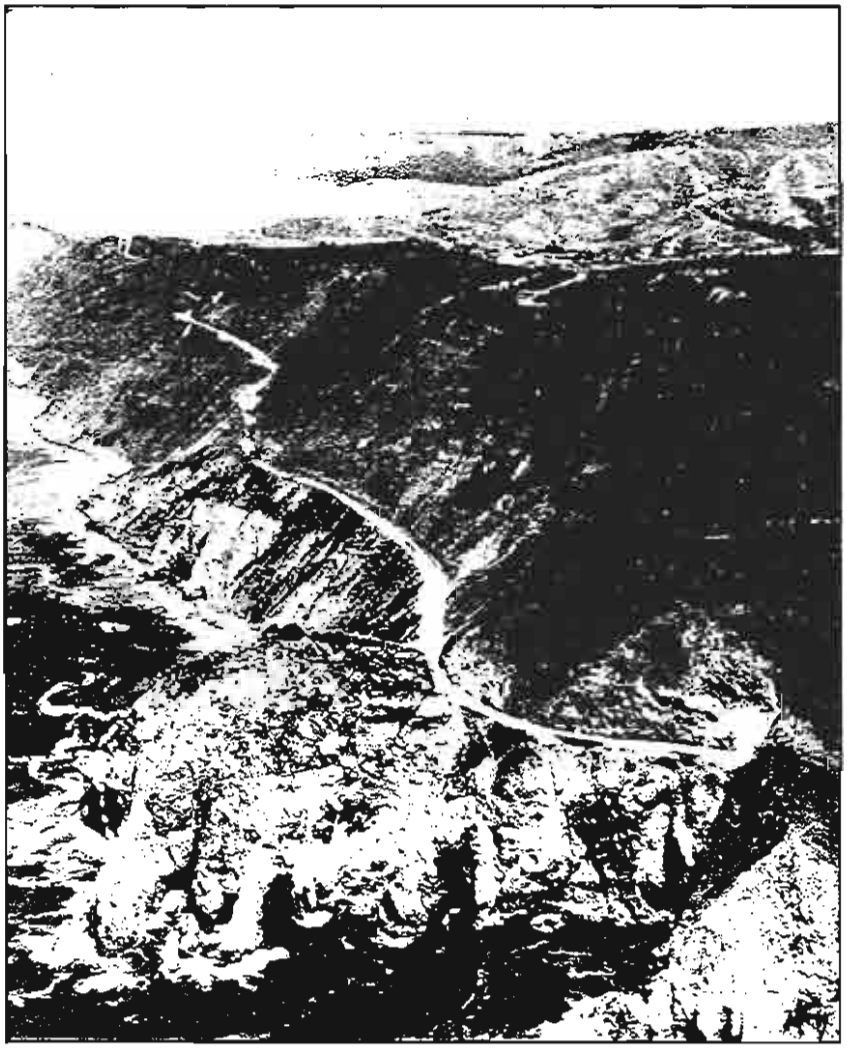
Devil's Slide
Final Second Supplement to the 1986
Environmental Impact Statement/Environmental Impact Report



Route 1 from the Half Moon Bay Airport to Linda Mar Boulevard, Pacifica, San Mateo County, California

VOLUME 2
Comments and Responses

Federal Highway Administration

California Department of Transportation

MAY 2002

Foreword

This Volume II of the two-volume Final Second Supplemental Environmental Impact Statement/Environmental Impact Report (Final SSEIS/EIR) for the Devil's Slide Improvement Project contains the comments received on the 1999 Draft Second Supplemental Environmental Impact Statement/Environmental Impact Report and the responses to those comments.

Each comment letter is typically followed by the responses to that comment letter. Verbal comments submitted at the public hearing are in the Public Hearing Transcript of Proceedings and the responses to those comments are on the following pages. The comments provided on comment sheets (from the public hearing) are also included and the responses to those comments are on the following pages. The last section includes the letters of support.

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ABBREVIATIONS AND ACRONYMS

ABAG	Association of Bay Area Governments
ACOE	U.S. Army Corps of Engineers
APE	Area of Potential Effect
ARB	California Air Resources Board
BA	Biological Assessment
BART	Bay Area Rapid Transit
BAAQMD	Bay Area Air Quality Management District
BMP	Best Management Practices
BO	Biological Opinion
CAAA	Clean Air Act Amendments
CAP	Clean Air Plan
Caltrans	California Department of Transportation
CCAA	California Clean Air Act
CCA	California Coastal Act
CCC	California Coastal Commission
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CMSA	Consolidated Metropolitan Statistical Area
CNPS	California Native Plant Society
CO	Carbon Monoxide
CRF	California Red-legged Frog
CZMA	Coastal Zone Management Act
CZMP	Coastal Zone Management Program
DEIS/R	Draft Environmental Impact Statement/Report
DOT	Department of Transportation
DPR	California Department of Parks and Recreation
DTSC	Department of Toxic Substance Control
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
ESC	Engineering Service Center
FEIS/R	Final Environmental Impact Statement/Report
FHWA	Federal Highway Administration
ha	Hectare
HASR	Historic Architecture Survey Report
HC	Hydrocarbons
HPSR	Historic Properties Survey Report

ABBREVIATIONS AND ACRONYMS (continued)

ISA	Initial Site Assessment
KP	Kilometer Post
LCP	Local Coastal Program
LOS	Level of Service
m	meter
MTC	Metropolitan Transportation Commission
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOI	Notice of Intent
NPDES	National Pollution Discharge Elimination System
NO_2	Nitrogen Dioxide
O_3	Ozone
PCM	Permanent Control Measures
PM	Post Mile
PM_{10}	Small Particulates
ppb	parts per billion
ppm	parts per million
ROD	Record of Decision
RTP	Regional Transportation Plan
RTIP	Regional Transportation Improvement Program
RWQCB	Regional Water Quality Control Board
SamTrans	San Mateo County Transit
SSEIS/R	Second Supplemental Environmental ImpactStatement/Report
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SSEIS	Second Supplemental Environmental Impact Statement
STIP	State Transportation Improvement Program
SWPPP	Storm Water Pollution Prevention Plan
TIP	Transportation Improvement Program
TCM	Transportation Control Measures
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

Index of Comments Received

Date	Federal Agency
5/5/99	US Department of Commerce-NOAA National Marine Fisheries Service
5/10/99	US Environmental Protection Agency
5/10/99	US Department of Agriculture-Natural Resources Conservation Service
5/11/99	US Department of the Interior-Geological Survey
5/27/99	US Department of the Interior-Office of the Secretary, San Francisco

Date	State/Regional/Local Agencies
4/5/99	Metropolitan Transportation Commission
4/9/99	City-County Association of Governments of San Mateo County
5/10/99	City of Pacifica-Planning Department
5/10/99	California State Coastal Conservancy
5/11/99	County of San Mateo-Planning and Building Division
5/12/99	California Coastal Commission
5/14/99	State of California, Governor's Office of Planning and Research

Date	Organizations
4/21/99	Rural Coast Open Space Trust
4/29/99	Coastal Family Alliance
5/1/99	Save Our Coast-Citizen's Alliance for the Tunnel Solution
5/5/99	Pacifica Land Trust
5/7/99	California Association of Bicycling Organizations
5/10/99	Sierra Club-Loma Prieta Chapter
5/10/99	Half Moon Bay Coastside Chamber of commerce
5/11/99	Surfrider Foundation
5/11/99	Mid-Peninsula Bicycle Coalition
5/12/99	Committee for Green Foothills

Date	Individuals
4/14/99	Jim and Joan Owens
4/22/99	Deane Gough
4/27/99	Barbara VanderWerf
5/1/99	Jan McClure
5/1/99	J. Plock
5/7/99	Chris Church
5/9/99	Mary Clayton
5/9/99	Joe Barnwell
5/10/99	Roger Goodrich
5/10/99	John Hovland
5/11/99	Mitch Reid
5/11/99	S.Gordon Marsh
5/11/99	Dana Denman-Shamrock Ranch
5/12/99	Scott Boyd
5/12/99	Victor Abadie
5/12/99	Susan Schectman
5/12/99	April Vargas
4/15/99	Doris Whitt
4/21/99	Peter Von Bleicher
4/26/99	Peggy DaSilva / Dan Hudam

Index of Comments Received (Continued)

Date	Verbal comments at public hearing
4/27/99	Nancy Maule
4/27/99	Sandra Hirzel
4/27/99	Rod Roderick
4/27/99	William Petty
4/27/99	Andrea Brown
4/27/99	Carla Haynie
4/27/99	Leonard Woren
4/27/99	Mildred Owen
4/27/99	Marcia Doty
4/27/99	Scott Butcher

Date	Written comments at public hearing
4/27/99	David Spiselman
4/27/99	Michael Hall
4/27/99	Marcia Doty
4/27/99	Jeff Olson
4/27/99	Jan McFarland Brown
4/27/99	Christine Powell
4/27/99	John Hunt
4/27/99	Dennis Lear
4/27/99	Ric Lohman
4/27/99	Rod Roderick
4/27/99	Grant Weiss

Support / Preference for Tunnel Alternative Variation A

Letters/Cards/Notes		SOC/CATS Postcards	
4/1/99	Evelyn Lundstrom	5/4/99	Joan Fernandez
4/21/99	John Mayburn	5/10/99	Len Silva
4/21/99	Susan Shankle	5/3/99	Cynthia Koept
4/21/99	Ruth O'Shea	5/1/99	Oliver Hix & Allen Lillie
4/21/99	Ronald Emerson	5/5/99	Allison Li
4/22/99	Diana Chapman	5/8/99	Dorothy Baughman
4/22/99	Joanne Bruggemann	5/3/99	Sally Benson
4/22/99	Frank Leone	5/8/99	Iben & Nadia Rodriguez
4/22/99	Merry Ann Moore	5/3/99	Susan Cresta
4/23/99	David Dorin	5/5/99	Mary Oldham
4/23/99	Marion Colton	5/3/99	Jackie Brookman
4/23/99	Cynthia Stern	5/3/99	A. Etheright
4/24/99	Robert Brodey	5/3/99	Mary Heidrich
4/24/99	Eleanor Anderson	5/3/99	Neal Wehtze
4/24/99	Genny Smith	5/3/99	Sally Noma
4/24/99	Donald Blackmarr	5/3/99	Kristann and Zachary Mann
4/24/99	Mary Fought	5/3/99	Eve Emery
4/24/99	Martha Smith	5/3/99	Walter Coggenhall
4/24/99	Denise Gambucci	5/3/99	Suzanne Stephanik
4/24/99	Sandra Goodwin	5/3/99	Jim Reed
4/24/99	Mr. & Mrs. Harry Warren	5/3/99	Scott Owen
4/25/99	Mary Davey	5/3/99	Kathryn Slater-Carter

Index of Comments Received (Continued)

Letters /Cards/Notes

4/25/99	Marylin Dodd
4/25/99	Billie Levy
4/25/99	Mr. & Mrs. Richard Ball
4/25/99	Diana Morgan
4/25/99	Sheila Cockshott
4/26/99	Joan Stiff
4/26/99	Malcolm Mitchell
4/27/99	Walter & Gretchen Smithey
4/27/99	John Wurr / Elizabeth Leonie Simpson
4/27/99	Valerie Hoffman / Jeff Landry
4/28/99	Jeanna Morris
4/28/99	Mr. & Mrs. J.C. Royce
4/28/99	J. Bell
4/29/99	Bruce and Janice Knechtel
4/30/99	Barbara Pope
5/1/99	Werner Rodiger
5/1/99	Mrs. James Gerstley
5/1/99	Tim Beatty
5/2/99	Allen Brown
5/3/99	Ellen Frank & Joseph Mayer
5/3/99	Maeva & Joe Neale
5/3/99	Gil and Nancy Workman
5/4/99	Dr. & Mrs. Irving Witt
5/4/99	Barbara Jean Richards
5/4/99	Brielle Johnck
5/5/99	Ritva, Steve, & Marc LeMieux
5/5/99	Christina Holloway
5/5/99	K. Christie Vogel
5/5/99	Anne & Putney Westerfield
5/10/99	Laurence Dawson
5/11/99	Maureen Brooks
5/11/99	Helen Sweyer
5/11/99	Marian & Rodney Fraser
5/12/99	Jeff Olson
5/12/99	John Langbein

