafter set forth in Schedule A, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an Exception in Schedule B or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations of said policy form.

This report (and any supplements or amendments thereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a Binder or Commitment should be requested.

Margaret L. Cisco
Title Officer

CCC Exhibit I
(page 13 of 17 pages)

SCHEDULE A

The estate or interest in the land described or referred to in this schedule covered by this report is:

A Fee

Title to said estate or interest at the date hereof is vested in:

**HAROLD G. BRETT AND LAVON M. BRETT,
husband and wife, as Joint Tenants**

The land referred to in this report is situated in the State of California, County of **San Luis Obispo** and is described as follows:

**Lot 2 of the LOCARBO TRACT, in the County of San Luis Obispo, State of California,
according to map recorded July 30, 1925 in Book 3, at Page 60 of Maps.**

CCC Exhibit I
(page 14 of 17 pages)

SCHEDULE B

At the date hereof Exceptions to coverage in addition to the printed exceptions and exclusions contained in said policy form would be as follows:

1. General and special taxes for the fiscal year 1980-81, now a lien, but not yet due and payable.

2. The lien for general and special taxes for the fiscal year 1979-80 securing;

Additional amounts that may hereafter be assessed within the guidelines defined in Chapters 49 and 242 of the State of California Statutes of 1979.

3. A special assessment for the project hereafter stated, amounts thereunder being collected with the County taxes;

Project : Cayucos Assessment District No. 1

4. Any adverse claim based upon the assertion that some portion of said land is tide or submerged lands, or has been created by artificial means or has accreted to such portions so created.

NOTE: General and special taxes for the fiscal year 1979-80 for proration purposes;

First Installment	:	\$544.28	paid
Second Installment	:	\$544.28	paid
Parcel Number	:	64-281-13	
Code Area	:	063-004	
Exemption	:	\$1,750.00	
Tax Bill Number	:	063283	

5/27/80
lcf

CCC Exhibit I
(page 15 of 17 pages)

RECORDING REQUESTED BY AND RETURN TO:
California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105-2219
Attention: Legal Division

DOC No: 1997-072256

Rpt No: 00091590

Official Records
San Luis Obispo Co.
Julie L. Rodewald
Recorder
Dec 23, 1997
Time: 08:46

NF -1 0.00

[2]

TOTAL 0.00

CERTIFICATE OF ACCEPTANCE

This is to certify that SAN LUIS OBISPO COUNTY heraby
accepts the Offer to Dedicate executed by HAROLD G. BRETT & LAVON
M. BRETT on MAY 20, 1980,
and recorded on JUNE 18, 1980 as Instrument No. 25130
in the Official Records of the Office of the Recorder of SAN LUIS OBISPO
County.

DATED: December 18, 1996

BY: [Signature]
Duane P. Leib, Director, Gen. Services
FOR: County of San Luis Obispo

STATE OF CALIFORNIA
COUNTY OF SAN LUIS OBISPO

On December 18, 1996, before me, Caryn Stumpenhau, a Notary
Public, personally appeared Duane P. Leib, personally
known to me (or proved to me on the basis of satisfactory evidence) to be the
person(x) whose name(x) (s) is/are subscribed to the within instrument and acknowledged
to me that (h)e/she/they executed the same in (h)is/her/their authorized capacity(x),
and that by (h)is/her/their signature(x) on the instrument the person(x), or the
entity upon behalf of which the person(x) acted, executed the instrument.

WITNESS my hand and official seal.

Signature [Signature]



CCC Exhibit I
(page 16 of 17 pages)

Page 1 of 2
463 Lucerne
Cayucos

ACKNOWLEDGEMENT BY CALIFORNIA COASTAL COMMISSION

This is to certify that SAN LUIS OBISPO COUNTY
 is a public agency/private association acceptable to the Executive Director of
 the California Coastal Commission to be Grantee under the Offer to Dedicate
 executed by HAROLD G. BRETT HAVON M. JAMESON on MAY 30, 1980,
 and recorded on JUNE 18, 1980, in the office of the
 Recorder of SAN LUIS OBISPO COUNTY as Instrument No. 25130.
 DATED: November 14, 1997

CALIFORNIA COASTAL COMMISSION

John Bowers
 John Bowers, Staff Counsel

STATE OF CALIFORNIA

COUNTY OF SAN FRANCISCO

On 11/14/97, before me, Deborah L. Bove, a Notary
 Public, personally appeared John Bowers, personally
 known to me (or proved to me on the basis of satisfactory evidence) to be the
 person(s) whose name(s) is/are subscribed to the within instrument and
 acknowledged to me that he/she/they executed the same in his/her/their
 authorized capacity(ies), and that by his/her/their signature(s) on the
 instrument the person(s), or the entity upon behalf of which the person(s)
 acted, executed the instrument.

WITNESS my hand and official seal.

Deborah L. Bove
 Signature



CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2 219
VOICE AND TDD (415) 904-5 200
FAX (4 15) 904-5 400



14 June 2004

GEOTECHNICAL REVIEW MEMORANDUM

To: Jonathan Bishop, Coastal Program Analyst
From: Mark Johnsson, Staff Geologist
Re: Appeal A-3-SLO-01-046 (Brett)

In regard to the above-referenced appeal, I have reviewed the following documents:

- 1) GeoSolutions Inc 2002, "Alternative analysis for rock revetment, 463 Lucerne Road, Cayucos Area, San Luis Obispo, California", 4 p. letter report dated 15 April 2002 and signed by J. M. D. Kammer (CEG 2118 CHG 502).
- 2) Belsher and Becker, 2001, "Appeal A-3-SLO-01-046 (Brett Revetment, 463 Lucerne Rd., Cayucos)", 3 p. letter to Steve Monowitz dated 27 November 2001 and signed by J. W. Belsher.
- 3) Belsher and Becker, 2001, "Appeal A-3-SLO-01-046 (Brett Revetment, 463 Lucerne Rd., Cayucos)", 3 p. letter to Steve Monowitz dated 12 November 2001 and signed by J. W. Belsher.
- 4) Westland Engineering Company 2001, "Rock revetment on Brett property", 2 p. letter to John Belsher dated 31 October 2001 and signed by T. K. Orton (PE 21807).
- 5) GeoSolutions Inc 2001, "Review of coastal bluff geologic conditions, 463 Lucerne Road, Cayucos Area, San Luis Obispo, California", 3 p. letter report dated 5 September 2001 and signed by J. M. D. Kammer (CEG 2118 CHG 502).
- 6) Westland Engineering Company 2001, "Brett Minor use permit D980047P", 1 p. letter to Martha Neder dated 19 January 2001 and signed by T. K. Orton (PE 21807).
- 7) GeoSolutions Inc 1998, "Compliance report of final construction, rock revetment structure, 463 Lucerne Road, Cayucos area, San Luis Obispo County, California", 3 p. geologic report dated 1 December 1998 and signed by J. M. D. Kammer (CHG 502) and R. A. Pfost (CEG 1281).
- 8) Westland Engineering Company 1998, "Emergency permit for Brett property", 1 p. letter to Lauren LaJoie dated 13 October 1998 and signed by T. K. Orton (PE 21807).
- 9) GeoSolutions Inc 1998, "Geologic assessment of bluff erosion and sea cliff retreat, 463 Lucerne Road, Cayucos area of San Luis Obispo County, California", 14 p. geologic report dated 16 July 1998 and signed by J. M. D. Kammer (CHG 502) and R. A. Pfost (CEG 1281).
- 10) John H. Wiese, 1980, "Construction of addition to Harold Brett residence, Lot 2, Locarno Tract (3 Lucerne Road), Cayucos, California", 2 p. letter to South Central Regional Coastal Commission dated 29 January 1980 and signed by J. H. Wiese (CEG 279).
- 11) Central Coast Laboratories 1975, "Examination of geologic conditions, residential site near Seacliff, Lot 2, Locarbo Tract, Cayucos, San Luis Obispo, California", 4 p. geologic report dated 1 April 1975 and signed by J. H. Wiese (CEG 279).

In addition, I have discussed the site geology with the project geotechnical consultant, Mr. Michael Kammer, on several occasions. I visited the site in December, 2001.

CCC Exhibit 5
(page 1 of 4 pages)

References (10) and (11) represent preliminary analyses of geologic conditions at the site, in preparation for consideration of construction at the site. The reports both conclude that the site is suitable for development. From survey data recorded on the site map, it is concluded that the sea cliff at the corners of the lot retreated approximately ten feet in the period 1925 to 1975 (or approximately 2.4 inches per year), but that there was essentially no retreat at the center of the lot. Although a large amount of seepage (described as a "spring") was observed in 1975 (reference 11), this was not present in 1980, and no mitigation measures for ground water seepage were suggested. Reference (10) concludes that the proposed addition to the structure would "not be endangered by seacliff retreat during its economic life span, and probably for much longer than 100 years, under presently obtaining and expectable conditions."

Nevertheless, reference (9), prepared in 1998, concluded that a coastal protection structure was necessary to protect the residence from bluff erosion. No information is provided in this report concerning the distance from the bluff edge of the structure to be protected, but reference (8) indicates that the structure is 20.4 feet from the bluff edge. Aerial photographs were used to estimate bluff retreat between 1952 and 1992 at a site approximately 100 feet west of the subject site. Due to lack of reference features, only a 1978 and 1992 photograph could be used to estimate retreat rates, which for that interval apparently averaged approximately 6 inches per year. It should be noted that such a time interval of only 14 years does not provide sufficient length of record to unambiguously assess long-term bluff retreat rates, but these results are roughly consistent with the results obtained from survey data in reference (9). No period of especially rapid bluff retreat was noted in reference (9) other than a "recent" block fall of approximately 10 cubic yards.

Reference (9) also makes mention of a sea cave on the subject property, near the property line with the upcoast property. Although no data are available concerning the growth rate of this sea cave, the report concludes that it represents a hazard to both the subject property and the upcoast property.

Reference (9), like reference (11), provides abundant evidence that ground water processes are active at the site. The spring noted in reference (11) was again flowing in 1998, emerging from the contact between the marine terrace deposits and the underlying Franciscan Formation sandstone bedrock at the site. The ensuing saturated conditions are cited as a significant contributor to bluff weakness and erosion. Further, surface drainage at the site generally flows over the bluff edge, exacerbating erosion. Roof gutters are described as present only some of the roofs at the site, and downspouts are only partly connected to a subsurface piping system. Accordingly, reference (9) indicates that there is much that could be done to improve site stability by controlling surface and subsurface drainage. Nevertheless, the report recommends that a rip-rap revetment be constructed to control erosion and growth of the sea cave, and makes no recommendations in its section "3.0 Conclusions and Recommendations" concerning controls on surface drainage or ground water.

A sinkhole apparently opened on the property sometime between July and 13 October 1998. Reference (8), submitted in support of an emergency permit for the previously proposed revetment, contains a figure showing an undermined area near the bluff edge, and apparently

within 15 feet of the house on the property. The revetment was constructed in November 1998, as reported in reference (7). At or near this time, the undermined area and any emergent sinkhole were apparently filled, but the manner and method of filling is not elucidated in any of the reports I reviewed, nor was it known to Mr. John Kammer when I discussed the matter with him earlier this month.

In my opinion, the undermining of the marine terrace sands and their collapse in a sinkhole could have been predicted from the drainage issues cited in the previous geologic reports. This failure appears to represent a classic "piping failure" in which groundwater emerging on the bluff face carries subsurface materials to the bluff face, resulting in the creation of a void inland of the bluff face. Mitigation measures that could reduce the likelihood of such piping failure revolve primarily around control of ground water, and include the installation of hydraugers, vertical pumping wells, clay caps, or other impermeable surfaces to limit infiltration. In my opinion, a revetment, itself a porous structure, would offer very little protection from piping failures of this type.