SOC/CATS Postcards

5/3/99	Richard & Angelique Schuppek
5/3/99	B. Michels
5/3/99	Theresa M. Keyes
5/3/99	David Levingston
5/3/99	Beverly Garrity
5/3/99	Martha Lautter
5/3/99	Marilyn Townsend
5/3/99	Mike and Christie Fitzgerald
5/3/99	Debbie and Rich Briscoe
5/3/99	Elizabeth McLaughan
5/3/99	Al Collins
5/3/99	Phil Vandervolt & Heather Smith
5/3/99	(two unsigned postcards)
5/3/99	Jacquelyn Galloway
5/3/99	Leah Champion
5/3/99	Laura Lucero
5/3/99	M. DeMay
5/3/99	Bob Frediani
5/3/99	John Schwanke
5/3/99	Alan Harris
5/3/99	Katrina
5/3/99	Sandy Osher
5/3/99	Diana Purucker
5/3/99	Eli Hall
5/3/99	Liz McBride / Beth James
5/3/99	Lillian Holsworth
5/3/99	Jason Hatch
5/3/99	Robert Gelman
5/3/99	Christine Georgeades
5/3/99	Cory
5/3/99	Kathy White
5/3/99	Fay Rudee
5/7/99	Bob Wheeler
5/10/99	Marie Alaime
5/10/99	Steve Naughton
5/6/99	Kandrick Gil

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
777 Sonoma Avenue, Rm 325
Santa Rosa, California 95404-6528

May 5, 1999 F/SWR3:JEA

Mr. Harry Yahata
District Director
California State Department of Transportation
P.O. Box 23660
Oakland, California 94623-0660

Dear Mr. Yahata:

Thank you for the opportunity to comment on the Draft Natural Environment Study for the Devil's Slide Tunnel Bypass Project, San Mateo County, California. This draft study addresses the potential impacts that may occur as a result of a proposed bypass of the unstable Devil's Slide area on State Route 1 in San Mateo, California. Of the two alternatives currently under consideration, the Tunnel alternative and the Martini Creek Alignment alternative, the National Marine Fisheries Service (NMFS) prefers the Tunnel alternative. 1

This proposed project is within the boundaries of the Central California Coast steelhead Evolutionarily Significant Unit (ESU) which is listed as threatened under the Endangered Species Act of 1973 (ESA). In accordance with section 7(a)(2) of the ESA, any federal agency shall insure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. In reviewing the draft proposal for this project, I determined that the preferred Tunnel alternative will not effect the listed steelhead, whereas the Martini Creek Alignment alternative may adversely affect listed species. If the Martini Creek Alignment alternative is chosen, consultation with NMFS will be necessary to minimize the adverse effects to the threatened steelhead and proposed critical habitat. Also, if the State Route 1 bridge across San Pedro Creek is replaced as part of this proposed project, the Federal Highway Administration (FHWA) will need to consult with NMFS. 2 3

If you have any questions concerning the above comments please contact Ms. Joyce Ambrosius at (707) 575-6064.

Sincerely,

Patrick J. Rutten
Northern California Supervisor
Protected Resources Division

cc: J. Lecky - NMFS
S. Shadle - Caltrans

US Department of Commerce-NOAA-National Marine Fisheries Service

1. Your preference for the tunnel alternative, as well as your determination that the preferred tunnel alternative would not affect the listed steelhead is noted.

2. Your comment that the Martini Creek alignment may adversely affect listed species, and if chosen, would require consultation with NMFS, is noted.

3. The State Route 1 bridge replacement over San Pedro Creek is not included as part of the tunnel alternative.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Robert F. Tally
Team Leader-Program Delivery Team North
Federal Highway Administration
980 9th Street - Suite 400
Sacramento, CA 95814-2724

Dear Mr. Tally:

The Environmental Protection Agency (EPA) has reviewed the **Draft Supplemental Environmental Impact Statement** (DSEIS) for **Devil's Slide**, San Mateo, California. We are submitting the following comments in accordance with our responsibilities under the National Environmental Policy Act (NEPA), Council on Environmental Quality regulations implementing NEPA (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

The first DEIS was released in 1984, when we expressed concerns with the document and the project. These concerns were based upon potential impacts to water and air quality and aquatic/wetland resources. The FEIS was presented in 1986. However, in response to a lawsuit, a Draft Supplemental EIS dealing solely with project generated noise was released in 1995. In our comments on that DSEIS, we did not raise objections to the project's noise impacts but, we commented that a full reevaluation of the project was warranted, since the last complete environmental impact analysis for the project dated back to the 1986 FEIS. Within the context of a reevaluation we suggested that FHWA reexamine air quality, water quality, and wetlands impacts, and that FHWA consider implementing the NEPA/404 Integration Memorandum of Understanding, for the remaining steps of the project.

In this DSEIS, the project sponsors propose alternative alignments, which would provide a safe, dependable and stable highway between Half Moon Bay and Linda Mar Boulevard in Pacifica, CA, bypassing the geologically unstable portion of Route 1 at Devil's Slide. This DSEIS is as a reevaluation of the Martini Creek alignment (the previous preferred alignment), and the full evaluation of a tunnel alternative, proposed to be double bore tunnel, with one lane in each direction. The DSEIS discusses both alternatives and a no action alternative. The Tunnel alternative has two variations, one with a bike lane through the tunnel and one with the bike lane outside the tunnel. While the Tunnel alternative is identified as the new preferred alternative, the DSEIS did not completely identify which variation is preferred. The FEIS should finalize that discussion. 1

We have rated the DSEIS as LO, Lack of Objections, (See enclosed "Summary of Rating Definitions and Follow-up Action"). We commend FHWA and Caltrans for incorporating avoidance and minimization techniques and design into the proposed alternatives, and for considering the public's request for a bike lane in the corridor. We encourage Caltrans and FHWA to continue in their efforts to provide alternatives to single occupancy vehicles. 2

We appreciate the opportunity to review and provide comments on this DSEIS. Please send two copies of the Final Supplemental EIS to this office at the same time it is officially filed with our Washington, DC office. If you have any questions, please feel free to contact me at (415) 744-1584, or have your staff contact David J. Carlson of my staff at (415) 744-1577.

Sincerely,

David Farrel, Chief
Office of Federal Activities

cc: Robert Gross, Chief, Planning-South, Caltrans Dist. 4

US Environmental Protection Agency

1. The tunnel alternative (variation "A") has been identified as the preferred alternative in this Final SSEIS/EIR.

2. We appreciate your comments and your lack of objections (LO) rating.

USDA United States Department of Agriculture
Natural Resources Service
5161 Soquel Drive, Suite F
Soquel, California 95073
831-475-1967 fx:475-3215

May 10, 1999

Robert Gross
Department of Transportation
Box 23660
Oakland CA 94623-0660

Dear Mr. Gross:

Thank you for the opportunity to review and comment on the attached Devil's Slide Second Supplement to th 1986 Final Environmental Impact Statement/Environmental Impact Report. Unfortunately, due to our heavy workload we do not have adequate time to complete a thorough review of the entire DRAFT.

We reviewed the areas that relate to natural resources conservaton (Environmental Setting, Farmlands, Natural Environment and Irreversible and Irretrievable Commitments of Resources) and only have one specific suggestion. Vegetative stabilization was mentioned as a possible best management practice to be used. We suggest that surface soil be stockpiled during construction to provide a suitable growth medium for any vegetative measures. 1

The Natural Resources Conservation Service is a non-regulatory federal agency under the United States Department of Agriculture. Technical assistance is made available, free of charge, through a mutual agreement with the Santa Cruz County Resource Conservation District (RCD).

If you have any questions please feel free to contact me at 475-1967. Once again, I apologize that we are unable to review the attached plans in more detail. I do appreciate your consideration and including our agency in the process.

Sincerely,

USDA NATURAL RESOURCES
CONSERVATION SERVICE

Richard Casale, CPESC #3
District Conservationist

Encl.

cc: Santa Cruz County RCD, Soquel

devilsld.let

USDA is an Equal Opportunity Employer and provides services without discrimination.

US Department of Agriculture-Natural Resources Conservation Service

1. The stockpiling of topsoil to provide suitable growth medium for vegetative stabilization will be included as part of the project's mitigation measures.

United States Department of the Interior
GEOLOGICAL SURVEY
345 Middlefield Road MS-977
Menlo Park, CA 94025-3591
Phone (415) 329-5641; FAX (415) 329-5163
email: klajoie@usgs.gov

May 11, 1999

CALTRANS
PO Box 23660
Oakland, CA
94623-4444

Subject:
Review Comments
CALTRANS/Federal Highway Administration
Draft EIR/EIS for Proposed Highway 1
Tunnel at Devils Slide, San Mateo County, CA

To whom it may concern,

I am the source of some interpretive errors regarding the nature and age of slope failure at Devils Slide. These errors have persisted through the years. mainly because a comprehensive geologic study of the the Devils Slide area has never been undertaken. This situation has resulted in repeated flawed analyses of the groundwater and landslide problem at Devils Slide, especially as it impacts California Highway 1. I submit the following brief comments on the geology of Devils Slide, not as a criticism of the EIR, but rather to explain why I feel the evaluation of the dewatering alternative in the EIR is inadequate. 1

All CALTRANS' geologic reports, the CALTRANS evaluation of Hovland's dewatering proposal, and the dewatering proposal, itself, all state or implicitly assume that the fresh landslide scarps at the top of the slope above Devils Slide were produced by the 1906 earthquake. However, historical maps and photographs conclusively show that those scarps formed mainly after construction of Highway 1 in 1937-38. The first detailed topographic map of the area (1866) shows an erosional scarp, but no landslide scarps at the top of the slope above the highway. A 1928 1

vertical aerial photograph shows only an incipient scarp at the south end of the present scarp complex, and a minor, overgrown scarp at the north end. A 1939 oblique aerial photograph shows essentially the same 1928 scarp configuration. However, the 1939 photograph also shows the extensive slope dressing above the recently completed highway. A 1943 vertical aerial photograph shows that the original southern scarp had enlarged and extended northward. A 1956 vertical aerial photograph, as well as all subsequent aerial photographs, shows that the fresh scarps had further widened and extended northward to include the vegetated scarp at the north end of the scarp complex. In effect, between 1939 and 1956, right after Highway 1 was built, the scarp complex had formed and essentially attained its present configuration. This sequence of events suggests that construction of the highway probably triggered, or at least greatly contributed to the deep-seated slope failure and scarp formation above Highway 1 At Devils Slide. Consequently, the 1906 earthquake probably did not initiate that slope failure, as I had originally, but erroneously, assumed. 1

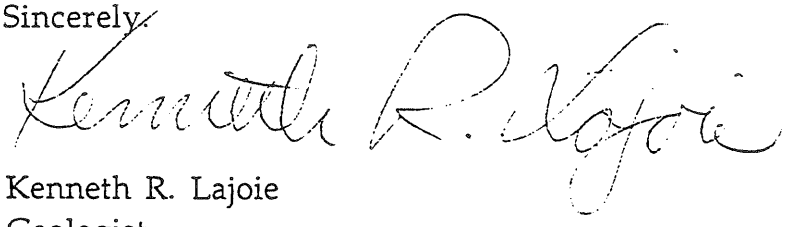
All CALTRANS' geologic reports, the CALTRANS evaluation of Hovland's dewatering proposal, and the dewatering proposal, itself, all state or implicitly assume that the fresh scarps at the top of the slope above Devils Slide form the headwall of a deep-seated landslide that extends down the entire slope to sea level. This interpretation is based mainly on a gouge zone penetrated by a deep bore hole in the granitic bedrock near sea level. All subsequent hydrologic interpretations are based on this interpretation, which I feel is incorrect. As shown above, the fresh scarps at the head of the deep-seated landslide above the road formed after the highway was constructed in 1937-38. If the deep-seated slide extended below the highway, the remnants of the 1906 Ocean Shore railroad grade below the highway would be downdropped. In fact, they are not! Except where a shallow-depth debris slide has destroyed the railroad grade, it still occupies its original position. Consequently, the slip surfaces at the base of the deep-seated slides must daylight in the cliff face above the highway and railroad grades, not below them. The gouge penetrated in the bore hole is probably fault gouge, not landslide gouge. The narrow, shallow landslide that periodically downdrops the road bed, and the numerous surficial debris slides that cascade down onto it from above, all appear to originate in the broad, poorly defined toes of the deep-seated slides above the highway. In effect, the deep-seated slides, are feeding the debris slides farther down slope. 2 2

Previous misinterpretations of the age and configuration of the deep-seated landslide have lead to inadequate analysis of the ground-water conditions at Devils Slide. For example, the draw-down test on one well is interpreted to represent hydrologic conditions within a slide mass. However, that well most-likely bottoms

in undisturbed granitic bedrock, which might explain the unexpectedly low yields from the draw-down test. In other words, the draw-down test probably represents hydrologic conditions in the bedrock, not the deep-seated landslide mass. Also, neither CALTRANS reports nor Hovland's original proposal recognizes the three levels of slope failure at Devils Slide. Consequently, drilling components of the groundwater investigations were not properly designed. Also, without an accurate understanding of the geology, the limited ground-water data obtained to date could not been properly interpreted. 2

For the various reasons outlined above, I feel that John Hovland's original dewatering proposal has not been adequately evaluated. Indeed, the fact that Highway 1 at Devils Slide did not slump during the heavy rains of the 1997-98 El Niño winter indicates that even the modest dewatering drains previously installed by CALTRANS were sufficient to prevent slide movement. In summary, I feel that to adequately evaluate the dewatering alternative at Devils Slide, a complete geologic study of the area must be conducted, and several more shallow test wells must to be drilled at appropriate locations. 2

Sincerely,



Kenneth R. Lajoie
Geologist

US Department of the Interior-Geological Survey

1. We concur with your summary, with the following exceptions:

   (a) It is conjectural as to whether the first detailed topographic map of the area (1866) shows an erosional scarp or a smaller landslide scarp at the top of the slope above the area of the current highway. This may never be resolved, although it does seem certain that whatever scarp existed at that time was smaller than the current existing slide scarp.
   (b) We believe that the 1906 earthquake probably did produce some additional movement in the vicinity of the existing landslide scarps at Devil's Slide, based on our observations following more recent slide and earthquake events at the site. The magnitude of any movement is questionable, and may have been small.
   (c) While there is no documentation to verify slide movement at the scarp in 1906, a large landslide mass did fall onto the railroad bench at Devil's slide at the time of the earthquake (Lawson, 1908). We do agree that, based on the aerial photographs cited, the slide scarps enlarged substantially in the years following Highway 1 construction in 1937-38.

   In summary, it is agreed that the 1906 earthquake probably did not initiate the massive Devil's slide failure, but we do believe that the slide probably existed prior to the 1906 earthquake.

   In your letter you state that you "... feel the evaluation of the dewatering alternative in the EIR is inadequate." The reason given is that there has never been a comprehensive geologic study of the Devil's Slide area, which has resulted in flawed analyses of the groundwater and landslide problem." It is our opinion, that the geologic studies were much more comprehensive than normally performed for alternative analysis in an environmental document and the analyses are not flawed.

   Additionally, you state that all of Caltrans geologic reports, and the evaluation of Hovland's dewatering proposal, either state or imply that the fresh scarps at the top of the slope above Devils slide form the headwall of a deep-seated landslide that extends down the entire slope to sea level. You also state that all subsequent hydrologic interpretations are flawed because they are based on this incorrect interpretation.

2. What is clear, is that your interpretation of the slide limits is different from ours, and we believe yours to be inaccurate for the following reasons.

   (a) Devil's Slide does, in fact, toe out offshore in the northerly portion in the area where sedimentary rocks are exposed, but not in the central and southern portions where granite is exposed. The offshore landslide toe, at the north end of the slide, is confirmed by Uniboom Seismic refraction, sidescan and bathymetry survey (Arnal,1984), slope inclinometer offset at ocean grade, geologic mapping (Beeston And Gamble, 1980) as well as the down-dropped remnants of the 1906 Ocean Shore railroad grade. We did not, as you state, base our interpretation on a gouge zone penetrated by a deep bore hole in the granitic bedrock near sea level. We have, at this time, no evidence to support the granite

being part of the slide mass, only the presence of the gouge zone, which may be fault gouge; but we do not believe that this is sufficient evidence for a slide plane without other supporting evidence.

(b) Dr. Hovland was kept fully informed of our plans for installing the dewatering wells and monitoring wells. He was aware of the site constraints and weather limitations at the time, and he visited the site. He was provided the results of pump tests and seemed satisfied with the result of the long term pumping study. It was our conclusion, after carefully evaluating all of the geologic and groundwater data for Devils Slide, including Dr. Hovland's report, that attempting to stabilize the roadway by dewatering the slide does not provide adequate long-term assurance of roadway stability, which both the tunnel and bypass alternates do provide.

(c) Dewatering Devils Slide may or may not provide stability for deep-seated slides, but certainly will not provide stability for other hazards such as shallow slides, rockfall and mass wasting of the bluff which will eventually undermine the roadway bench. Please refer to detailed comments on Dr. Hovland's letter for more information.

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
600 Harrison Street, Suite 515
San Francisco, California 94107-1376

May 27, 1999

ER 99/308

Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA 94623-0660

Re: Draft-Supplement to the 1986 FEIS/EIR for the Proposed Devil's Slide Improvement Project, Route 1 from Half Moon Bay Airport to Linda Mar Boulevard, Pacifica, San Mateo County, California.

Dear Mr. Gross:

The Department of the Interior (Department) has reviewed Caltrans' Draft-Second Supplement to the 1986 Final Environmental Impact Statement/Environmental Impact Report (FEIS/EIR) for the Proposed Devil's Slide Improvement Project, Route 1 from Half Moon Bay airport to Linda Mar Boulevard. We offer the following comments and observations for your use when preparing the final documents.

GENERAL COMMENTS:
Too little information is presented to assess whether hazards due to major earthquakes on nearby faults and the possibility of renewed slip across the Montara Fault intersecting the tunnel (see below) have been adequately taken into account in the design. References provided below should be helpful in making a full assessment of the seismic risk.

SPECIFIC COMMENTS:
Page 9, Table S-1; Geology/Seismology For the Martini Creek Alignment, it is unclear whether the roadbed has been designed to sustain the level of ground motion anticipated for events on the San Andreas, Hayward, or San Gregorio faults. The last sentence on page 28 only states "current seismic standards". A quantitative definition of those standards is needed. 1

Page 25, Figure 3-2 The new bridges in the vicinity of the Shamrock Ranch, north of the proposed tunnel, are probably more vulnerable to failure, due to strong ground motion from nearby major earthquakes, than any other part of the tunnel-related structure. This component of the project needs seismic hazard analysis.

Page 56, Section 5.8, Fourth Paragraph; Geology Although the Montara Fault is mentioned, it is not stated that the proposed tunnel will cross the Montara Fault. According to Darrow (1963, p. 21 and section F-F), a fault scarp (small cliff) occurs along the fault at one locality. This scarp could be the result of differential erosion between the granodiorite and the sedimentary rocks, or it could be the result of relatively young fault displacements. 2

In addition, recently-published maps of earthquake epicenters (Olson and Zoback 1995 and 1998) show many small-earthquake epicenters covering an area that includes the tunnel site. These epicenters are not aligned parallel to the Montara fault but rather include a broad area to the north and south of the fault. A composite fault plane solution in Olson and Zoback (1995 and 1998) suggests that the epicenters originate on a steeply-dipping fault or fault zone that trends NNW with right slip or a zone that trends ENE with left slip. 2

In contrast, both the measured (Pampeyan 1994, geologic map) and inferred dip (Darrow 1963, structure sections) of the Montara Fault are low, about 40 degrees, and the strike of the fault is nearly east-west in the tunnel area. Thus, neither the distribution of epicenters nor the composite fault plane solution fits the geologic expression of the Montara Fault. Nonetheless, these small recent earthquakes show that this area is currently seismically active. The level of nearby seismic activity and the fault scarp described above demonstrate that the possibility exists that the Montara Fault could be "Holocene-active." 3

The references listed in the enclosure should be included in the final EIS/EIR.

<u>National Park Service Comments</u>

In April 1998, the National Park Service completed the *Pacifica Boundary Study* for the Golden Gate National Recreation Area. This study was prepared pursuant to congressional direction to evaluate the potential of several tracts of land in the Pacifica area for addition to the Golden Gate National Recreation Area. The study describes and evaluates 16 tracts and concludes that all but one meet the established minimum criteria for addition of lands to units of the National Park System. Two of these tracts are in the vicinity of the Devils Slide Project area and should be considered in the Environmental Impact Statement. These properties include San Pedro Point, a 246-acre tract bounded by Highway 1 and the Pacific Ocean, and a tract on the northern slope of San Pedro Point, bounded by Highway 1, San Pedro Avenue and Grand Avenue. A copy of the Boundary Study is attached. 4

The San Pedro Point tract is currently owned by the City of Pacifica and the California Coastal Conservancy and managed as a nature preserve. The property was acquired in part through the use of Intermodal Surface Transportation Efficiency Act funds for scenic corridor preservation purposes. These owners are actively looking for a land manager to open the property to public use as parkland. Should boundary expansion legislation pending before the U.S. Congress be enacted, San Pedro Point could be transferred to the Golden Gate National Recreation Area. Acquisition of the second parcel, currently in private ownership, would depend on the interest of a willing seller. The Draft SSEIS should mention these properties, the potential for future parkland use, and the pending legislation to expand the National Park Service boundary within the Parkland 4 5

section (5.14, p. 79). For more information about the Golden Gate National Recreation Area, please contact Nancy Hornor, Acting Chief, Division of Resource Management and Planning at (415) 561-4937.

Access to the San Pedro Point property from Highway 1 is currently located just to the north of the proposed tunnel approach, and represents an existing safety hazard. The Draft SSEIS does not address whether access to this property will be provided in the Devil's Slide Improvement Project or how to resolve this safety hazard after the completion of the project. The National Park Service's Rivers, Trails and Conservation Assistance Program has been working with the property owners and the Pacifica Land Trust to plan a trails system and restoration activities for the property. Public parking facilities as well as administrative access into the interior of the property for emergency, patrol and maintenance activities are foreseen. 6

Access to this site and resolution of this safety issue should be worked out in conjunction with the property owners and addressed in the final EIS. For more information about the Rivers, Trails and Conservation Assistance Program's involvement in this project, please contact Holly Van Houten at (415) 427-1451. 7

Finally, in the cultural resources section (5.5) beginning on p. 51, there is no discussion of the impact of the tunnel alternative on the remnant coastal highway. Portions of this road were built beginning in the 1870's and are still evident and in some use today. This old highway is an important resource that tells the story of the development of the San Mateo Coast. The alignment could also provide a potential linkage for non-motorized trail uses. Impacts of the tunnel alignment, particularly in the vicinity of the South Portal entrance to the tunnel, and the impact of disposal of materials on this cultural resource should be discussed and mitigation proposed in the final EIS. 8

Thank you for the opportunity to review this document.