Several reports were prepared at the request of Commission staff to answer specific questions. Reference (6) reports on the location of the southerly property line. The report indicates that the "State owns from the mean lower-low water mark outward from shore for 3 miles..." The report then goes on to indicate that mean lower-low water at Port San Luis lies at -0.20 feet NAVD88, and that the State owns land from the -0.20 feet and seaward. In fact, State sovereign lands extends three miles seaward of the mean high tide line (e.g., Public Resource Code Section 3061). Reference (5) documents the extent of threat to the house at the site, and makes calculations concerning the amount of sand generation at the site. The latter is estimated at approximately three cubic yards per year, and I concur that this is a reasonable estimate based on the data provided. Reference (5) indicates that the sink hole that opened in late 1998 represented erosion occurring at a substantially faster rate than the measured 6-inch per year bluff retreat rate, and that this event could jeopardize the foundation of the house. I concur that a sinkhole and/or piping failure in the vicinity of the house foundation could threaten the structure, but I disagree that a revetment is an appropriate mitigation measure. If the foundation was threatened by piping, then filling of the void by compacted fill, grout, or concrete, perhaps in conjunction with underpinning of the foundation, would be the appropriate mitigation response. The rock revetment neither provides foundation support nor addresses the ground water issues associated with piping failures. Reference (4) further clarified the degree of threat that the house was under. Citing the County's Policy Discussion for Seawalls, a structure could be considered threatened and an owner could request a permit to protect the structure if the bluff had retreated to within 15 feet of the structure. Reference (4) goes on to cite the UBC concerning slope setbacks for footings. Both the County's Policy Discussion for Seawalls and the UBC provisions are meant to refer to foundation setbacks from slopes, however, not from ongoing piping failures, and so are not especially useful in evaluating the degree of threat experienced by the structure. In any case, it is my opinion that even if the foundation elements of the house were threatened by the piping/sinkhole failures, the rock revetment is not an appropriate mitigation strategy. Finally, reference (1) was prepared to provide an alternatives analysis for mitigation measures to address the stability issues at the site. No mention of drainage improvements, which in my opinion are the most important means to address piping failures, are discussed.

In my opinion it is possible, although not conclusively demonstrated, that ongoing piping failures and sinkhole collapse could have threatened the principal structure at 463 Lucerne Road in 1998. It is not clear how the sinkhole and piping failure was addressed, but it is likely that if mitigation measures did not include control of groundwater, that they will be of limited effectiveness in the long term. The revetment that was constructed at the site will not, in my opinion, have a significant effect on ongoing piping failures. It will help mitigate slumping and erosion associated with wave attack, but there is nothing in the record to indicate that this type of erosion ever has placed the house in imminent threat.

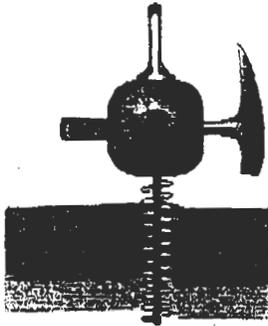
I hope that this review is helpful, please do not hesitate to contact me if you have any further questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Johnsson", with a long horizontal flourish extending to the right.

Mark Johnsson, Ph.D., CEG, CHG
Staff Geologist

CCC Exhibit 5
(page 4 of 4 pages)



At Grace

From

John Kanner

GeoSolutions, LLC

220 High Street

December 1, 1998
Project SL00345-2

Mr. Harold Brett
463 Lucerne Road
Cayucos, California 93430

Subject: Compliance Report of Final Construction
Rock Revetment Structure
463 Lucerne Road, Cayucos Area
San Luis Obispo County, California

- Reference:**
1. Geologic Assessment of Bluff Erosion and Sea Cliff Retreat, 463 Lucerne Road, Cayucos Area, San Luis Obispo, California. Report by GeoSolutions, LLC, dated June 26, 1998.
 2. Rock Slope Protection Plan, 463 Lucerne Road, Cayucos, San Luis Obispo County, California. Grading Plan prepared by Westland Engineering Company, plans dated August 17, 1998.

Dear Mr. Brett:

INTRODUCTION

As required, we are providing this letter as confirmation that a rock revetment structure was constructed at 463 Lucerne Road, Cayucos Area of San Luis Obispo, California. Construction of the revetment was performed in compliance with the requirements of the referenced Geologic Assessment for bluff protection.

SCOPE OF WORK PERFORMED

Professional construction monitoring was performed by GeoSolutions, LLC during the construction period from November 11, 1998 through November 20, 1998. Construction was performed by G. F. Garcia and Sons, Inc., general engineering contractors of Morro Bay, California. Services provided by GeoSolutions, LLC included client and contractor consultation and observation of the following: debris removal; preparation of original slope; keyway excavation; installation of geotextile fabric, installation of rip rap; and installation of drain pipes. Revetment construction was performed in a manner consistent with the method discussed with the owner and contractor. The following conditions were verified:

RECEIVED

APR 27 2001

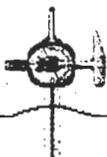
CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

CCC Exhibit K
(page 1 of 36 pages)

December 1, 1998

Project SL00345-2

1. Starting along the western side, the existing slope was grubbed of plant material. Top of slope vegetation was allowed to remain. Beach sand and stone were removed and stockpiled for later use. Loose soil from the exposed bluff face was removed and stockpiled. One bench was cut on the slope approximately ten feet above the beach for revetment stabilization.
2. Excavation of a keyway approximately five feet below grade across the toe of the bluff was completed. This keyway was approximately 3-feet into bedrock and was approximately six feet wide.
3. Alignment of the front of the revetment was established along a line established by the contractor.
4. Geotextile filter fabric was placed down the bluff face and continued into the keyway to add stability to the entire structure.
5. Two-ton stone was staged off-site, brought to the Site by a rubber tire loader, and individually placed by a trackhoe. An initial course of stone was placed within the keyway and adjusted to allow minimal future settling.
6. Twelve-inch diameter drainpipe was connected to existing subsurface drain-conduit that extended from the top of slope. The new drainpipe was positioned to exit at the face of the rock structure.
7. Revetment construction with 2-ton class stone continued to approximately two-thirds up the face of the slope. One-ton and half-ton rock was placed on the upper third of the bluff. Smaller, 50 to 100 pound rock was placed onto the face of the revetment, filling in voids between larger stone.
8. At the approximate elevation of 28 feet, the rip rap was terminated. The revetment slope extends up at an approximate 1.5:1 (horizontal to vertical) slope.
9. A surface drain is planned to be installed along the top of the bluff to intercept surface drainage. Drainage water will be transferred to recessed drain-boxes that ultimately drain to the face of the revetment.
10. The beach area was returned to pre-construction conditions.



December 1, 1998

Project SL00345-2

RECOMMENDATIONS

The following recommendations are suggested to provide additional long-term stability to the revetment structure and Site.

- Rain gutters should be installed on all roof-lines and downspouts should connect to the existing subsurface drain that diverts water to the face of the revetment. In a similar manner, runoff collected from hardscape and vegetated areas should be collected in drains and plumbed into the main subsurface drain. All drains should be properly maintained to assure proper function.
- Animal burrows can serve to collect normal sheet flow on slopes, causing rapid destructive erosion and should therefore, be controlled or eliminated.
- All future modifications to the slopes should be made under the direction or approval of the engineering geologist or general civil engineer.
- Particular care should be made by the owner to maintain the revetment. Damage from natural or man-made causes should be repaired.

SUMMARY

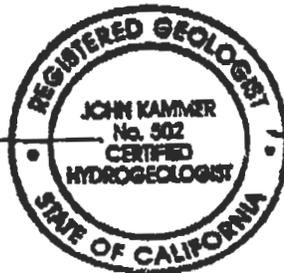
Construction operations observed by the representative of GeoSolutions, LLC was during the month of November, 1998. The conclusions and recommendations contained herein regarding construction compliance have been based upon our observations. It is our opinion that the work performed has been completed in accordance with the recommendations of the referenced Geologic Assessment and Coastal Bluff Study, as well as the requirements of regulating agencies. This letter should be considered subject to review by the controlling authorities.

Thank you for the opportunity to have been of service. If there should be any questions regarding this report, please contact us at 805-543-8539.

Sincerely,

GEOSOLUTIONS LLC


 John M.D. Kammer
 Project Hydrogeologist



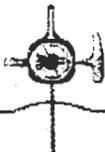
Reviewed:


 Richard A. Pfost
 Senior Engineering Geologist



Cc: Mr. Terry Orton, Westland Engineers, 75 Zaca lane, Suite 100, San Luis Obispo, CA, 93401.

Mr. Aisc Garcia, G.F. Garcia and Sons, Inc., 1710 Toro Creek Road, Morro Bay, CA 93442.



JOHN W. BELSHER
HOWARD MARK BECKER
STEVEN P. ROBERTS

BELSHER & BECKER

ATTORNEYS AT LAW
412 MARSH STREET
SAN LUIS OBISPO, CALIFORNIA 93401

TELEPHONE (805) 542-9900
FAX (805) 542-9949
E-MAIL stolaw@belsherandbecker.com

November 12, 2001

RECEIVED

NOV 19 2001

VIA FAX & U.S. MAIL
831-427-4877

California Coastal Commission
Attn: Steve Monowitz
725 Front St., Suite 300
Santa Cruz, CA 905060

CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

RE: Appeal A-3-SLO-01-046 (Brett Revetment, 463 Lucerne Rd., Cayucos)

Dear Mr. Monowitz:

This letter responds to your inquiries of May 18, 2001 concerning issues raised in the appeal referenced above. At the present time, we are hopeful that we can meet with Coastal Staff and resolve its informational needs in time to prepare a Staff Report for the October Coastal Commission hearing. However, should the Staff need more time, we are agreeable to a continuance for another month in order to give adequate time for preparation for the necessary report and recommendation.

With respect to the specific comments raised in your letter, we offer the follow:

1. Need for the Project.

Enclosed herewith are statements by Civil Engineer, Terry Orton of Westland Engineering and Certified Engineering Geologist, John Kammer of GeoSolutions, Inc. Both these statements provide further detail into the need for the rock revetment construction at the referenced site. Of critical note is the observance by both Westland Engineering and GeoSolutions, in the presence of the property owner, of a sink hole (or fissure), which appeared between the top of the bluff and the house (less than 15 feet from the Brett dwelling). Both observed measurements indicating this sink hole was several feet deep and had arisen as an episodic event. The concern was so great that survey crews were not allowed to operate within the area until the revetment had been constructed pursuant to the County's emergency permit. As indicated in the engineer's comments, the Uniform Building Code and County policy both indicate the dangers of such slope failures this near to a structure. County policy provides that a setback of less than 15 feet gives rise to a presumption of danger to structures. The UBC likewise precludes location of structures so near to a sink hole.

Several geologic reports have noted the occurrences of springs and seepage into the face of the bluff. The geologist indicates the best explanation for the sudden appearance of the sink hole in the backyard is the result of springs seeping under the backyard area out to the face of the bluff. As explained in geologic reports in the record, this creates a significant problem for the backyard integrity and, ultimately, the structure.

The sea cave referred to in geological reports is not of significance to this project, as it is located on property to the west. The information about the cave previously provided in geologic studies was simply to provide background for the geology of the area. There is no physical link between the "sink hole" and "the sea cave". The approximate location of this sink hole is plotted in the full-scale plan, enclosed herein.

CCC Exhibit: K
(page 4 of 36 pages)

2. Relationship of Project Mean High Tide and State Lands.

The rock revetment was constructed entirely above the mean high tide line. Surveyors were present before the construction project. The statement of Terry Orton, enclosed herein, details the confirmation by his engineering company, Westland Engineering, that the rock revetment was constructed above the mean high tide line. The enclosed Site Plan further depicts the elevation of the revetment, as surveyed and designed by Westland Engineering.