Sincerely,

Patricia Sanderson Port
Regional Environmental Officer

Enclosure – Pacifica Boundary Study

cc: Director, OEPC, w/original incoming
Regional Director, FWS, Portland
Director, USGS, Reston
Regional Director, NPS, San Francisco

REFERENCES

Darrow, R. L. 1963. Age and structural relationships of the Franciscan Formation in the Montara Mountain quadrangle, California. California Division of Mines and Geology Special Report 78, 23 p.

Olson, J. A. and Zoback, M. L. 1998. Source character of microseismicity in the San Francisco Bay block, California, and implications for seismic hazard. Seismological Society of America Bulletin 88 (2): 543-555.

Pampeyan, E. H. 1994. Geologic map of the Montara Mountain and San Mateo 7 ½' quadrangles, San Mateo County, California. U.S. Geological Survey Miscellaneous Investigations Map I-2390, scale 1:24:000. Enclosure

US Department of the Interior-Office of the Secretary, Region 9

1. As part of the design process, a seismic analysis of the new bridge at the north end of the tunnel will be conducted. Such an analysis is not conducted in the environmental phase of a project unless there is an active or potentially active fault that crosses under or near the proposed bridge structure.

2. The California Division of Mines and Geology (CDMG) has not classified the Montara fault as being either an active or a potentially active fault. The fault is therefore considered to be inactive.

3. Comment noted

4. The Final EIR/EIS references the Pacific Boundary Study for the Golden Gate National Recreation Area and the recent property acquisitions at San Pedro Point.

5. A discussion of these properties is included in the final environmental document. See Section 5.14, Parkland and Recreational Areas.

6. Access to the San Pedro Point Headlands is provided by a gated dirt road connecting to existing Route 1 approximately 200 feet from the northern approach to the project area. This existing access will not be affected by this project nor will the existing physical and operational conditions be altered.

   The tunnel alternative will have a new alignment for the roadway approach to the north portal. This new roadway approach will provide improved sight distance since the new northbound alignment will be southerly of the current alignment and thereby, will allow improved visibility and a more expansive view of what is ahead including the driveway access. Currently there is limited sight distance available due to the existing curve in the road. Sight distance will also be improved because the structure and roadway will be "super-elevated" or banked. Motorist departing from the driveway access will have greater visibility of the traffic approaching from the south.

   Caltrans is available to review and discuss any modifications to the highway, including the proposed relocation of the access southerly of the existing location, and can offer input and possible suggestions on the proposal which will require adherence with highway design standards. Any work within Caltrans right of way will require an encroachment permit.

7. Existing public access to established recreation trails including McNee Ranch State Park, Grey Whale Cove State Beach and Montara State Beach will not be impacted by construction of the tunnel alternative. Accident records indicate that from the period January 1999 through December 2000, there were no accidents associated with vehicles entering or leaving the San Pedro Point Headlands access point on Route 1. Additional safety hazards are not anticipated given the proximity of the project to the Headland property. Extension of the current trail is outside the scope of work required to fulfill the purpose and need of the project.

8. The series of roads and trails in the vicinity of the proposed project were determined to lack the proper integrity and significance to be eligible for listing on the National Register. See revised text Section 5.5-Cultural Resources.

METROPOLITAN
TRANSPORTATION
COMMISSION

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April 5, 1999

Robert Gross
Chief of Environmental Planning South
Caltrans District 4
Post Office Box 23660
Oakland, California 94623-0660

RECEIVED
APR 0 8 1999
Office of Environmental Planning, South

Dear Bob:

We have received your Draft Second Supplemental Environmental Impact Statement and Report for constructing a double bore 1.2 kilometer tunnel beneath San Pedro Mountain so SR 1 can avoid the geologically unstable Devil's Slide area.

The draft document states on page 19 that the cost of the preferred alternative is between $134.9 and $137.55 million. From discussions with the project manager I understand that this is based on 1997-1998 costs and that there have been some design changes that would both add and subtract some cost components from these totals. In your final document, please state the cost of the preferred alternative based on the currently contemplated design. Please escalate the construction costs to the anticipated year of construction, and describe the factors used for escalating the costs. Please also include anticipated tunnel operations costs and their method of funding. 1

The draft document states on page 20 that the cost of the preferred alternative could be funded using emergency relief funds. I understand from discussions with the Federal Highway Administration that emergency relief funds sometimes require a non-federal match of about 16%. In the final document, please state whether or not a match will be required for the emergency relief funds. If a match is required, the final document should also state the dollar amount of the match and the anticipated funding sources for that match. 2

The draft document on page 30 describes both the no project alternative and the slide dewatering alternative that Caltrans considered but withdrew because of the cost and time required for implementation. Does the no project alternative include any dewatering as a component of "the general maintenance and repair of the existing alignment"? 3

The dewatering feasibility study described on page 31 of the draft document is based on two test wells and no horizontal drains. Would Caltrans have reached the same conclusion had test horizontal drains been used rather than wells? Intuitively, one might expect more water to come out through a drain that was horizontal or gently sloping downward rather than having to be pumped upwards. I understand from page 37 of the draft that horizontal drains "are very difficult to construct and to maintain in working order over time." In the final document, please discuss the difficulty of constructing horizontal drains compared to the difficulty of constructing a 1.2 kilometer tunnel and 0.75 kilometers of approach roads. The final document should also describe the difficulty of maintaining horizontal drains in working order over time compared with the difficulty of maintaining a tunnel. The draft document defines tunnel maintenance to include control and surveillance systems, traffic control, communications, tunnel maintenance, emergency evacuation system, fire protection, ventilation, and environmental monitoring. 4 5

The traffic volumes for assumed this project appear only in a thirteen year old document and not in the current report. Would it be possible to reproduce the traffic data from the 1986 FEIS into the final EIS for this project? 6

Thank you for the opportunity to review this draft environmental document.

Sincerely,

Marc Roddin
San Mateo County Liaison

Copies to:
Commissioner Griffin
Commissioner Lempert
Commissioner Powers
Commissioner Yahata

Metropolitan Transportation Commission

1. Construction estimates for the tunnel alternative are a combination of costs presented in the Woodward-Clyde Tunnel Feasibility Study, and the Caltrans estimates for the cost of the Shamrock Ranch Bridge and bicycle facilities. The *1999 Draft Second Supplement* to the *1986 EIR/EIS* included tunnel alternative estimates made in early 1997. The current total estimated project cost for the preferred alternative (Tunnel Alternative Variation "A") is $272,519,000 and $279,325,000 for Tunnel Alternative Variation "B". These figures reflect escalated cost for 2003/2004 Fiscal Year construction and includes cost for construction, engineering, and right of way. See discussion and updated cost estimates in Section 3.1. The method of funding for the tunnel's operational cost is anticipated to be through our agency's Budget Change Proposal process.

2. Prior to approval of the 1998 STIP, the Federal Transportation Reauthorization Bill allocated $6,000,000 in demonstration funds for the Devil's Slide project. In June 1999, the FHWA informed Caltrans that 100% of the project costs are eligible for Emergency Relief Fund reimbursement. It is our understanding that a non-federal match is not required.

3. Existing wells, pumps and horizontal drains will be maintained while the roadway remains a State Highway.

4. Any long-term maintenance program for the existing alignment would include some measure of de-watering for slope stability. Based on our study, horizontal drains would likely be the only feasible type of de-watering strategy used. As covered in Section 10 of the Devil's Slide De-watering Feasibility Study dated November 1998, there is a long history of horizontal drains at Devil's Slide in an unsuccessful attempt to stabilize the coastal bluff slide area. Each of the horizontal drains installed at the site is considered "test horizontal drains". Since both horizontal drains and test wells were considered in the study we would have come to the same conclusions.

5. The difficulty in constructing horizontal drains in comparison to constructing a tunnel is that the horizontal drains are drilled and installed into a broken fractured slide mass with active slide and mass wasting both above and below the roadway. The tunnel on the other hand is to be constructed into relatively intact stable rock.

6. The following projected traffic volumes include the year-2020 AM and PM peak-hour forecasts for various locations on Route 1 and Route 92 near the project area:

Route 1, Existing and Year 2020, Peak-Hour Traffic Volumes

Location	1998 AM Peak-Hour	1998 PM Peak-Hour	2020 AM Peak-Hour	2020 PM Peak-Hour
Devil's Slide				
NB Route 1	920	600	1080	704
SB Route 1	530	1000	622	1174
Half Moon Bay				
NB Route 1	1030	1950	1210	2290
SB Route 1	1712	1894	2010	2224

Note the AM peak-direction on Route 1 north of Montara is different than the AM peak-direction south of Montara (northbound vs. southbound, respectively).

Route 92, Existing and Year 2020, Peak-Hour Traffic Volumes

Location	1998 AM Peak-Hour	1998 PM Peak-Hour	2020 AM Peak-Hour	2020 PM Peak-Hour
EB Route 92	1436	694	1686	815
WB Route 92	424	1018	498	1195

The projected AM peak-hour volumes indicate that the traffic split between eastbound Route 92, and northbound Route 1 (north of Montara) is nearly 50:50 (1,686 vs. 1,644, respectively). When comparing the projected AM, eastbound Route 92 volumes (1,686) to the northbound Route 1 volumes south of Montara (1,210), the split is 60:40 in favor of eastbound Route 92.

The forecasts were derived from the MTC BAYCAST travel demand model and adjusted based on existing traffic volume counts.

C/CAG

CITY/COUNTY ASSOCIATION OF GOVERNMENTS
OF SAN MATEO COUNTY

Atherton • Belmont • Brisbane • Burlingame • Colma • Daly City • East Palo Alto • Foster City • Half Moon Bay • Hillsborough • Menlo Park • Millbrae Pacifica • Portola Valley • Redwood City • San Bruno • San Carlos • San Mateo • San Mateo County • South San Francisco • Woodside

April 9, 1999

State of California Department of Transportation
Caltrans District 4 - Office of Environmental Planning, South
PO Box 23660
Oakland, CA 94623-0660

Attention: Mr. Robert Gross
Chief

Subject: Devil's Slide Second Supplement to the 1986 Final Environmental Impact Statement (EIS) / Environmental Impact Report (EIR)

Dear Mr. Gross:

The City/ County Association of Governments (C/CAG) staff has reviewed the Devil's Slide Second Supplement to the 1986 EIR and find it complete and adequately addresses the issues with regard to this project. Pages 18 and 19 of the report indicate that accommodations have been made for bicycles and pedestrians in accordance with the directions provided by the San Mateo County Board of Supervisors Resolution #61060. Enclosed is the letter C/CAG sent to the San Mateo County Board of Supervisors dated 4/24/97 with regard to bicycle access for your consideration. This is an important project to San Mateo County and we urge approval of the document as presented. 1

If there are any questions or additional information needed please contact Richard Napier at 650 599-1420. Your prompt assistance in this matter is appreciated.