3. Impacts on Public Access.

There is no "beach" with a traveled way for the public as this site is extremely rocky and the water runs to the base of the cliff during normal conditions. As the revetment was constructed into the hillside and above the mean high tide line, above any theoretical traveled way, there was and is no impact on lateral public access. Staff's request for a "sand supply" study is responded to in the statement of John Kammer, a Certified Engineering Geologist. The amount of sand supply which would otherwise be generated by this cliff absent the present rock revetment is negligible—on the order of three (3) cubic yards per year.

4. Project Alternatives.

Alternatives are not available to the construction of the rock revetment.

There is no ability to move the existing dwelling. The structure is already sited as far away from the bluff as possible, and, in fact, the property owner was granted a variance into the front yard setback by action of the Coastal Commission and the County in September, 1976. Moreover, the house is of a concrete slab construction, with utilities and conduit running through the concrete slab. Therefore, it would be an engineering nightmare (or, perhaps near impossibility) to replace conduit and plumbing eliminated by the demolition of portions of the property in order to accommodate the necessary setback from the area of the sink hole. Accordingly, the "alternatives" suggested hypothetically by staff of relocation of the structure and filling of the sea cave are not available. Only the rock revetment could protect against the continuing hydrologic influences of the spring in the backyard area, which was threatening the existing structure and leading to a potentially catastrophic and life-threatening event.

As a final note, great care was taken by the owners to construct the revetment with local rock, following the natural topography of the cliff face. Rock was individually hand-placed into the face of the cliff under direction of a geologist. As a result, every attempt was made to make the revetment aesthetically compatible with its rocky surroundings.

Steve Monowitz
RE: Appeal A-3-SLO-01-046
November 12, 2001
Page 3

Please contact me to discuss the foregoing and the possibility of a coordinated site visit.

Sincerely,



John W. Belsher

JWB/ab

Encls

cc: client (w/out encls)
Terry Orton (via fax)
John Kammer (via fax)

CCC Exhibit K
(page 6 of 36 pages)

Mr. John Belsher
Belsher & Becker
Attorneys at Law
412 Marsh Street
San Luis Obispo, California 93401

October 31, 2001

RE: ROCK REVETMENT ON BRETT PROPERTY

Dear Mr. Belsher:

The following is information regarding our preparation and processing of the plans for the above project. In the early part of 1998 Richard Pfof of GeoSolutions, Inc. and I went to the site at the request of Mr. Harold Brett to observe a failure in the soil in his back yard. While at the residence, we went into the back yard with Mr. Brett to observe the failures. we observed one failure which was a surface failure in the southwesterly portion of the site. At another area of the site and much closer to the residence, Mr. Brett showed us a failure where a sink hole (see the attached sketch) was formed. Mr. Brett took a 2 inch by 4 inch stud and pushed it several feet down into a hole in the yard. He indicated that he had partially stepped into this hole and warned us to stay away from this hole since he felt it was a hazard.

In order to determine if this project was eligible for a permit I reviewed the guidelines from the codes. At this time the County was working under a set of guidelines that had been established in a staff report on a Policy Discussion for Seawalls and presented to the Planning Commission. The Policy established criteria whereby a permit could be granted for protection of a structure adjacent to a bluff. The Policy indicated that if the bluff was within 15 feet of the structure and the request is supported by a Geologist Report, the structure could be considered threatened and the owner can request a permit to protect the structure.

The UBC in section 1806.5.3 indicates that the footing *shall be founded in firm material with an embedment and setback from the slope surface sufficient to provide vertical and lateral support for the footing without detrimental settlement.* This was a concern since we did not know the extent of the undermining of the site.

The sink hole appeared to be less than fifteen feet away from the structure. GeoSolutions, Inc. had a Geologist review the information and he felt we should go forward with both an

RECEIVED

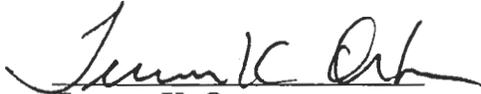
NOV 19 2001

CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

emergency permit and a regular permit. Since Mr. Brett did not want our survey crew near the sink hole, due to his concerns for safety, I estimated the approximate location of the sink hole and attached the sketch to a letter that we prepared and sent to the County on October 13, 1998 (see attached letter).

When we performed the field work for the site we tied into the National Geodetic Survey Bench Mark that was near the site. This Bench Mark was shown on the Grading Plan for the site. This Bench Mark was used to determine the location of the Mean High Tide Line. This line is shown on the Grading Plan. We then designed the revetment with the assistance of the Engineering Geologist to be constructed within the lot above the Mean High Tide.

Sincerely yours,



Terence K. Orton
PE 21,807 (Expires 9-30-01)

encl. Sketch showing sink hole that was attached to October 13, 1998 letter to the County.

N 88°51'00" E

TBM

MON

50.0'

50.0'

50.0'

254.7'

169.5'

114.8'

N 1°09'00" W

N 1°09'00" W

N 1°09'00" W

LOT 4

LOT 3

LOT 2
3 MAP 60

LOT 1

WOODEN FENCE

HOUSE

DECK

STAIRS

GATE

2' WIDE CONCRETE WALK

CHAIN LINK FENCE

TOP OF BLUFF

18.12'

3-4" PIPES

APPROX. LOCATION

ROCK

APPROX. LOCATION
3" PIPE

HOUSE

BRICK PATIO

PORCH

**UNDESIRABLE
AREA**

BLOCK WALL

3" TREE

HOUSE

PORCH

4" PVC OUTLET
APPROX. LOCATION

EXIT
ROCK-SLOT

CONNECT ALL DRAINS
TO PIPE K

COC exhibit
(page 9 of 36 pages)

END CHAIN LINK
FENCE, BEGIN
WOODEN FENCE

October 13, 1998

Ms. Lauren LaJoie
County Planning Department

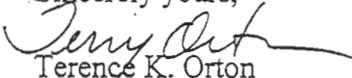
RE: EMERGENCY PERMIT FOR BRETT PROPERTY

Dear Ms. LaJoie:

I wanted to mention again to you that the property in question has a problem that can not be quantified. Mr. Brett went into his yard, near the location I have circled on the map, and nearly fell into an hole. Mr. Brett used a long pole and stuck it into the earth, he indicated the pole went down very deep. This area is undermined and could not be accurately identified by our survey crew.

You can understand that Mr. Brett is very concerned that the yard could give way. Please take this into advisement when considering the emergency permit.

Sincerely yours,


Terence K. Orton

encl.



GeoSolutions, INC.

220 High Street, San Luis Obispo, CA 93401
(805) 543-8539, 543-2171 fax
info@GeoSolutions.net

September 5, 2001
Project SL00345-3

Mrs. Harold Brett
463 Lucerne Road
Cayucos, California 93430

Subject: Review of Coastal Bluff Geologic Conditions
463 Lucerne Road, Cayucos Area
San Luis Obispo County, California

Dear Mrs. Brett:

INTRODUCTION

As requested, GeoSolutions, Inc. has reviewed a May 18, 2001 letter submitted by the California Coastal Commission regarding Appeal A-3-SLO-01-046, the Brett rock revetment located at 463 Lucerne Road, Cayucos area of San Luis Obispo County, California. A rock revetment has been constructed at the property and it is our understanding that the Coastal Commission has requested additional information regarding geologic conditions at the Site. Specifically, the Coastal Commission has requested discussion regarding the following: 1) sand generation from the Site; and 2) risk assessment of the existing house prior to construction of the rock revetment.

SAND GENERATION

Sand generation from the Site is primarily from erosion of Marine Terrace Deposits comprising the upper four to five feet of the bluff. This material is composed of gravel, sand, silt, and clay. Bedrock is comprised of greenstone, gabbro, and greywacke sandstone. Since the bedrock erodes mainly by block fall, immediate sand generation from the bedrock is not realized. Additionally, these types of rocks primarily weather to clay components rather than weathering directly to sand.

A sample of Terrace Deposit was collected from the Site bluff and a sieve analysis was conducted according to test method ASTM C136-96a to verify sand content. The laboratory analysis data sheet is provided at the end of the report. Approximately 60 percent of the material is sand while approximately 40 percent of the material is clay and silt. Sand generation at the site can be calculated utilizing the assumptions of bluff erosion rates of 6 inches per year, thickness of Terrace Deposits (average of 4.5 feet), density of soil (approximately 90 percent), and length of bluff (approximately 65 feet).

$$\begin{aligned} & (\text{Bluff length}) \times (\text{height of terrace deposits}) \times (\text{density of soil}) \times (\text{yearly bluff loss}) \times \\ & \qquad \qquad \qquad (\text{percent sand}) = \\ & (65 \text{ feet}) \times (4.5 \text{ feet}) \times (90 \text{ percent}) \times (0.5 \text{ feet}) \times (60\%) = 78.6 \text{ cubic feet} \end{aligned}$$

CCC Exhibit K
(page 11 of 36 pages)

It appears that approximately 79 cubic feet (3 cubic yards) of sand are potentially generated at the site per year based upon a retreat rate of 6 inches per year.

THREAT TO EXISTING STRUCTURE

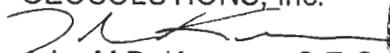
As stated in the July 16, 1998 Geologic Assessment of Bluff Erosion and Sea Cliff Retreat (hereby termed "1998 Bluff Study") a bluff retreat rate of 6-inches per year has been established for the property. This rate was obtained by evaluating retreat rates from air-photo evaluation and is an average rate for the bluff.

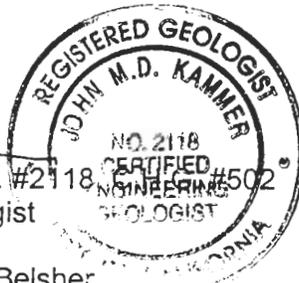
A report prepared by Central Coast Laboratories, 1975, details the geologic conditions at the site at that time. The report states "there are no sea caves present, nor sag area on the terrace which might suggest collapse of the underlying rocks behind the cliff edge, nor any sea stacks rising through the terrace." Several years later, An October 13, 1998 letter from Westland Engineering Company states "Mr. Brett went into his yard, near the location I have circled on the map, and nearly fell into an (sic) hole." On October 20, 1998, GeoSolutions, Inc. issued a letter stating "site conditions associated with the sea cave and rear yard "sink hole" demonstrate the extent of bluff erosion. The undermined area identified in the referenced letter could widen dramatically this coming winter, threatening the loss of support to the foundation. It is imperative that the bluff be re-supported and protected as recommended in the referenced Geologic Assessment at the earliest possible date." From the history of these statements, an immediate concern arose regarding the opening of a sink-hole that was not apparent during earlier geologic assessments of the property (in 1975) or during conduct of the 1998 Bluff Study. An emergency permit application was filed based upon the massive undermining of the bluff at the sink-hole. Erosion associated with the sink-hole was occurring at a substantially faster rate than the measured 6-inch erosion rate and it was our opinion that this event could jeopardize the foundation of the house.

It is our professional opinion that the creation of the sink-hole is a direct result of weakness of the immediate geological conditions in the central portion of the site bluff and that the spring within this bluff exacerbates the instability of this area of the bluff. The risk to the structure appeared immediate due to the accelerated denudation occurring within the central portion (sink-hole area) of the bluff. It appears that there is a hydraulic link between development of the sink-hole and groundwater discharge within the face of the cliff. The immediacy (emergency permit) for rock revetment construction was predicated on the development of the sink-hole at the property and the threat this sink-hole could have on the foundation of the house.

If there should be any questions regarding this report, please contact us at 805-543-8539.

Sincerely,
GEOSOLUTIONS, Inc.


John M.D. Kammer, C.E.G. #2118
Project Engineering Geologist



Cc: Terry Orton and John Belsher

CCC Exhibit K
(page 12 of 36 pages)

REFERENCES

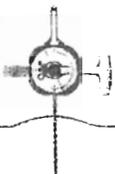
GeoSolutions, Inc., October 20, 1998, Emergency Permit for Bluff Support, 1 page letter.

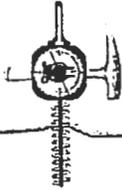
Geologic Assessment of Bluff Erosion and Sea Cliff Retreat, 463 Lucerne Road, Cayucos Area, San Luis Obispo, California. Report by GeoSolutions, LLC, dated June 26, 1998.

Rock Slope Protection Plan, 463 Lucerne Road, Cayucos, San Luis Obispo County, California. Grading Plan prepared by Westland Engineering Company, plans dated August 17, 1998.

Examination of Geologic Conditions, Residential Site Near Seacliff, Lot 2, Locarno Tract, Cayucos, San Luis Obispo County, California, report by Central Coast Laboratories, April 1, 1975, signed by Mr. John Wiese, CEG.

Westland Engineering Company, October 13, 1998, Emergency Permit for Brett Property, to Ms. LaJoie, San Luis Obispo County Planning Department, regarding Brett property, signed by Mr. Terence Orton.





98.018
Brett Harold
GeoSolutions, Inc.

220 High Street, San Luis Obispo, CA 93401
(805) 543-8539, 543-2171 fax
info@GeoSolutions.net

April 15, 2002
Project SL00345-3

Mrs. Harold Brett
463 Lucerne Road
Cayucos, California 93430

Subject: Alternative Analysis for Rock Revetment
463 Lucerne Road, Cayucos Area
San Luis Obispo County, California

Dear Mrs. Brett:

1.0 INTRODUCTION

As requested, GeoSolutions, Inc. has completed this Alternative Analysis for the existing rock revetment structure located at 463 Lucerne Road, Cayucos area of San Luis Obispo County, California. The California Coastal Commission has requested this analysis to understand alternatives available to Site stabilization in lieu of the rock revetment.

It is the opinion of GeoSolutions, Inc. that there was an immediate threat to the existing residence due to site conditions associated with a sink hole that opened within the rear yard (that area between the bluff and the residence). It was determined that the undermined area could widen dramatically in the coming winter, threatening the loss of support to the foundation of the residence. GeoSolutions, Inc. made a recommendation to re-support and protect the bluff at the earliest possible date. An emergency permit application was filed based upon the massive undermining of the bluff at the sink-hole. Erosion associated with the sink-hole was occurring at a substantially faster rate than the measured 6-inch erosion rate at the bluff and it was our opinion that this event could jeopardize the foundation of the house. As required by the Coastal Element to the General Plan for the County of San Luis Obispo, alternatives to a rock revetment structure were considered at the time, but the revetment was considered the option that provided the most reasonable protection to the structure. Most reasonable was considered to be the least evasive, both asthetically and physically. Timeliness was a priority for this project; risk to the structure appeared immediate due to the accelerated cavitation occurring within the central portion (sink-hole area) of the bluff.

2.0 ALTERNATIVE ANALYSIS

Several alternatives to a rock revetment structure were considered for the Site prior to obtaining a permit to build a rock revetment structure. These alternatives are presented below.

CCC Exhibit K
(page 14 of 36 pages)

2.1 NO ACTION

Based upon our nearly 25 years of experience providing geological investigations along the coastal bluff, the first consideration for any coastal site is "no action". Due to the constraints of the Coastal Act, loss of property is insufficient for action. This is explained to all clients prior to discussion and consideration of sites. Existing structures must be threatened for there to be consideration of support or protection. Verification of direct threat to the residence was confirmed, requiring action to protect. The "no action" alternative was considered but was not viable for this property.

2.2 CONCRETE FILLING OF VOID

A marginal engineering alternative would have been to fill the sink-hole with concrete. This would provide a temporary solution to an on-going, long-term stability issue of the foundation at the house. It is our professional opinion that the creation of the sink-hole is a direct result of structural or petrologic weakness of the immediate geological conditions in the central portion of the site bluff and that the local spring exacerbates the instability. It appears that there is a hydraulic link between development of the sink-hole and groundwater discharge within the face of the cliff. Filling of the sink-hole with concrete would not address groundwater discharge at the bluff face and, ultimately, would not address stability at the bluff. Concrete filling would uncontrollably divert groundwater to an alternate area and face of bluff. The result of this permeability "dam" would be to concentrate the ground water beneath the house or neighbor's house. This option was considered as an alternative but was associated with professional liability issues that could not be overcome (mainly, filling of the void could have been considered negligence by not providing adequate residence protection from the larger subsurface and bluff condition).

2.3 CAST-IN-PLACE CONCRETE WALL

The decision not to construct a cast-in-place concrete wall at the coastal bluff was at the lead of San Luis Obispo County planners. This option was not a viable alternative due to resistance from County planners as to the artificial appearance with this type of structure. Enforcement of County policy dictated that this alternative was not to be considered. In addition, it was the engineers and geologist opinion that local rock would create a natural appearance and blend with the coastal geology and neighboring revetment structure versus a concrete structure.

2.4 BUTTRESS FILL

A buttress fill at the bluff would temporarily act to stabilize the slope but would not allow water to drain through as well as a rock revetment. Additionally, engineered fill associated with a buttress could not withstand repeated wave action and would create accelerated sediment loading to the immediate oceanic environment, possibly disturbing aquatic life. The in-place rock revetment acts as a buttress fill but allows water within the bluff to freely move through the wall. Additional sediment loading associated with the rock of the revetment is not a concern with the revetment.



2.5 SURFACE RETAINING STRUCTURE

A surface retaining structure such as a railroad-tie wall or concrete block wall would provide only a temporary solution to a larger problem in the bluff. The surface retaining structure would not offer support of that area associated with the spring in the central portion of the bluff and could later be undermined by the spring. A surface retaining structure is considered a "landscaping improvement" and not an adequate, long-term engineered solution to the coastal bluff weakness. The land use requirement is to provide a design that would be stable for 75 years. Landscape improvements do not comply with this requirement.

2.6 RESIDENCE SUPPORT

Subsurface support of the residence was considered during initial review of Site due to the proximity of the sinkhole to the foundation. Geotechnical solutions such as underpinning, pressure grouting, or caissons, to stabilize the residence were investigated. However, there would be professional negligence to exclude bluff stabilization with residence stabilization. We would be remiss to only suggest residence stabilization to an obvious problem occurring at the bluff.

2.7 RESIDENCE RELOCATION

While not necessarily a geotechnical issue, relocation of the house was considered and rejected. The structure is already encroaching, by variance, into the front yard setback and against a roadway embankment. Since the house is on a slab foundation, it would be impractical to move.

3.0 CONCLUSIONS

Possible solutions in lieu of a rock revetment structure were considered for an emergency permit to construct a rock revetment at the Site. The instability was recognized in the face of the bluff but the development of the sink-hole prompted the emergency permit process. Unconventional filling of the void would create new problems, posing a new threat to structures. This unacceptable alternative is not permitted by Coastal Commission requirements as enforced by the County of San Luis Obispo.

As professionals, we must consider the liability associated with each corrective alternative recommended for mitigation. It was our goal to consider all options but to recommend for design that option that reduces the potential for structural damage (to the house), in a cost effective manner, and conform to the general guidelines of the California Coastal Commission and County of San Luis Obispo. It is our opinion that the rock revetment structure offered the most effective manner to protect and support at the residence while maintaining aesthetic appearance similar to the surrounding coastline within a cost effective framework.

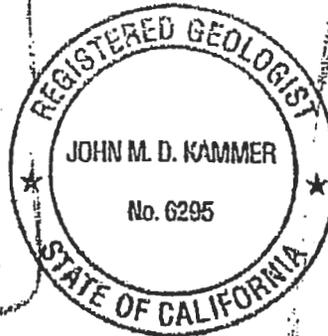
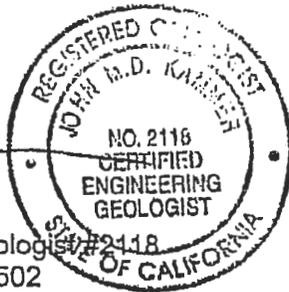


If there should be any questions regarding this report, please contact us at 805-543-8539.

Sincerely,
GEOSOLUTIONS, Inc.



John M.D. Kammer
Certified Engineering Geologist #2118
Certified Hydrogeologist #502
Registered Geologist #6295



Cc: Terry Orton, Westland Engineering
John Belsher, Belsher & Becker

\\Betty\geosolutions\Geology\Geology & Hydrology\Sea cliff erosion\SL00345 Brett seawall
Cayucos\SL345-3 geo review\Coastal Commission review 4-15-02 let.doc

REFERENCES

GeoSolutions, Inc., October 20, 1998, Emergency Permit for Bluff Support, 1 page letter.

Geologic Assessment of Bluff Erosion and Sea Cliff Retreat, 463 Lucerne Road, Cayucos Area, San Luis Obispo, California. Report by GeoSolutions, LLC, dated June 26, 1998.

Rock Slope Protection Plan, 463 Lucerne Road, Cayucos, San Luis Obispo County, California. Grading Plan prepared by Westland Engineering Company, plans dated August 17, 1998.

Examination of Geologic Conditions, Residential Site Near Seacliff, Lot 2, Locarno Tract, Cayucos, San Luis Obispo County, California, report by Central Coast Laboratories, April 1, 1975, signed by Mr. John Wiese, CEG.

Westland Engineering Company, October 13, 1998, Emergency Permit for Brett Property, to Ms. LaJole, San Luis Obispo County Planning Department, regarding Brett property, signed by Mr. Terence Orton.

GeoSolutions, Inc., September 5, 2001, Review of Coastal Bluff Geologic Conditions, 463 Lucerne Road, Cayucos Area, San Luis Obispo County, California.



April 19, 2005
E0145

Mr. and Mrs. George Brett
463 Lucerne Road
Cayucos, California

SUBJECT: Geotechnical Analysis – Stone Revetment
RE: 463 Lucerne Road
Cayucos, California

REFERENCE: GeoSolutions, Inc., Boring Logs, Laboratory Test Results, and Site
Geologic Map and Cross Section of 463 Lucerne Road, Cayucos,
California.

Dear Mr. and Mrs. Brett:

This letter report presents the results of our geotechnical analysis of the stone revetment installed at the back of the residence of 463 Lucerne Road, in Cayucos, California. We understand that a large portion of the coastal bluff behind your residence failed into the ocean and that the revetment was constructed on an emergency basis to provide buttress support to protect the residence from additional bluff failure into the Pacific Ocean. In the following letter report, we describe the project, our purpose and scope of work, results of our slope stability analysis, conclusions and recommendations regarding slope stability, and the limitations of our services.

PROJECT DESCRIPTION

During intense winter storms of February 1998, a significant section of the backyard at 463 Lucerne Road lost stability and slipped into the Pacific Ocean. In an attempt to provide an emergency buttress and reduce the risk associated with the potential for additional sections of the backyard and residence from slipping into the ocean, a stone revetment was constructed at the back of the residence. The revetment consists of a stack of large, resistant rocks beginning at the wave-cut terrace below the backyard and continuing up to the level of the residence. The height of the revetment is approximately 31 feet and the face is sloped at approximately 1.5:1 (H:V).

GeoSolutions, Inc. (GeoSolutions) performed the subsurface investigation, laboratory testing, engineering geologic mapping and preparation of the engineering geologic cross section and Westland Engineering, Inc. performed the topographic surveying at the site. Our analysis and conclusions are based on the assumption that

the engineering mapping and engineering geologic cross section, borings, and laboratory testing by GeolSolutions are accurate and represent the site conditions.