Regards,

Richard Napier

cc: Ms. Therese McMillan - MTC

10 TWIN DOLPHIN DRIVE, SUITE C-200, REDWOOD CITY, CA 94065-1036 PHONE: 650.599.1406 FAX: 650.594.9980

City/County Association of Governments of San Mateo County

1. Your comments that the Second Supplemental to the 1986 document is "complete and adequately addresses the issues with regard to this project" and that "this is an important project to San Mateo County and you urge approval of the document" are noted.

CITY HALL • 170 Santa Maria Avenue • Pacifica, California 94044-2506
Telephone (415) 738-7300 • Fax (415) 359-6038

Scenic Pacifica

May 10, 1999

Mr. Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA 94623-0660

Re: Response to the Draft Second Supplement to the 1986 Final Environmental Impact Statement/Environmental Impact Report for the Devil's Slide Improvement Project

Dear Mr. Gross:

We have reviewed the Draft Second Supplement to the 1986 FEIS/EIR for the Devil's Slide Improvement Project and have the following comments.

1. The Draft Second Supplement contains no discussion of the San Pedro Point Headlands property, its potential for future parkland development, and any potential impacts associated with the Devil's Slide Improvement Project. Of particular concern is the existing access to the Headlands property and what, if any, potential impact the Devil's Slide Improvement Project will have on that access. We believe the Draft Second Supplement should identify and discuss potential impacts and necessary mitigation measures with regard to the Headlands property. The document should also include a map showing the relationship between the Headland's property access and the Devil's Slide Improvement Project.

2. Section 3.5 acknowledges the City of Pacifica's San Pedro Creek Flood Control Project, but does not discuss what, if any, potential impacts the Devil's Slide Improvement Project may have on the Flood Control Project. We believe the Draft Second Supplement should contain a discussion of any potential impacts and necessary mitigation measures with regard to the San Pedro Creek Flood Control Project. If no impacts are anticipated, a statement confirming such should be included in the document.

Thank you for the opportunity to comment on the Draft Second Supplement, and for your consideration of our comments.

Sincerely,

Michael Crabtree
City Planner

c: David Carmany, City Manager

City of Pacifica, Planning Department

1. A discussion of the San Pedro Point Headlands properties has been included in the final environmental document. Please see Section 5.14 Parkland and Recreational Areas.

   Access to the San Pedro Point Headlands is provided by a gated dirt road connecting to existing Route 1 approximately 200 feet from the northern approach to the project area. This existing access will not be affected by this project nor will the existing physical and operational conditions be altered.

   The tunnel alternative will have a new alignment for the roadway approach to the north portal. This new roadway approach will provide benefits in the form of improved sight distance because the new northbound alignment will be southerly of the current alignment and thereby will allow improved visibility and a more expansive view of what is ahead (including the driveway access) as opposed to the limited sight distance currently available due to the existing curve in the road. Sight distance will also be improved because the bridge and roadway will be "super-elevated" or banked. Motorist departing from the driveway access will have greater visibility of traffic approaching from the south.

   Caltrans is available to review and discuss any modifications to the highway, including the proposed relocation of the access southerly of the existing location, and can offer input and possible suggestions on the proposal which will require adherence to highway design standards. Any work within Caltrans right of way will require an encroachment permit.

   A map showing the San Pedro Point Headlands properties is included in this Final SSEIS/EIR. See Figure 5-11.

2. The preferred alternative (tunnel variation A) will not affect the San Pedro Creek Flood Control Project.

Coastal Conservancy

May 10, 1999

Mr. Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA 94623-0660

Dear Mr. Gross:

This letter represents the State Coastal Conservancy's comments on the draft Devil's Slide Second Supplement to the 1986 Final Environmental Impact Statement/Environmental Impact Report (SEIS). First and foremost, the Conservancy feels strongly that the tunnel alternative is the environmentally superior alternative to the proposed Martini Creek Bypass alignment. We recommend that the Martini Creek Bypass alignment be formally rejected in favor of the tunnel alternative. 1 2

Our specific comments on the report fall into two areas: public access at Devil's Slide and the Pedro Point Headland property immediately adjacent to the proposed project site.

1) Public Access at Devil's Slide

The Conservancy believes there are unprecedented opportunities to enhance public access to the area's unique recreational resources, which are not adequately addressed in the draft SEIS. Specifically, further consideration needs to be made for the proposed tunnel's potential impacts on existing and future public access to the recreational resources in and around the project area. 3

Designation of Highway One at Devil's Slide as a recreational trail creates new and exciting opportunities to establish continuous trail access between parkland at Pedro Point Headlands adjacent to the north portal entrance and McNee Ranch and Grey Whale Cove State Parks near the south portal entrance. However, the draft SEIS fails to address the environmental impacts to the designated California Coastal Trail created by both the massive cut proposed for the approach to the south portal and the south portal fill site. The 1998 Association of Bay Area Governments Coastside Subregional Planning Project identifies the historic Half Moon Bay-Colma Road above the south portal and south portal fill site as the preferred alignment for the California Coastal Trail. The draft SEIS fails to address impacts to this recreational resource and provides no mitigation measures at the south portal and fill site to ensure that the old roadbed will be adequately preserved for future development as a recreational trail. 4

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In addition, the proposed conversion of Highway One at Devil's Slide to a hiking and biking facility represents a significant addition to the California Coastal Trail between Pacifica and Half Moon Bay. As currently designed however, the tunnel alternative fails to provide trail users with continuous access through the project area because the proposed trail deadends near the south portal. The south portal entrance should be redesigned to accommodate continuous pedestrian and trail access. However, should this prove infeasible, the Half Moon Bay-Colma Road (if preserved for future use) could serve as the critical link with the Highway One alignment north of the south portal entrance. Identification and preservation of the Half Moon Bay-Colma Road as the alternate route for recreational access in the project area would also be consistent with San Mateo County Resolution 61060 passed by the Board of Supervisors on May 27, 1997 which requires that an alternate trail route be identified. 4

2) Pedro Point Headland

We are very concerned that the draft SEIS does not address impacts of a Devil's Slide Improvement Project to the Pedro Point Headlands property. The 250-acre Headlands property is located west of Highway One immediately north of the Devil's Slide area. The property is directly adjacent to the project area identified in the draft SEIS. The Headlands property is owned by the City of Pacifica and the Coastal Conservancy and managed by the Pacifica Land Trust.

The access road serving the property connects to Highway One in the immediate vicinity of the proposed alignment of the Devil's Slide Tunnel. The Headlands property will eventually be a regional park facility. There was broad community support for the acquisition of this property and for its conversion to parkland. The final portion of the property was purchased with ISTEA funds in 1995. The property is located within the Golden Gate National Recreation Area's boundary expansion area and will eventually be operated as a regional park by the GGNRA or another entity. It is important, therefore, not to ignore the property and its access needs in planning the Devil's Slide project. 5 6

Approximately five years ago, I personally met with the Caltrans staff responsible for planning the Devil's Slide project to make them aware of the property and the need to address continued access to the property. In addition, representatives of the Pacifica Land Trust have been regularly attending the County's tunnel meetings and have, on more than one occasion, raised the issue of preserving access to the property with Caltrans staff. In light of all this notice, we are very disappointed that the issue has not been addressed in the draft SEIS. 7

Based on the issues discussed above, we offer the following comments and recommendations for the final SEIS:

- A discussion of issues related to the preferred alternative's impact on the Pedro Point Headlands, especially access to the property, should be included in the final SEIS. 8
- Section 5.14 "Parkland" needs to be revised to include the Headlands property in its discussion of "setting," "impacts," and, possibly, "mitigation measures." 9

- Section 5.16.4 "Right of Way Acquisitions/Relocations" is not specific as to which properties would be affected by right of way acquisitions for the proposed tunnel project. We believe that the Pedro Point Headlands property may be one of those properties. When would such information be made available to the Conservancy and the City of Pacifica as owners of the Headlands property? 10

Thank you for this opportunity to comment on the draft SEIS. We would be happy to discuss our comments in more detail with your staff. Questions regarding the Devil's Slide public access comments should be directed to Tim Duff at (510) 286-3826. Questions related to Pedro Point Headlands should be directed to me at (510) 286-4169.

Sincerely,

Christopher Kroll
Project Manager

Cc: David Carmany, City Manager
City of Pacifica
170 Santa Maria Avenue
Pacifica, California 94044

Arlene Patton
Pacifica Land Trust
P.O. Box 988
Pacifica, California 94044

Supervisor Rich Gordon
San Mateo County Board of Supervisors
455 County Center
Redwood City, California 94063

California State Coastal Conservancy

1. Your comment that "the tunnel alternative is the environmentally superior alternative to the proposed Martini Creek bypass alignment" is noted.

2. The tunnel alternative (variation "A") has been identified as the preferred alternative in the Final EIS/EIR.

3. The tunnel alternative will not impact any established publicly owned parklands but it will affect sections of existing trails on private property within the project area. The placement of fill material at the South Disposal Area will impact that section of the abandoned Half Moon Bay-Colma Road through the disposal area.

4. During construction of the tunnel alternative, trail access will be maintained by means of trail detours. After construction, any trail affected by the project, including the impacted section of the old Half Moon Bay-Colma Road, will be reestablished or realigned and reconnected to maintain trail continuity.

   We are not aware of any formal Coastal Trail designation within the project area but we are aware that the existing section of State Route 1 has been suggested as an ideal segment of the Coastal Trail after it has been relinquished and is no longer used as a highway. During the design phase of the project, supplemental materials studies will be conducted to finalize the location of the south portal and to determine allowable depths and slope inclinations of excavation. Alternative grading plans will be considered to determine the feasibility of preserving existing trails. If it is not feasible to avoid affecting the existing trail, it will then be reconstructed around the affected area and reconnected to restore continuity. Extension of the current trail or major expansion of the trail system is beyond the scope of this project.

5. Access to the San Pedro Point Headlands is provided by a gated dirt road connecting to existing Route 1 approximately 200 feet from the northern approach to the project area. This existing access will not be affected by this project nor will the existing physical and operational conditions be altered.

6. Caltrans is available to review and discuss any modifications to the highway, including the proposed relocation of the access southerly of the existing location, and can offer input and possible suggestions on the proposal which will require adherence to highway design standards. Any work within Caltrans right of way will require an encroachment permit.

7. Please see response No. 5 and 6 above.

8. Please see response No. 5 and 6 above.

9. The parkland section (5.14) has been revised to include a discussion of the San Pedro Point Headlands.

10. Right of way acquisition of property from the San Pedro Point Headlands will not be necessary for construction of the proposed tunnel alternative.

Environmental Services Agency

Planning and Building Division

County of San Mateo

Mail Drop PLN122 · 455 County Center · 2nd Floor · Redwood City
California 94063 · Telephone 650/363-4161 · Fax 650/363-4849

Board of Supervisors
Rose Jacobs Gibson
Richard S. Gordon
Mary Griffin
Jerry Hill
Michael D. Nevin

Director of Environmental Services
Paul M. Koenig

Planning Administrator
Terry L. Burnes

May 11, 1999

CalTrans District 4
Office of Environmental Planning South
Attn: Robert Gross/Ed Pang
P.O. Box 23660
Oakland, CA 94623-0660

Dear Mr. Gross and Mr. Pang:

As Director of the San Mateo County Environmental Services Agency, I am writing on behalf of the County to comment on the Second Supplemental Environmental Impact Statement Environmental Impact Report that was prepared for the Devils Slide Improvement Project located along Highway 1. I would like to offer the following comments regarding this document:

Preferred Tunnel Alternative A

The Second SEIS/SEIR offers two tunnel alternatives as an alternate route to replace the existing section of Highway at Devils Slide. The preferred tunnel alternative A is a 4,000-foot long double bore facility with one lane in each direction and a pedestrian/bicycle path located outside of the tunnel. Tunnel alternative B provides a wider double bore facility with one lane in each direction, and pedestrian and bicycle access located inside the tunnel. Measure T, an Initiative which was adopted by the voters of San Mateo County, amended the Local Coastal Program to provide for motorized vehicle access only through the Devils Slide tunnel. This restrictive language specifically prohibits construction of tunnel features or facilities designed specifically and primarily for bicycle travel through the tunnel. 1

CalTrans requested the position of the County of San Mateo with respect to its willingness to accept ownership for the current Route One right-of-way at Devils Slide. It is anticipated that this route will be used for a bicycle and pedestrian path. The Board of Supervisors have stated in a letter written to CalTrans on February 24, 1999 (see attached) that the transition from the current use of Route One as a highway to a bicycle/pedestrian path will require a public agency having responsibility for its ownership and maintenance. It is the County's position that ownership is more appropriately placed with an agency with other recreational lands in proximity to the bypass, such as the Golden Gate National Recreation Area or the State

Department of Parks and Recreation. While the County will undertake such ownership if required, we will be continuing to work to facilitate a direct transfer of the lands to recreational agencies.