PURPOSE AND SCOPE OF WORK

The purpose of our geotechnical analysis was to: 1) conduct a slope stability analysis of the failed bluff conditions to formulate conclusions regarding the necessity of the emergency revetment; and 2) conduct additional slope stability to assess the effectiveness of the revetment in buttressing the slope.

The specific scope of work performed for our investigation included the following tasks:

- 1) Site reconnaissance;
- 2) Review of geologic information and laboratory test results;
- 3) Slope stability analyses and geotechnical engineering analysis; and
- 4) Preparation of this summary letter report.

SLOPE STABILITY ANALYSIS

Computer Program

We used the computer program UTEXAS3 (by Shinoak Software of Austin, Texas) to perform the slope stability analysis. In all of the analyses performed, we utilized the Spencer's method of analysis as modified by Dr. Stephen Wright (1975). The Spencer's method program option was selected to determine the Factor of Safety (FS) of a slope using both circular and noncircular failure surfaces. The sliding mass is divided into slices, and all interslice side forces are parallel to each other. Spencer's method satisfies equilibrium conditions for overall moment, individual slice moment, and vertical and horizontal forces. The noncircular surfaces to be analyzed are determined by the program using a method similar to that developed by Duncan and Celestino (1981). In this procedure, the shear surface is systematically moved from an initial starting position, which is selected by the investigator, until a minimum Factor of Safety (FS) is calculated. The circular failure surfaces to be analyzed were initially selected in an attempt to evaluate results from the noncircular surfaces, and then iterations were conducted until the most critical circular failure surface was determined.

The FS is essentially equal to the resisting forces divided by the driving forces. Failure theoretically occurs when the FS equals unity, and the standard of practice for a stable slope (under static conditions) is considered to be a FS equal to or greater than

1.5. Under seismic conditions (using a pseudo static coefficient equal to 0.15) a slope is generally considered stable with a FS equal to or greater than 1.1.

Soil Parameters

Terrace Deposits – For the shear strength of the Terrace Deposits material we used GeoSolutions, Inc. laboratory test results from direct shear tests on an “undisturbed” sample from the small-diameter borings at a depth of 2.0 feet. These tests resulted in shear strength parameters of $C' = 979$ pounds-per-square-foot (psf), $\Phi = 9.5$ degrees, which we used for our analysis.

Franciscan Complex Graywacke Bedrock – For the shear strength of the Graywacke bedrock material we used laboratory test results from direct shear tests on an “undisturbed” sample from the small-diameter borings at a depth of 14.0 feet. These tests resulted in shear strength parameters of $C' = 144$ psf, $\Phi = 34$ degrees, which we also used for our analysis.

Stone Revetment – For the shear strength of the Revetment material, we assumed conservative shear strength parameters of $C' = 0$, $\Phi = 60$ degrees, which we used for our analysis.

Unit Weight – Unit weights were based on numerical averages of laboratory test data, and when no data was available, we used engineering judgment. We used the following values: 1) 133 pcf for Terrace Deposit material; 2) 134 pcf for Graywacke bedrock material; and 3) 125 pcf for the Stone Revetment.

Material Strength Parameters Used in Analysis

Material Type	Moist Unit Weight (pcf)	Effective Friction Angle (degrees)	Effective Cohesion (psf)
Terrace Deposit	133	9.5	979
Graywacke Bedrock	134	34	144
Stone Revetment	125	60	0

Method of Analysis – Loading Conditions

Slope stability analysis was performed on the GeoSolutions engineering geologic cross section that extends across the property. The geologic contacts and phreatic surface utilized in the slope stability program were based on the Geosolutions

engineering geologic cross section. The topography used was also based on the Geosolutions engineering geologic cross section.

The results of slope stability analysis are presented in the following table:

Slope Stability Results

Condition	Distance from Slope Face Failure Plane Daylights	Factor of Safety
Without Revetment - NonCircular	64 feet	1.5
	56 feet	1.1 w/ Seis. Coef 0.15
	40 feet	1.0
Without Revetment - Circular	64 feet	1.62
	64 feet	1.1 w/ Seis. Coef 0.15
	40 feet	1.1
With Revetment - Circular	55 feet	2.0
	25 feet	1.5
	25 feet	1.1 w/ Seis. Coef 0.15

Based on the above described parameters and our analysis, it appears that the stone revetment buttress results in reducing the upslope projection of hypothetical unstable slope conditions ($FS < 1.5$ static and $FS < 1.1$ w/ Seismic Coefficient = 0.15) by approximately 40 feet. This is calculated by comparing the limit of the stable slope condition based on the daylight location of a hypothetical failure surface without the buttress (64 feet away from the slope face) to the limit of a stable slope condition based on the same criteria with the buttress (~25 feet away from the slope face).

PRELIMINARY CONCLUSIONS AND RECOMMENDATIONS

Based on our analysis it appears that the revetment provides necessary buttressing support for protection of the residence and substantially reduces the potential for an additional landslide/bluff failure which would potentially adversely impact the residence.

We recommend that the California Coastal Commission approve the final Coastal Development Permit for the buttress.

In order to reduce the potential for surface water infiltration and improve the stability of the slope, we recommend that surface water around the residence be collected and discharged into the municipal storm drain system if possible. We also

recommend that the resident install an array of survey monuments which can be easily monitored on a regular basis in order to detect potential slope instability before it manifests as full-scale failure. In the event that movements/distress (cracking and/or separations of concrete flatwork) are observed, the homeowners should immediately notify GeoSolutions or CSA so that supplemental precautions can be implemented.

LIMITATIONS

Our services consist of professional opinions and recommendations made in accordance with generally accepted geotechnical engineering principles and practices. No warranty, expressed or implied, or merchantability of fitness, is made or intended in connection with our work, by the proposal for consulting or other services, or by the furnishing of oral or written reports or findings.

This report and analysis are based on the assumption that the GeoSolutions engineering geologic mapping, engineering geologic cross section, subsurface exploration and laboratory test results are accurate and represent site conditions. CSA assumes no responsibility for the accuracy of this portion of the work.

We trust that this provides you with the information that you need at this time. If you have any questions, or need additional information, please call.

Respectfully submitted,
COTTON, SHIRES AND ASSOCIATES, INC.

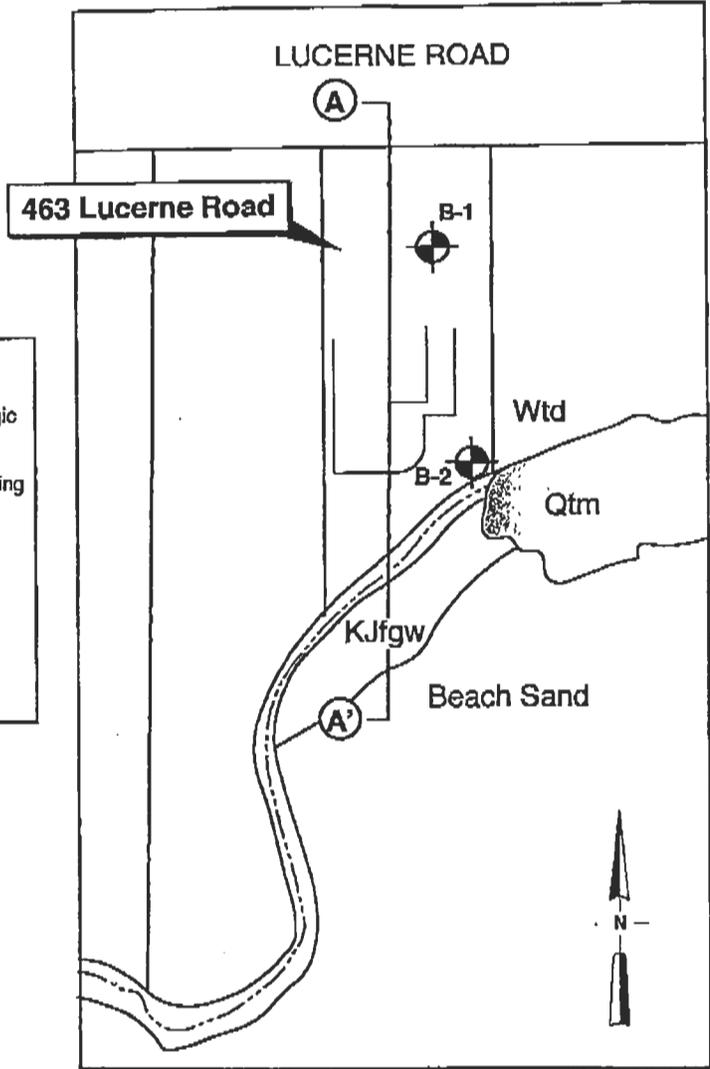
David T. Schrier
Senior Geotechnical Engineer
GE 2334

Patrick O. Shires
Principal Geotechnical Engineer
GE 770

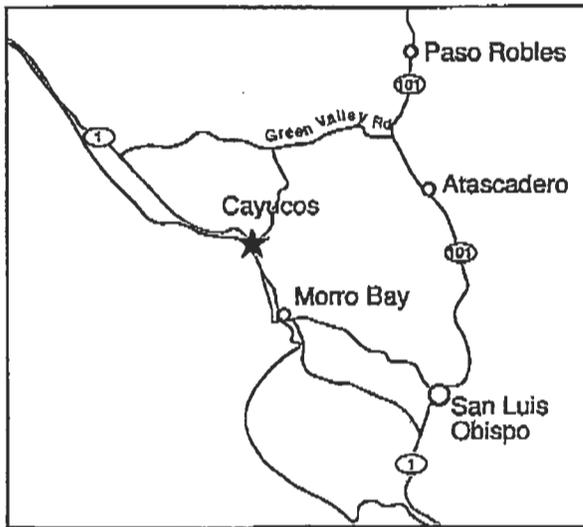
POS:DTS

Attachment: Figures 1 through 5

EXPLANATION	
	Geosolutions, Inc. Engineering Geologic Cross Section
	GeoSolutions, Inc. Small-diameter boring
	Beach Sand
	Weathered Terrace Deposits
	Terrace Deposits
	Franciscan Assemblage, Greywacke Sandstone

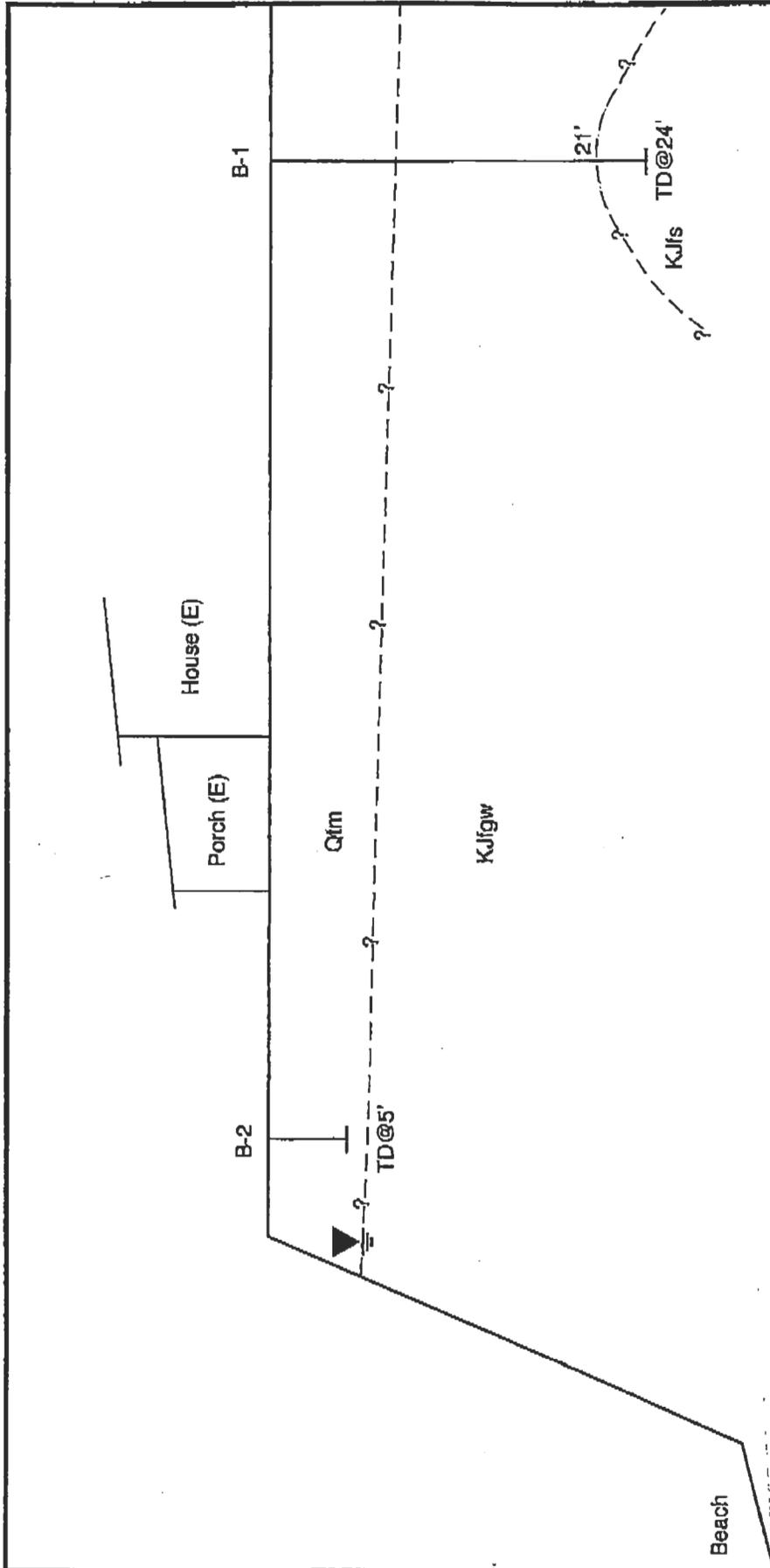


SITE PLAN



VICINITY MAP

 COTTON, SHIRES & ASSOCIATES, INC. CONSULTING ENGINEERS AND GEOLOGISTS		
SITE PLAN, VICINITY MAP AND BORING LOCATION MAP 463 LUCERNE ROAD, CAYUCOS, CALIFORNIA		
GEO/ENG. BY DTS	SCALE NTS	PROJECT NO. E0145
APPROVED BY POS	DATE APRIL 2005	FIGURE NO. 1



EXPLANATION	
MAP SYMBOLS	EARTH MATERIALS
Ground water elevation identified by GeoSolutions, Inc.	Terrace deposit material
Geologic contact, dashed where approximate, queried where unknown	Franciscan complex greywacke
Location of GeoSolutions, Inc. small-diameter exploratory boring	Franciscan complex serpentinite
B-1	
TD@24'	

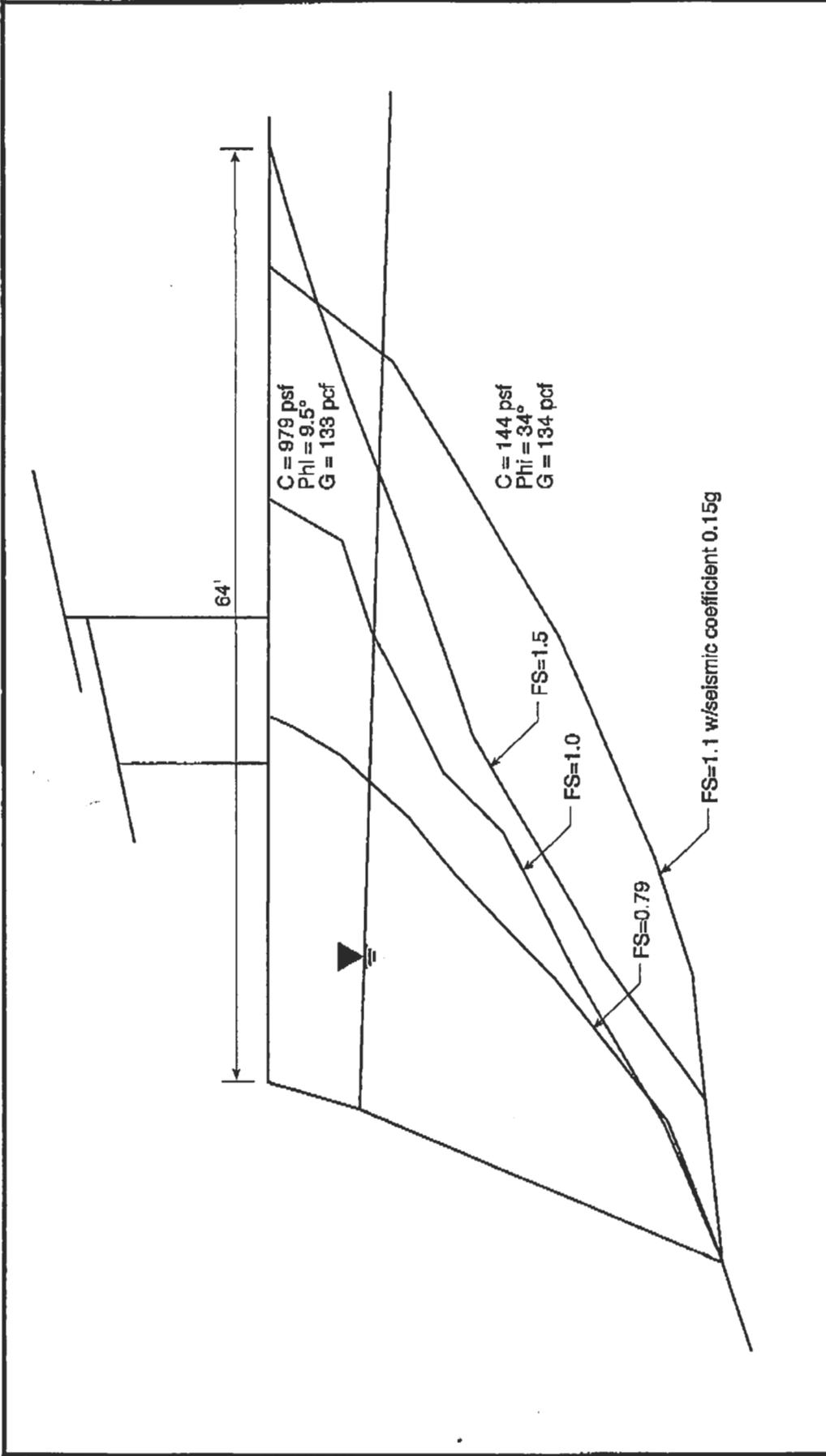
COTTON, SHIRES & ASSOCIATES, INC.
CONSULTING ENGINEERS AND GEOLOGISTS

GEOLOGIC CROSS SECTION

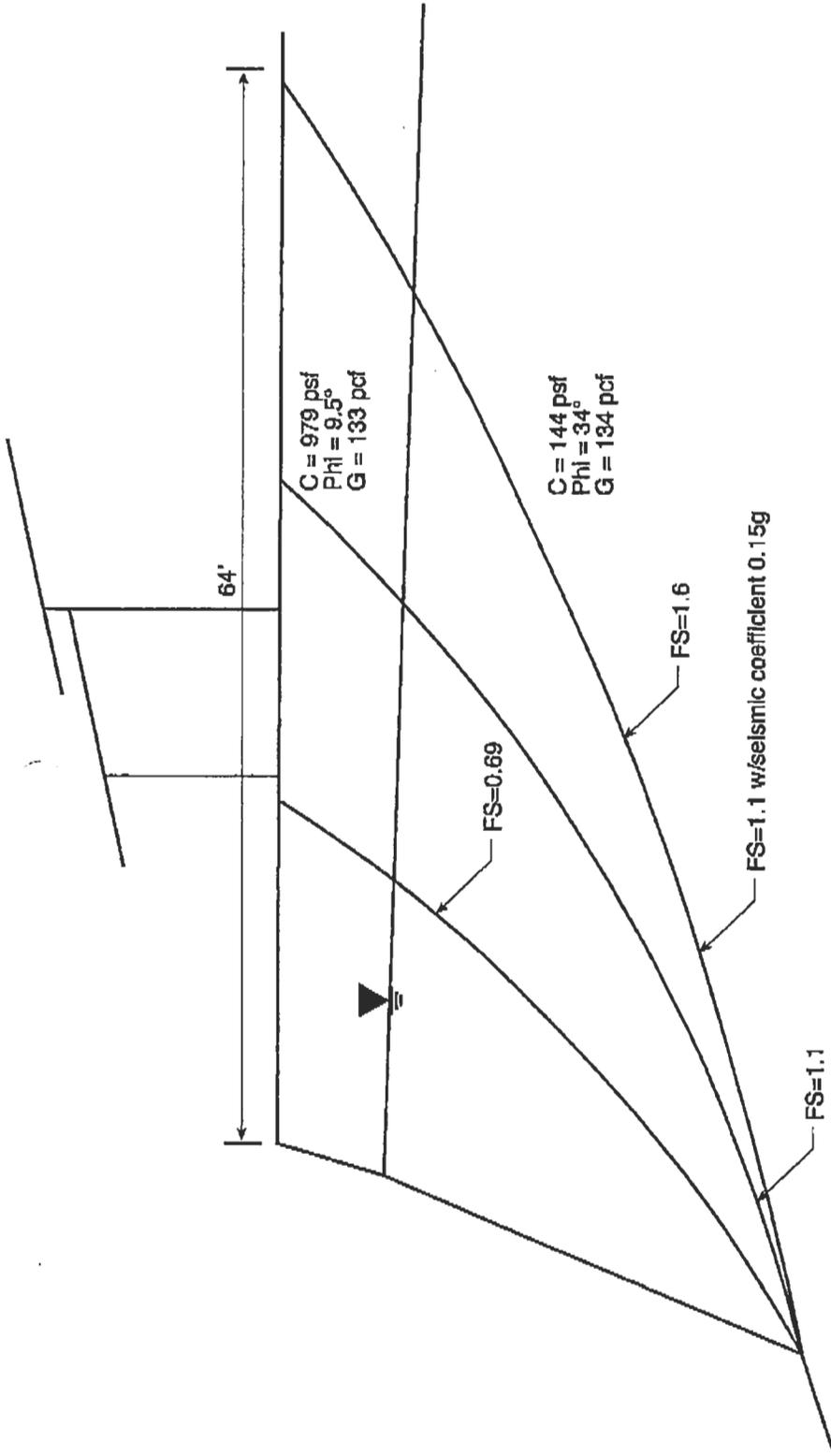
463 LUCERNE ROAD, CAYUCOS, CALIFORNIA

GEO/ENG. BY DTS SCALE 1"=10' PROJECT NO. ED145

APPROVED BY POS DATE APRIL 2005 FIGURE NO. 2



 COTTON, SHIRES & ASSOCIATES, INC. CONSULTING ENGINEERS AND GEOLOGISTS		
NON-CIRCULAR SLOPE STABILITY SECTION - WITHOUT REVEMENT		
463 LUCERNE ROAD, CAYUCOS, CALIFORNIA		
GEO/ENG. BY DTS	SCALE 1"=10'	PROJECT NO. E0145
APPROVED BY POS	DATE APRIL 2005	FIGURE NO. 3