Wetlands

The Coastal Commission is the agency that administers the requirements of the California Coastal Act of 1976. A Coastal Development Permit is required for most new development located within the coastal zone, which extends from the State's three-mile seaward limit to an average of approximately 1,000 yards inland from the mean high tide of the sea. The California Coastal Act authorized the Coastal Commission to approve local coastal development programs. Once a local program is certified by the Coastal Commission, authority to issue most Coastal Development Permits reverts to the city or county. San Mateo County has a Local Coastal Program (LCP) that was approved by the Coastal Commission in 1980.

The California Coastal Act regulates development within wetlands in the coastal zone (Pub. Resources Code, section 30233). The Act defines wetlands as "lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats or fens" (Pub. Resources Code, section 30121). The California Coastal Commission has further defined wetlands through administrative regulation: 2

> "Wetlands are lands where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent or drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salt or other substance in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deep water habitats." (Title 14, Cal. Code Regs., section 13577(b).)

In 1994, the California Coastal Commission also issued interpretive guidelines through a publication entitled "Procedural Guidance for the Review of Wetland Projects in California's Coastal Zone."

The San Mateo County Local Coastal Program (LCP) contains policies that relate to protecting biological resources in San Mateo County.

The LCP has identified sensitive habitats in San Mateo as any area in which plant or animal life or their habitats are either rare or especially valuable and any area which meets one of the following criteria: (1) habitats containing or supporting "rare and endangered" species as defined by the State Fish and Game Commission; (2) all perennial and intermittent streams and their tributaries [riparian corridors]; (3) coastal tide lands and marshes; (4) coastal and off-shore areas containing breeding or nesting sites and coastal areas used by migratory and resident water-associated birds for resting and feeding; (5) areas used for scientific study and research concerning fish and wildlife; (6) lakes and ponds and adjacent shore habitat; (7) existing game and wildlife refuges and reserves; and (8) sand dunes. Sensitive habitat areas include riparian corridors, wetlands, and habitats supporting rare, endangered, and unique species. 2

The LCP permits only resource dependent uses in sensitive habitats. Resource dependent uses for riparian corridors, wetlands, habitats supporting rare, endangered, and unique species shall be the uses permitted in Policies 7.9, 7.16, 7.23, 7.26, 7.30, 7.33, and 7.44, of the LCP. Permitted uses in sensitive habitats are required to comply with USFWS and CDFG regulations.

The LCP requires that development permitted in wetland areas minimize adverse impacts during and after construction (7.17). The LCP contains the following definition of wetland:

> Define wetland as an area where the water table is at, near, or above the land surface long enough to bring about the formation of hydric soils or to support the growth of plants which normally are found to grow in water or wet ground. Such wetland can include mudflats (barren of vegetation), marshes, and swamps. Such wetlands can be either fresh or saltwater, along streams (riparian), in tidally influenced areas (near the ocean and usually below extreme high water of spring tides), marginal to lakes, ponds, and man-made impoundments. Wetlands do not include areas which in normal rainfall years are permanently submerged (streams, lakes, ponds and impounds), not marine or estuarine areas below extreme low water of spring tides, nor vernally (seasonally) wet areas where the soils are not hydric.
>
> In San Mateo County, wetlands typically contain the following plants: cordgrass, pickleweed, jaumea, frankenia, marsh mint, tule, bullrush, narrow-leaf cattail, broadleaf cattail, pacific silverweed, salt rush, and bog rugh. To qualify, a wetland must contain at least a 50 percent cover of some combination of these plants, unless it is a mudflat.

Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of species typically adapted for life in saturated

soil conditions (hydrophytic species). There is no one uniform definition of a wetland for regulatory purposes. The term "wetland hydrology" as applied by the Corps, refers to inundation or saturation of an area for a minimum of 14 days during the growing season. "Hydric soils" are a type of soil that are indicative of wetland conditions. These soils exhibit unique characteristics including gleying (gray colors, bright mottles and/or low matrix chroma, and iron and manganese concretions). "Hydrophytic" vegetation are plants that are adapted to wetland conditions. All three characteristics - wetland vegetation, wetland hydrology, and evidence of hydric soils - must be present in order for an area to be classified as a wetland by the Corps.

The LCP defines a wetland as an area where soils are sufficiently saturated to result in the development of hydric soils or to support the growth of plants which normally are found to grow on wet ground. The LCP also excludes vernally wet areas where the soils are not hydric.

The California Coastal Commission's guidelines provide that the Commission generally follows the wetland definition and classification methodology used by the CDFG. CDFG requires the presence of one of three possible attributes (hydrology, hydric soils or hydrophytic vegetation) for an area to qualify as a wetland. An area considered to be a wetland by the Coastal Commission would be considered to be a sensitive habitat under the LCP Policy 7.1 and consequently pursuant to LCP policy 7.18 require a 100-foot buffer from the outermost limit of wetland vegetation. 3

The FEIS/EIR on pages 74 and 75 describe the impacts of the proposed tunnel on wetland and riparian habitats. We want to bring to your attention the potential conflicts between this discussion and the Coastal Act and Local Coastal Program. The tunnel will fill approximately 5,500 square feet of wetlands and 9,700 square feet of riparian habitat. Off-site mitigation of such an impact is not currently allowed under the Coastal Act or Local Coastal Program. As a result, we cannot at this time find that the proposed tunnel design complies with the Local Coastal Program. We remain committed to working with you and Coastal Commission staff to develop a design which does comply with the Coastal Act and Local Coastal Program. 4

Sincerely,

Paul M. Koenig

Paul M. Koenig
Director of Environmental Services

PMK/MJS:cdn - MJSJ0569.6CN

cc: Members, Board of Supervisors

County of San Mateo, Planning and Building Department

1. Comments regarding Preferred Tunnel Alternative A noted. As discussed in the draft environmental document and as indicated in the July 26, 1999 letter to Mary Griffin, President of the San Mateo County Board of Supervisors, "The segment of Route 1 superceded by the construction of a Devil's Slide tunnel will be relinquished to San Mateo County." The County in turn could enter into an agreement with another appropriate agency identified by the county, to continue the use of relinquished Route 1 as a bicycle/pedestrian facility. This will comply with the desire of the county as expressed by San Mateo County Resolution No. 61060. Directional signs will be placed near the tunnel portals to encourage bicyclists to use the exterior path.

2. Comments regarding administration of the Coastal Act and regulatory jurisdictions are acknowledged. The comments regarding the LCP policies and definitions as they pertain to wetlands and sensitive habitats, are also acknowledged.

3. Comment that an area considered as wetlands by Coastal Commission would be considered to be sensitive habitat under LCP policy and consequently subject to buffer zone requirements is acknowledged. See discussion regarding LCP wetlands in Section 5.12.3.

4. An alternative analysis of fill disposal options was prepared and included in the Federal Consistency Certification concurred with by a unanimous vote of the Coastal Commission on Oct. 10, 2000. As noted in the Jan. 25, 2001 letter to Caltrans from the County of San Mateo County Counsel, "a coastal development permit for a tunnel at Devil's Slide could be approved as consistent with the County's Local Coastal Program notwithstanding some impacts to wetlands." Caltrans will continue to coordinate with the Coastal Commission and San Mateo County regarding compliance with the Coastal Act and the Local Coastal Program.

STATE OF CALIFORNIA—THE RESOURCES AGENCY GRAY DAVIS, GOVERNOR

CALIFORNIA COASTAL COMMISSION
45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2219
AND TDD (415) 904-5200
(415) 904-5400

May 12, 1999

Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA 94623-0660

Re: Devil's Slide Improvement Project, Draft Second Supplemental EIS/EIR
SCH No. 83051706
CCC Post-Cert. No. 1-SMC-99-156

Dear Mr. Gross,

Thank you for the opportunity to review the above-referenced document. The following are staff comments as the Coastal Commission itself has not reviewed the document.

This project will be subject to the requirement for a Coastal Development Permit to be issued by San Mateo County under its Local Coastal Program. The standard of review for that permit will be the consistency of the project with the certified LCP and with the public access policies of the Coastal Act. That permit will be appealable to the Coastal Commission. The project is also subject to review by the Coastal Commission for consistency with the federally-approved State Coastal Zone Management Program (CZMP), including the policies of the Coastal Act. At this time our principal concerns are as follows: 1

Wetland Fill: The document identifies what is called a "low value wetland" on page 59. On page 75, in an apparent reference to this wetland, the document states that an "estimated 269 square meters ... of wetlands in the south portal drainage area will be filled." The document also refers to a preliminary wetland delineation, which may be contained in the "Biological Assessment" cited on page 114. Page 74 of the document indicates that this preliminary wetlands delineation was provided to the U.S. Army Corps of Engineers, presumably to address wetlands as defined under Section 404 of the Clean Water Act. The document does not include a map of the delineated wetland area and does not make it clear whether the delineation is based only on the Clean Water Act definition of wetlands or whether the wetlands delineation also mapped wetlands as defined under the San Mateo County LCP and the Coastal Act. These two definitions of wetlands differ from the Clean Water Act definition and differ from each other. Wetlands as defined under the San Mateo County LCP may include more areas than wetlands delineated under the Clean Water Act definition. Wetlands as defined under the Coastal Act and its implementing regulations generally include even more areas. As noted previously, the standard of review for the Coastal Development Permit will be the certified LCP and public access policies of the Coastal Act. The County, and the Commission if the project is appealed, will have to assess the appropriateness of any fill proposed in wetlands as defined under the LCP using LCP wetland policies. Pursuant to Section 30603(a)(2) of the Coastal Act, the project will be appealable based in part on the fact that portions of the proposed project are located within 100 feet of wetlands as defined under the Coastal Act. Therefore, identification of all areas affected by the project that are wetlands 2

under each of these other two definitions of wetlands will be essential for the process of reviewing the coastal development permit. The final environmental document should identify all areas affected by the project that are wetlands under the LCP and under the Coastal Act and its implementing regulations. Please also note that the Commission has published "Procedural Guidance for the Review of Wetland Projects in the Coastal Zone" (June 14, 1994), which has previously been distributed to Caltrans. This document provides useful information concerning the delineation of wetlands as defined under the Coastal Act. Please contact us if you would like another copy of the document.