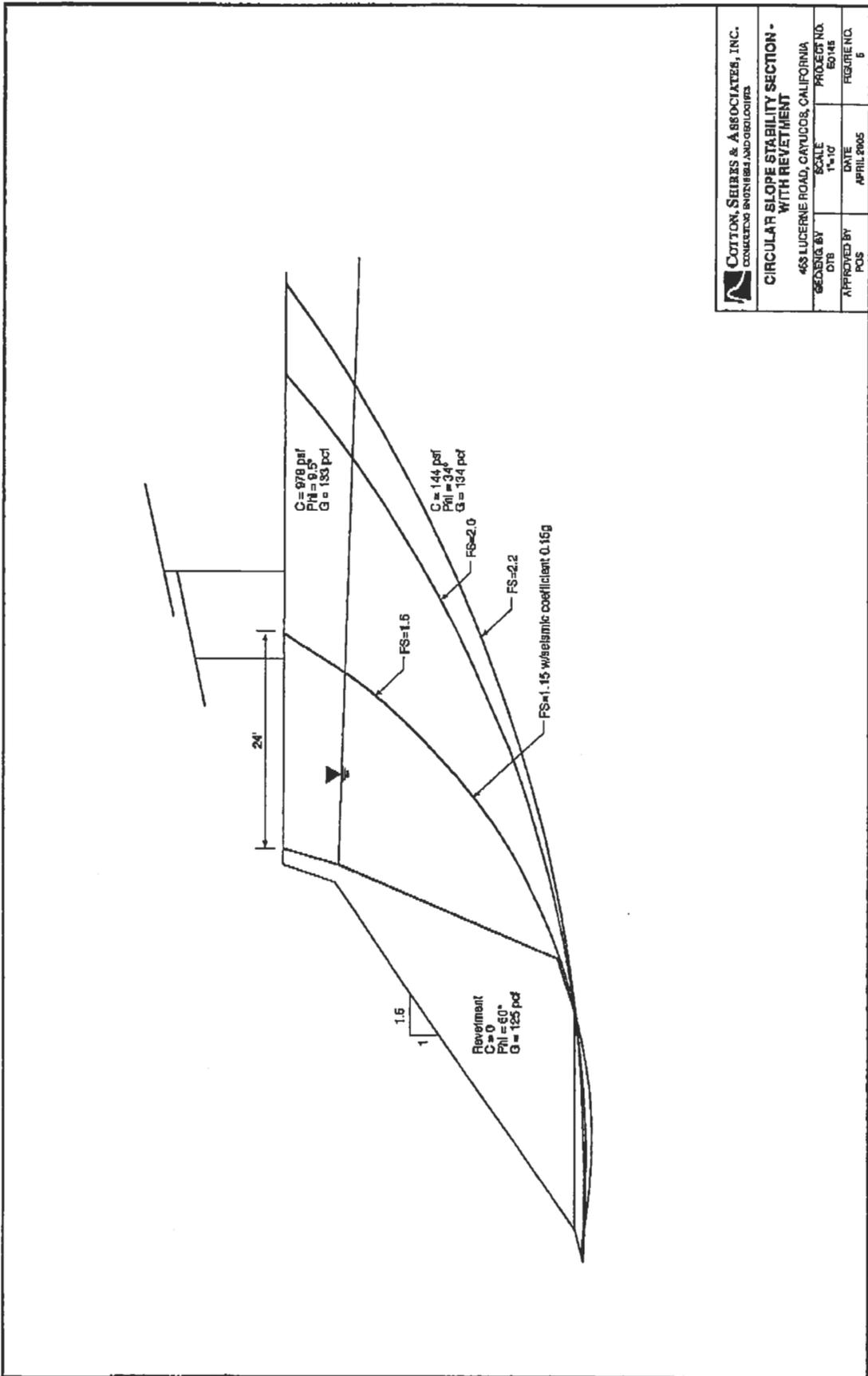


COTTON, SHIRES & ASSOCIATES, INC.
CONSULTING ENGINEERS AND GEOLOGISTS

**CIRCULAR SLOPE STABILITY SECTION -
WITHOUT REVETMENT**

463 LUCERNE ROAD, CAYUCOS, CALIFORNIA

GEO/ENG. BY DTS	SCALE 1"=10'	PROJECT NO. E0145
APPROVED BY POS	DATE APRIL 2005	FIGURE NO. 4



COTTON, SEIBERS & ASSOCIATES, INC. CONSULTING ENGINEERS AND ARCHITECTS	
CIRCULAR SLOPE STABILITY SECTION - WITH REVERTMENT	
468 LUCERNE ROAD, CAYUDOS, CALIFORNIA	PROJECT NO. E0148
DESIGNED BY DTB	SCALE 1" = 10'
APPROVED BY POS	DATE APRIL 2005
	FIGURE NO. B

BELSHER & BECKER

ATTORNEYS AT LAW
412 MARSH STREET
SAN JUAN OBISPO, CALIFORNIA 93401

JOHN W. BELSHER
HOWARD MARK BECKER
STEVEN P. ROBERTS
GREGORY A. CONNELL

TELEPHONE (805) 542-9900
FAX (805) 542-9949
E-MAIL slolaw@belsherandbecker.com

RECEIVED

MAR 10 2008

March 6, 2008

CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

VIA ON TRAC OVERNIGHT MAIL & FAX
831-427-4877

Jonathan Bishop
California Coastal Commission
Central Coast District Office
725 Front St., Suite 300
Santa Cruz, CA 95060

RE: Brett

Dear Jonathan:

Enclosed is the second alternatives analysis, completed by Westland Engineering. You should also have the following analysis previously requested by Coastal Staff:

1. Alternatives analysis by GeoSolutions, dated April 15, 2002;
2. Sand loss analysis by GeoSolutions, dated April 15, 2002;
3. Geotechnical Analysis for stone revetment by Cotton Shires, dated April 19, 2005;
4. Overview of Emergency Permit Issuance by Westland Engineering, dated October 31, 2001;
5. Review of Coastal Bluff Geologic Conditions (Bluff Retreat) by GeoSolutions, dated September 5, 2001 [referencing five Geologic reports and plans]; and
6. Letters from this office dated November 12, 2001.

I will be providing cross-sections and a topographic survey relating to the toe of bluff as soon as I get them from Westland Engineering, together with the remaining responses to your letter of August 10, 2006.

Sincerely,

BELSHER & BECKER

John W. Belsher

JWB/ab

cc: George Brett

P:\John's Files\Brett, George\Coastal Commission - Bishop 03 05 08.wpd

CCC Exhibit K
(page 28 of 36 pages)



RECEIVED

MAR 10 2008

CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

**Alternative Analysis
for the slope stabilization at
463 Lucerne Road, Cayucos, California**

December 14, 2007

This report is intended to review alternative methods that could be used to stabilize the slope adjacent to the structure located at 463 Lucerne Road in Cayucos, California. I am a Registered Civil Engineer practicing in the field as a General Civil Engineer. Our office normally prepares bluff stabilization plans based upon the recommendation of Soils Engineers and Engineering Geologists.

I was contacted regarding this slope failure in the yard adjacent to the structure which occurred in early 1998. I went to the site with Mr. Richard Pfof of GeoSolutions, Inc. to observe the damage from the storms. There were two items of concern. First, the slope had failed at the South West corner of the property. This failure was not an immediate threat to the house. The second item was a sink hole in the earth much closer to the house. This hole was pointed out by the owner, who took an 8 foot long 2 by 4 and stuck it into the hole without hitting bottom.

We went to the County to meet with staff to go over alternatives for the site. We were told that the County was working with the Coastal Commission on a policy for failures to slopes in Cayucos and Cambria. We went over some alternatives with staff and received their feedback (based upon the above mentioned policy discussions).

The following alternatives include those discussed with staff and additional measures suggested after this time. I have received input from Cotton, Shires & Associates as well as GeoSolutions, Inc.

Review of Alternatives

Subsurface Drainage Measures Only – These measures would involve installation of horizontal drains from the base of the bluff up under the lot. Construction of the drains would require working from the bottom of the bluff, which would include its own challenges to put the rigs in place. With the bluff in the condition it was in circa 1998, the outlet to these drains (if intended to flow by gravity) would likely be destroyed within a short period of time due to slope instability. While they are beneficial in reducing water pressures which are adverse to slope stability, they would only address one aspect of slope instability and would likely be destroyed by the combined other negative factors of slope instability such as weak geologic materials, steep slopes, seismic shaking, etc.

There may also be other problems associated with draining these geologic materials that might require many drains to be successful. Because of the variability of materials in the Franciscan Complex we would not know if we had collected the subsurface drainage that was specifically contributing to the adverse conditions.

Another concern is that the extent of the sink hole is not known and safety may be an issue both during and after construction. These drains would need to be maintained over time and it wouldn't be safe to do so unless they were installed in combination with a stabilization measure such as a wall or revetment.

The subsurface drains would have no area footprint on the beach.

This system would generate a smaller amount of sand from the erosion if the drains are working since there would not be as much loss of land. Upon failure of the drains, the generation of sand would return to normal.

Micropiles – Micropiles could be used to underpin the residential structure and the bluff allowed to continue to fail over time. However, micropiles do not have sufficient lateral load carrying capacity to resist earth slump or slope instability failures and would therefore likely be compromised in the event of the headward migration of the bluff instability, particularly under seismic loading. Again, Micropiles do not address the sink hole or extent of underground problems and may still leave a safety hazard in place. If excavations are made to determine the extent of the measures needed to stabilize the sink hole this would weaken the bank and would not stabilize it later.

The Micropiles would have no area footprint on the beach.

The anticipated life would be as low as 5 years with a high of 20 years, depending upon the geologic conditions at each pile location.

The long-term shore line retreat rate would remain the same as predicted in the Geology Assessment by GeoSolutions, Inc. (6 inch per year).

This system would generate the same amount of sand from the erosion.

Drilled Caissons – Drilled caissons (reinforced concrete underpins) would provide lateral load carrying capacity, but would simply delay the inevitable, the bluff retreat would eventually expose the ugly face of the caissons and eventually a seawall would have to be built to retain the sand and weak rock from eroding out between the caissons. Underpinning in this manner would probably not be structurally compatible with the existing slab-on-grade foundation system so the entire foundation would have to be replaced to be compatible and to function satisfactorily under seismic loading conditions. Drilled Caissons also does not address the safety issues from the sink hole.

The drilled caissons would have no area footprint on the beach.

The anticipated life would equal the life of the structure.

The long-term shore line retreat rate would remain the same as predicted in the Geology Assessment by GeoSolutions, Inc. (6 inch per year).

This system would generate the same amount of sand from the erosion.

Vertical Retaining Wall with Tiebacks – Because of the height of the bluff face here and weak materials involved, any vertical wall would likely require the use of tieback anchors to achieve adequate stability (the face is too high to be supported by a cantilever wall alone or vertical gravity wall alone without anchors). Such a wall would be very expensive (on the order of a million dollars) and have significant

visual impacts. It could be designed and built to achieve project objectives of slope stability and less beach access footprint though. However, in this area of the coast, there are very few vertical seawalls and more liberal use of stone revetments. County Staff, in their review felt that this would not be acceptable due to both the visual impacts and the fact that no other wall exist adjacent to the site. Consequently, the revetment would blend much more with the surroundings than the vertical wall.

Tie backs are an unknown item until they are drilled, particularly in the Franciscan Complex due to the differing strength of the material and the potential of encountering voids. Conventional construction practice would not use tiebacks for this area, specifically with the known void (sinkhole) condition.

The area footprint on the beach is estimated to be approximately 860 square feet based on a footing width of 15 feet.

The anticipated life with yearly maintenance would be 50 years (with no maintenance the span could be as low as 10 year, depending on wave and storm activity).

The long-term shore line retreat rate would reduce to a negligible amount per year if the wall is maintained.

This system would not generate any sand from erosion.

Soil Nails and Shotcrete Facing – Soil nails could be drilled in the bluff and then the face tied into the nails with shotcrete facing. The cost of this alternative would rival that of the vertical retaining wall with tiebacks and it would be a dangerous proposition to install without laying the slope back first. Soil nails would need to be installed at approximate intervals of 5 feet on centers both ways and shotcrete would have to be keyed into bedrock at the base sufficient depth to avoid scour. The shotcrete thickness and reinforcing would have to be designed to resist repeated wave impact. Maintenance would be high. The aesthetics would be problematic in matching the existing rock slopes and stone revetments already in place.

Conventional construction practice would not use soil nails for this area for the same reason tie backs are not favored.

The area footprint on the beach is estimated to be approximately 290 square feet based on a footing width of 5 feet.

The anticipated life with maintenance would be 25 to 50 years.

The long-term shore line retreat rate would possibly reduce to a negligible amount per year with maintenance.

This system would generate approximately 5% of sand from the erosion.

Gravity Wall – A stone revetment is essentially a type of gravity wall. Other types include gabion walls (impractical for beach environments), massive concrete walls, etc. The Stone Revetment Wall (Preferred Project Alternative) is a gravity wall that can be used to address high bluff slopes such as this one. Aesthetically, it blends well with the existing upcoast and downcoast features. Stones placed in the beach access area can be removed if they are outboard of the revetment keyway (which is necessary to maintain long term stability). The revetment will require monitoring and maintenance over time. Stones that become dislodged will need to be replaced and the beach access area will need to be cleaned of stones

periodically, especially following intense storm and/or wave events.

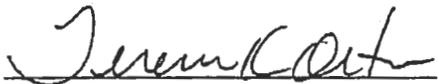
This system would generate approximately 5% of sand from the erosion.

Based on a comparison of the original topographic survey and the as constructed topographic map, the area footprint on the beach is calculated to be approximately 230 square feet.

The anticipated life with maintenance would be 75 to 100 years.

The long-term shore line retreat rate would possibly reduce to 1 inch per year.

This system would generate approximately 30% of sand from the erosion. Granite will break down to sand not clay, which will actually generate more sand than some of the clayey geologic units in the area.



Terence K. Orton
PE 21,807 (Expires 9-30-09)

Attachments GeoSolutions Alternative Analysis dated April 15, 2002



BELSHER & BECKER

ATTORNEYS AT LAW
412 MARSH STREET
SAN LUIS OBISPO, CALIFORNIA 93401

JOHN W. BELSHER
HOWARD MARK BECKER
STEVEN P. ROBERTS
GREGORY A. CONNELL

TELEPHONE (805) 542-9900
FAX (805) 542-9949
E-MAIL slolaw@belsherandbecker.com

March 17, 2008

VIA OVERNIGHT MAIL & FAX
831-427-4877

California Coastal Commission
Central Coast District Office
725 Front St., Suite 300
Santa Cruz, CA 95060

RECEIVED

MAR 24 2008

CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

RE: LaVon Brett revetment; Appeal A-3-SLO-01-040

Dear Coastal Commissioners:

The Emergency

In 1998, the Bretts found a large sink-hole in their bluff-top backyard. Civil Engineer Terry Orton and geologist Richard Pfof observed Mr. Brett (now deceased) drop a long 2x4 down the hole, indicating a serious failure in the bluff-top integrity less than fifteen feet from the Brett's home. See Orton letter of October 31, 2001. County staff visited the site and confirmed the dangerous condition.

Photos dated February of 1998 show large chunks of the top of the bluff washed away near the sink hole. Additional photos show cracks in the block fence shared with the neighbor to the east, evidencing sloughing of the bluff toward the ocean.

The Emergency Permit

In response to this dangerous condition, the Bretts applied for an emergency permit through the County of San Luis Obispo. The Bretts submitted an application to the County, based upon:

- A. Geologic Assessment and letter of support for revetment (by Geosolutions)
- B. Rock Slope Protection Plan and Grading Plan (by Westland Engineering)

According to Geosolutions, alternatives were considered and the placement of native rock into the bluff chosen as the least invasive, "both asthetically and physically."

The emergency permit was granted and the revetment constructed, at a cost of \$65,000, including permits and engineering/geology reports. A minor use permit/coastal development permit was then obtained.

The Coastal Development Permit Appeal

The coastal development permit was appealed by the Coastal Commission, seeking further analysis of alternatives and justification of the emergency.

CCC Exhibit K
(page 33 of 36 pages)

Additional Geotechnical Support for Permits

In response to discussions with Coastal staff following receipt of the appeal, the Bretts then had prepared and submitted to Coastal staff, among other items:

C. Review of Coastal Bluff Geologic Conditions (by Geosolutions), dated September 5, 2001, including loss of sand generation report (negligible) and threat to existing structure (**citing an "immediate concern" which "could jeopardize the foundation of the house"**)

D. An Alternatives Analysis (by Geosolutions), dated April 15, 2002. **"The rock revetment offered the most effective manner to protect and support at the residence while maintaining aesthetic appearance similar to the surrounding coastline within a cost effective framework."**

E. Letter from Westland Engineering's Terry Orton describing sink hole discovery, dated October 31, 2001.

Following additional staff consultation with newly hired Coastal Commission geologist Mark Johnson, the following additional studies and documents were prepared and submitted to Coastal staff:

F. Core sampling of the bluff providing additional soils analysis for geotechnical evaluation (by Geosolutions), dated Nov. 16, 2004.

G. Geotechnical analysis and peer review of geologic reports (by Cotton Shires), dated April 19, 2005, recommending Coastal approval and concluding **"the revetment provides necessary buttressing support for protection of the residence and substantially reduces the potentiality for an additional landslide/bluff failure which would potentially adversely impact the residence."**

I. Second Alternatives Analysis (by Westland Engineering), dated December 14, 2007.

J. Cross-sections of bluff and revetment (by Westland Engineering), dated March 17, 2008 and public access analysis (by Belsher & Becker), dated March 17, 2008.

Possible Impact on Public Access

Coastal staff also requested analysis of impacts on public access along the base of the bluff, particularly in light of a lateral access "to the toe of the bluff" granted by the Bretts in 1980 and accepted by the County of SLO in 1996, recorded by the Coastal Commission in 1997. The revetment was installed by digging in revetment keystones at the "toe" or base of the bluff, according to the geologist who supervised the construction of the revetment. Since "toe of the bluff" is not a defined term, the topographic analysis submitted concurrently under separate cover is unclear as to whether the current revetment actually encroaches into the public access easement. Comparing historical photos of the "toe of the bluff" to the present day, there does not appear to be any encroachment into the public easement. Of course, the public can, and does, use the revetment as a means of escape from high tides and wave action. This is without objection from the property owner.

In sum, Mrs. Brett and her geologists and engineers have made every effort to address each issue raised on this appeal. The analyses show the revetment was and

remains "necessary" to the protection of the Brett home and that there are no reasonable alternatives to the native stone protection placed on the bluff in 1998. In ten years' time we have seen no ill-effects of this protective measure, but the bluff collapse has been halted and members of the public continue to access along the water-inundated shore-line, using the keystones of the revetment for travel where necessary. Mrs. Brett has given a public easement, does not object to continued use of the revetment by the public where necessary due to high tides and wave action and has otherwise followed all the recommendations and requirement of the County and the Commission. She respectfully requests denial of the appeal, based on what reasonable conditions the Commission may wish to impose.

Sincerely,

BELSHER & BECKER



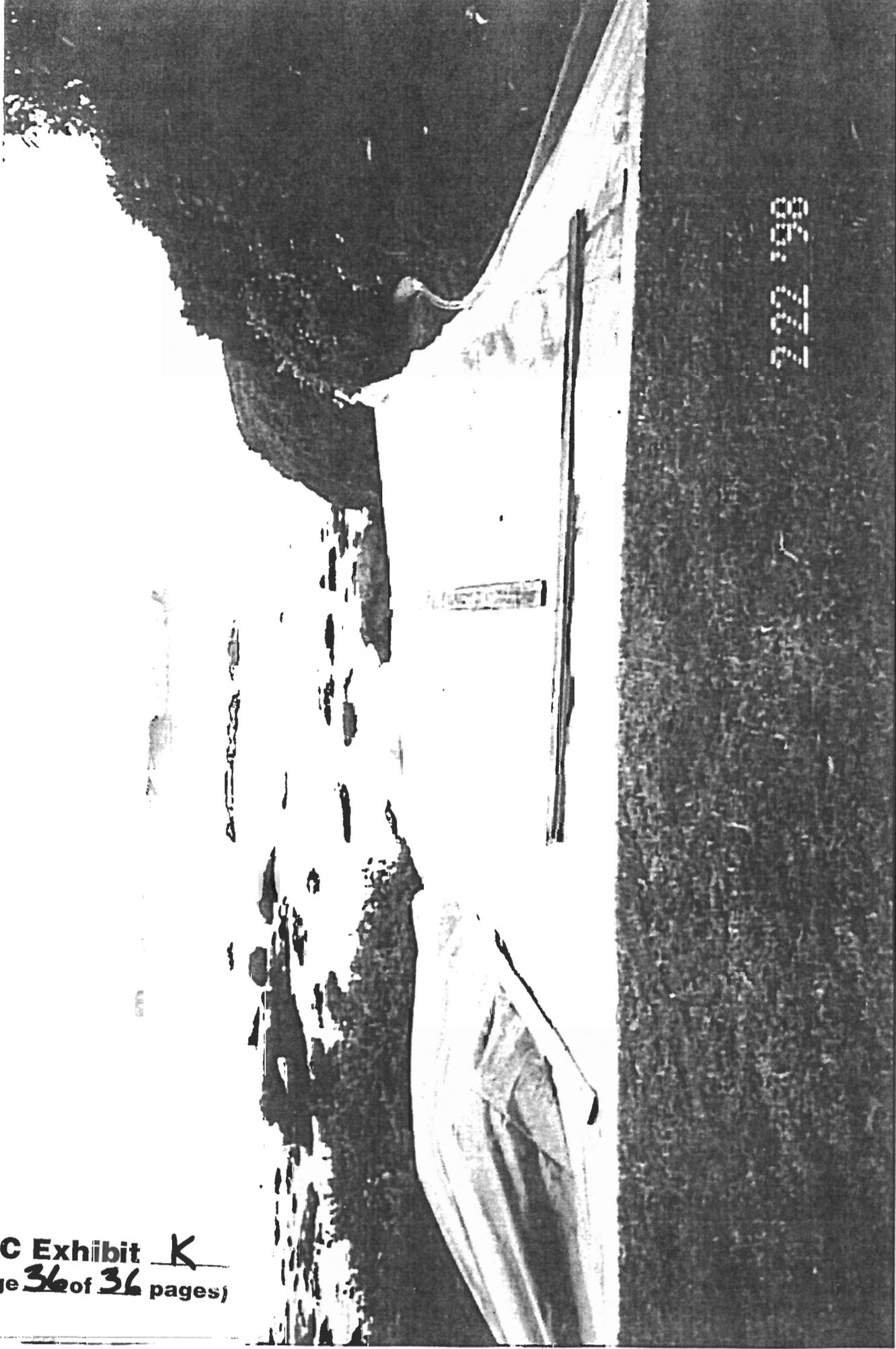
John W. Belsher

JWB/ab

cc: LaVon Brett

P:\John's Files\Brett, George\Coastal Commission - Bishop 03 17 08.wpd

1998 Blowout at Brett Bluff



272:98

CCC Exhibit K
(page 36 of 36 pages)