Page 76 of the Supplemental EIS/EIR describes proposed mitigation to replace the riparian and wetland habitat that would be eliminated as a result of the project. The certified San Mateo County Local Coastal Program (LCP) policies (Chapter 7, Sensitive Habitats Component), only allow fill for certain purposes, whether or not mitigation is provided. It is not clear that the proposed use of wetland areas as a site for disposing of excavated material from the tunnel is consistent with the list of purposes for which the LCP indicates fill can be allowed. In addition, the LCP wetland policies calls for an examination of alternatives to proposed wetland fill projects. The final document should provide an analysis of alternatives to using wetlands as a fill disposal site that are consistent with the LCP. 2

Visual Resources: The Aesthetics section of the document (section 5.1, pgs. 41-45) lists a number of visual impacts associated with the project. Without renderings of the various elements of the project, it is difficult to assess the significance of such impacts. The Commission in the past has found Caltrans' Visual Impact Assessments helpful in evaluating a project's visual aspects for the purposes of environmental documents, and eventually permits, appeals or consistency actions. In this case, the Visual Impact Assessment was not circulated with the, nor were significant graphic excerpts included in the SEIS/R. The final document should include a copy of the Visual Impact Assessment cited on page 114, or at least relevant excerpts. The document notes (page 44) how important a "well-designed bridge...consideration of form, pattern, color, etc., as well as structural elements..." is to the overall visual impact of the project. 3
The Commission has also been concerned about protecting scenic views *from* bridges and roads. The final EIS/R should provide information about what is being proposed with regard to bridge railings and other such considerations at least a preliminary design level.

Mitigation measures are proposed for some of the identified impacts. However, the document indicates that these mitigation measures will not eliminate the visual impacts of the project, notably including "prominent" rock cuts, and the potential negative visual impacts of the bridge (page 44). The final document should address the potential for offsetting unmitigated visual impacts of the project at off-site locations. For example, consideration could be given to dedicating the Caltrans right-of-way for the Martini Creek alignment to State Parks or otherwise assuring that this area be perpetually kept in its natural state to retain its visual beauty. 4

Traffic: The discussion of traffic (page 89) is somewhat cursory, considering the project substantially affects Highway One, one of the two principal transportation facilities that carry most of the traffic to and from the San Mateo coast.

The document asserts "[n]either project is capacity increasing, therefore no traffic... changes...are anticipated." A similar statement is included in the discussion of "Growth Inducing Impacts" (pg. 93). However, Caltrans' "Highway Capacity Manual" seems to take road configuration into account in determining the capacity of specific highway segments. By replacing the current tortuous and slow alignment along Devil's Slide, the project would remove bottlenecks. Wouldn't this aspect of the project increase the number of cars per hour that Highway One between Pacifica and Montara can accommodate? Any resulting increase in capacity would be extremely relevant to continuing land use planning in the area, as both the San Mateo County and Half Moon Bay LCPs tie future permissible development to infrastructure, notably highway capacity. San Mateo County LUP Policy 2.52a., for example evidences how important such capacity information is by requiring that "Caltrans monitor peak commuter period traffic and submit data reports to the County on the results...when a permit application is submitted." The Countywide Transportation Plan for San Mateo County June 1997 Alternatives Report presents traffic volume to capacity (V/C) ratios that are helpful in such capacity analysis. The final supplemental EIS/EIR should indicate which, if any, of the segments of the "Highway 1 North Corridor" (such as shown in Exhibit C.18, for example) currently with a capacity value of "C" will change, and to what value. 5

Water Quality: This section defers the full identification of water quality impacts to the "pre-construction process," (pg. 90), the identification of control measures and Best Management Practices (BMPs) through a conceptual Storm Water Pollution Prevention Plan (SWPPP) to the project design phase (pg. 91), and the "final selection of appropriate control measures" to the contractor after the contract has been awarded (pg. 91). To provide meaningful information to decision-makers who rely on the final SEIS/R, it would be appropriate to have the conceptual SWPPP available prior to final certification of the SEIS/R. 6

Please feel free to contact me if I can be of any assistance. Thank you again for the opportunity to review and comment.

Sincerely,

Jack Liebster
Coastal Planner

cc: Resources Agency
State Clearinghouse
San Mateo County Planning

California Coastal Commission

1. Comments regarding the coastal development permit process and project consistency with the CZMP are acknowledged.

2. The wetland delineation prepared for highway projects is typically based on the definition of wetlands as defined under Section 404 of the Clean Water Act. The final environmental document includes and identifies the wetland and riparian areas affected by the project under jurisdiction of the San Mateo County LCP and the Coastal Act. An alternative analysis of fill disposal options was prepared and included in the Federal Consistency Certification concurred with by the Coastal Commission by unanimous vote on October 10, 2000. Caltrans will continue to coordinate with the Coastal Commission and San Mateo County regarding compliance with the Coastal Act and the Local Coastal Program.

3. Visual renderings of the tunnel and approaches are included in the Devil's Slide Visual Impact Assessment for the 1999 Draft Supplemental EIR/EIS. This visual impact assessment and other technical studies are referenced in the environmental document and were made available to the public at several locations. A copy was also provided to your agency.

4. The disposal of excess property will be in accordance with established laws and procedures, which include priority rights to recreational and other government agencies. In recognition of the local concern regarding the future use of all property to be declared as excess after construction of the project, discussions for a planned program for disposal have been initiated with the County of San Mateo.

5. Highway capacity is influenced by multiple factors including alignment, grade, and roadway and shoulder widths. A common analogy used to describe a highway segment's capacity is that of an hourglass, wherein the location having the most limiting combination of factors is compared to the neck of an hourglass and determines the maximum rate of flow for the entire length. Improving the above listed factors will improve the capacity of the reconstructed segment of Route 1 in comparison to that of the superseded segment. However, unreconstructed locations, similar to the superseded segment, along the highway between Montara and Pacifica, will continue to constrain the capacity of this greater length to its present level. An updated assessment of projected traffic capacity has been included in Section 5.17-Traffic.

6. Your comment that it is appropriate to have the conceptual SWPPP prior to certification of the SEIS/R is acknowledged. Standard Caltrans procedure is to develop a conceptual SWPPP as part of the final design and a more detailed and specific SWPPP prepared by the contractor prior to construction and submitted to the Regional Water Quality Control Board. Caltrans has also agreed to incorporate into the water quality component of the project, a commitment that its Best Management Practices will attempt to treat, infiltrate, or filter stormwater from each runoff event, up to and including the 85th percentile, 24-hour event.

STATE OF CALIFORNIA
Governor's Office of Planning and Research
1400 TENTH STREET SACRAMENTO, CALIFORNIA 95812-3044
916-322-2318 FAX 916-322-3785 www.opr.ca.gov

Gray Davis
GOVERNOR

Loretta Lynch
DIRECTOR

May 18, 1999

ED PANG
State of California Department of Transportation
111 Grand Avenue
Oakland, CA 94623-0660

Subject: Devil's Slide Improvement Project (DEVIL'S SLIDE SUPPLEMENTAL EIR-SAN MATEO COUNTY)
SCH#: 83051706

Dear ED PANG:

The enclosed comment (s) on your draft environmental document was (were) received by the State Clearinghouse after the end of the state review period. We are forwarding these comments to you because they provide information or raise issues that should be addressed in your final environmental document. 1

The California Environmental Quality Act does not require Lead Agencies to respond to late comments. However, we encourage you to incorporate these additional comments into your final environmental document and to consider them prior to taking final action on the proposed project.

Please contact the State Clearinghouse at (916) 445-0613 if you have any questions concerning the environmental review process. If you have a question regarding the above-named project, please refer to the eight-digit State Clearinghouse number (83051706) when contacting this office.

Sincerely,

Terry Roberts

Terry Roberts
Senior Planner, State Clearinghouse

Enclosures
cc: Resources Agency

STATE OF CALIFORNIA
Governor's Office of Planning and Research
1400 TENTH STREET SACRAMENTO, CALIFORNIA 95812-3044
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Gray Davis
GOVERNOR

Loretta Lynch
DIRECTOR

May 14, 1999

ED PANG
State of California Department of Transportation
111 Grand Avenue
Oakland, CA 94623-0660

Subject: Devil's Slide Improvement Project (DEVIL'S SLIDE SUPPLEMENTAL EIR-SAN MATEO COUNTY)
SCH#: 83051706

Dear ED PANG:

The State Clearinghouse submitted the above named environmental document to selected state agencies for review. The review period is closed and none of the state agencies have comments. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the eight-digit State Clearinghouse number when contacting this office.

Sincerely,

Terry Roberts
Senior Planner, State Clearinghouse

State of California, OPR

1. The comments forwarded to Caltrans by OPR were from the California Coastal Commission and are included in this document.

Rural Coast Open Space Trust (RCOST)

100 Lobitos Creek Road
Half Moon Bay, CA 94019
Voice 650-726-3307 & 650-726-8497
Fax 650-726-2799

FAX: TOTAL PAGES=31

April 21, 1999

To: Robert Gross & Edward Pang for Caltrans
Robert Tally & William Wong for FHWA
From: Oscar Braun & Coastal Family Alliance
Re: Comments & Questions regarding the Devil's Slide Project EIR/EIS and Supplements 1 & 2

Please find enclosed partial copies of the "Adopted Findings On Consistency Certification" adopted April 16, 1986, Final Supplemental Environmental Impact Statement/Environmental Impact Report dated June 1995 , Appeal to the State of California First Appellate District Division Four No.A083286, and letters to the editor on behalf of Oscar Braun and Coastal Family Alliance. We respectfully have some comments and questions for Caltrans and FHWA to respond to regarding the Devil's Slide project.

I am the Co-Chair of the Coastal Family Alliance, which is made up of rural farm families and property owners in the San Mateo County Coastal Zone. We, as a rural community, support the purpose and need of a basic two lane open air highway that will provide a safe, dependable and stable State highway route that avoids the geologically unstable Devil's Slide area. The instability of the Devil's Slide and the problems with the existing roadway, including landslides and rock falls through that area , remain the same as set forth in the FEIS approved on April 16, 1986.

1. **Question: Is the purpose and need for a safe and dependable roadway the same in 1999 for the Devil's Slide project as it was in 1986?**

"A tunnel alternative was considered and rejected as part of the CEQA/NEPA environmental review process in 1986. The U.S. District Court subsequently determined that the treatment of alternatives in the 1986 FEIS was proper. Although only noise-related issues were addressed in the 1995 Draft SEIS, comments were received indicating a tunnel alternative would avoid project noise impacts. Several comments requested investigation of the tunnel option. This issue has been reviewed, and it is determined that the tunnel is not a reasonable alternative because of its inconsistency with current planning policies, the lack of funding, and various safety and cost issues." 1995 Final Supplemental EIR/EIS response 34.

2. **Question: Other than a change in the "planning policies" in 1996 by the San Mateo County Board of Supervisors changing their 1985 LCP " alternative preference" from the Martini Creek alignment to the Tunnel alternative, is not the Tunnel Freeway still not a reasonable alternative because of the lack of funding, and various unique tunnel safety and higher cost issues?**
3. **Question: Has the U.S. District Court subsequently changed it's determination that the Tunnels Freeway is in fact the Certified Consistent Alternative?**
4. **Question: Has the California Coastal Commission changed their 1986 certified findings "that the maintenance of Highway 1 as a safe and dependable highway is essential to provide agriculture dependable access to markets and transportation centers; to**

provide for recreation shore line access and recreational opportunities, as required by Section 30210 of the Coastal Act; and to ensure that the basic goals of the State for the Coastal Zone, as stated in Section 30001.5, are met ?

5. **Question: Is it not True that the CCC 1986 Certified Consistency Certification "further finds that these goals and policies can best be satisfied by a safe and dependable bypass to Devil's Slide along the Martini Creek alignment; and that the broader goals and policies and policies mentioned above must take precedence over the more specific policies contained in the Coastal Act and Local Coastal Plan?**
6. **Question: Did the CCC 1986 Certified Consistency Certification also conclude " (a) the policies of the certified Local Coastal Program which are to be CONSULTED FOR *GUIDANCE* UNDER THE CCNP, AND WHICH AUTHORIZE A TWO LANE ROAD?**
7. **Question: Does the CCC review authority and the Coastal Acts requirement to consult the San Mateo County LCP for guidance override or supercede Caltrans and FHWA authority to select, design and fund State roadways or compliance with all the requirements of CEQA/NEPA?**
8. **Question: Does the Coastal Act or LCP supercede CEQA/NEPA statues in any way?**
9. **Question: Does Caltrans and the FHWA allow Local Coastal Plan policies such as San Mateo County's "preferred Tunnel alternative" to preempt their agencies obligation to protect the health, safety and welfare of the people of the State of California?**
10. **Question:Is it TRUE that the California Department of Transportation is charged with the responsibility to design, construct, operate and maintain public roadways for the benefit of the citizens of the State of California? 10a. Is there any Coastal Zone County in the State of California where the voters control the critical decisions affection State Highway 1 ?**
11. **Question: Is it TRUE that the California Coastal Commission is charged with the responsibility to administer the Coastal Act and review land use decisions which affect the Coastal Zone of the State of California?**
12. **Question: Does the California Department of Transportation and the California Coastal Commission obligation to protect the health, safety and welfare of the people of the State of California supercede the "Preferred Tunnel Alternative" policy of the San Mateo County Local Coastal Plan when it comes to CEQA/NEPA ?**
13. **Question: How many tunnels has Caltrans built when there was a reasonable alternative?**

According to the CCC 1986 Consistency Certification, 111. "Tunnel Alternative. This alternative would entail a tunnel through San Pedro Mountain, and was suggested by the Sierra Club in 1973. This alternative was withdrawn from active consideration because the tunnel would cost an estimated $100 million. In addition, a tunnel would have to have to be 2 lanes in each direction to provide access for emergency vehicles in the event of an accident or stalled vehicle."

14. **Question: Have the costs for the Sierra Clubs tunnels gone up since 1995 EIR Supplemental?**
15. **Question: Are there still two lanes in each bore for emergency vehicle access?**
16. **Question: How many Sierra Club co-planned, co-designed and co-funded roadways or tunnels projects has Caltrans and the FHWA completed to date?**
17. **Question: Have tunnels have become safer than open air roadways in the Bay Area since 1995?**

18. Question: Do long tunnels no longer provide significant hazardous potential for catastrophic accidents within the tunnel's confined space like the 40 killed in the Mont Blanc tunnel in March 1999?
19. Question: Is it TRUE that the accident history indicates a higher actual accident rate within Bay Area tunnels and their approaches than on comparable open air highways?
20. Question: Has the $200,000 plus per month tunnel freeway maintenance cost estimate in the 1995 tunnel investigation response increased?
21. Question: The San Mateo County voter approved Tunnel concept plan did not have any bridges or fill. Is there going to be any fill in the Devil's Slide Tunnel Freeway? How much fill?
22. Question: Is the tunnel alternative fill going to be placed on wetlands in the south portal area?
23. Question: How high is the fill mountain going to be?
24. Question: How far away will the wetland fill mountain be visible?
25. Question: How many wetland acres are going to be buried with the new Sierra Madre Tunnel Freeway fill?
26. Question: The new Sierra Club Tunnel Freeway design now includes two 1100 foot bridges does it not?
27. Question: Please describe the Vistas from inside the proposed State Scenic Highway 1Sierra Club Devil's Slide Tunnel Freeway ?
28. Question: How does the CCC describe the vistas along the Martini alignment in their 1986 Adopted Finding on Consistency Certification?
29. Question: The legislative intent for State Scenic Highway 1 is a two lane roadway in rural scenic areas but isn't there a total of four lanes in the Sierra Club's Tunnel Freeway ?
30. Questions: How did the 1986 four lane, $100 million, too expensive and withdrawn Sierra Club Tunnel Freeway become the Sooner (funded), Safer and Cheaper Tunnel Freeway in 1999?
31. Question: Will the new Tunnel Freeway alternative require that the Devil's Slide project meet federal consistency program regulations and will a new or amended consistency certification be submitted to the Coastal Commission and U.S. District Court for concurrence?
32. Question: Has the Tunnel Freeway alternative been included in the current programming and planning documents of the Metropolitan Transportation Commission's (MTC), Federal Transportation Improvement Program (TIP) and in the MTC 1994 Regional Transportation Plan (RTP)?
33. Question: Does the Sierra Club's Devil's Slide Tunnel Freeway comply with the MTC's Intergovernmental Review (IGR) process?
34. Question: Isn't it TRUE that as recently as April 4, 1995, the San Mateo County Board of Supervisors reaffirmed its support for the approved and certified proposed Martini Creek alignment alternative by voting against a proposal to request that Caltrans further consider other alternative proposals such as a new tunnel?
35. Question: Is it TRUE that in 1986 the California Coastal Commission having deliberated and selected a safe and dependable roadway, the Commission found that , in view of the uncertainty of the continued funding necessary to provide a permanent solution, all efforts must be made to diligently and expeditiously process the proposed project to qualify for the presently allocated federal emergency funding which would expire in September 1986?
36. Question: Will Caltrans diligently and expeditiously seek funds to construct the fully processed and certified EIR Martini Creek alignment alternative?

37. Question: How many rock slides does Caltrans record's indicate have occurred affecting Highway 1 in the Devil's Slide area south of the south portals of the proposed Sierra Club's Tunnel Freeway alternative?
38. Question: Based on the recurring experiences with the closure of Highway 1 at Devil's Slide and its demonstrable adverse impacts on the social and economic well-being of the residents of the San Mateo Coastside, has the Coastal Commission and Caltrans endeavored to find and select a permanent solution to the unstable condition of Highway 1 at Devil's Slide as a matter of the HIGHEST PUBLIC PRIORITY?

The Coastal Family Alliance asks the California Department of Transportation and the Federal Highway Administration to please place their mandated obligation to protect the health, safety and welfare of the people of the State of California before the anti-coastal access agenda of the Sierra Club. The Sierra Club's fourteen year campaign of politics without principles has blocked Caltrans from constructing a safe and reliable roadway that avoids the geologically unstable Devil's Slide area and has caused great social and economic hardship on the San Mateo County Coastside residents.

Rural Coast Open Space Trust

Visual simulations of portal entrances, fill height, bridge structures, re-vegetation efforts and approach roads were available for public review at the April 27, 1999 public hearing. These technical reports are also available for review at Caltrans District 4 offices located at 111 Grand Ave. in Oakland. It is impractical to describe all of the subtle visual changes that may take place as a result of the project, and we recommend your review of the visual assessment. Copies of the 1986 environmental documents referenced in the 1999 SSEIS/EIR are also available for review.

1. The purpose and need of the project is to provide a safe, dependable and stable State Highway route to bypass the geologically unstable area of Route 1 at Devil's Slide in San Mateo County.

2. Based upon the results of "The Devil's Slide Tunnel Study" (Woodward-Clyde Consultants, 1996) and the updated cost estimates for the revised Martini Creek alignment alternative, FHWA and Caltrans determined that a tunnel alternative was, in fact, a reasonable alternative that should be fully evaluated in the environmental process. A description of the project funding is included in Section 3.1.2. Safety and design characteristics of the tunnel are described in the Devil's Slide Tunnel Study Feasibility Report.

3. Your comment is unclear. There is no alternative identified as the "Tunnels Freeway" in this environmental document.

4. The need for a dependable highway has not changed since 1986. Regarding the 1986 finding by the Coastal Commission, those sections of the Coastal Act, which you reference, are still applicable to the proposed project. The finding you referred to on page 22 of the 1986 Consistency Certification apply to the Martini Creek alignment.

5. The Coastal Commission Consistency Certification in 1986 regarding the Martini Creek alignment would be specific to that alternative. The current Consistency Certification for the preferred tunnel alternative was evaluated and considered the policies and statutes of both the Coastal Act and the County LCP.

6. The Commission did conclude in their findings (page 21) that the certified Local Coastal Program would be consulted for guidance.

7. The statutory authority of the Coastal Commission does not override or supercede Caltrans and FHWA authority and responsibility regarding the "selection, design, and funding" of state highway projects nor does it relieve the lead agency of any Federally funded project from complying with the requirements of CEQA or NEPA.

8. See preceding response.

9. Local coastal plan policies do not "preempt" Caltrans or FHWA "obligations to protect the health, safety, and welfare of the people of the State of California."

10. Caltrans is responsible for the state highway system including design, construction, operations, and maintenance. The "voters" of counties located in the coastal zone do not "control" critical decisions affecting the State highway system, however public input and local planning is recognized and considered.

11. The Coastal Commission's responsibilities and authority are detailed in the California Coastal Act.

12. The obligations of the two state agencies and the results of local planning processes and decisions are entirely different issues and one does not supersede the other "when its comes to CEQA/NEPA."

13. When Caltrans has built tunnels in the past, they were warranted.

14. We do not refer to the tunnel alternative as the "Sierra Club" tunnel. Cost estimates for both the tunnel alternative and the Martini Creek Alignment Alternative have been updated. See Sections 3.1 and 3.2.

15. The preferred tunnel alternative (variation "A") is a 4,000 foot long double bore facility with one lane in each direction.

16. Caltrans and the Sierra Club do not design tunnels together.

17. A review of Bay Area tunnels is inconclusive with regards to comparing accident rates between tunnels and open-air roadways. The accident rates are higher in some tunnel roadways and lower in others. However, over the years, there have been improvements in the operating systems of Bay Area tunnels such as lighting and communication systems. This has improved the safety of Bay Area tunnels.

18. The tunnel alternative will provide no significant hazards potential for catastrophic accidents. Unlike the Mont Blanc tunnel, it will have a state of the art lighting and ventilation system and two bores (each bore with one way traffic and shoulders on both sides) approximately 0.8 miles in length. The Mont Blanc tunnel is a single bore tunnel with two lanes and two-way traffic, no shoulders, and is 7.2 miles in length. In addition, as stated in the 1983 FHWA – RD-83-032 entitled *Prevention and Control of Highway Tunnel Fire,* "Fire statistics indicate that highway tunnels are safer than open roads." The design of the Tunnel alternative will be in compliance with National Fire Prevention Association (NFPA) 502, (2001), which is a more recent standard intended to improve vehicular tunnel safety.

19. No. Based on accident data reflecting the last five years, there are situations where accident rates are lower in Bay Area tunnels and approaches than on open air highways. Therefore, tunnel roadways do not necessarily contribute to higher accident rates.

20. The $200,000 monthly maintenance cost represents the higher end estimate for the Tunnel alternative. This estimated cost was based on other on-site 24-hour maintenance facilities.

The tunnel alternative will incorporate the latest in design standards and technology to reduce maintenance requirements. Therefore, the estimate provided is considered representative of the cost necessary to maintain the tunnel facility.

21. Any tunnel consistent with Measure T would necessarily require bridges and/or fill as was recognized by the California Coastal Commission in its certification of Measure T as consistent with the Coastal Act. Furthermore, the Woodward Clyde Tunnel Feasibility Study identified a fill option as well as a bridge option for the tunnel project. There will be minimal fill associated with the roadway construction; however, the excavated material from the construction of the tunnel project will be placed in the designated disposal area as engineered fill.

22. The tunnel alternative will result in fill in wetlands in the south portal area. See Section 5.12 for more detailed information.

23. The fill in the south disposal area is expected to reach 90 m (295 feet) in height.

24. The south disposal site is a coastal scrub-covered valley tucked inland of the coastal bluffs. The fill material will be contour graded to match the adjacent hillsides and re-vegetated to blend with the surroundings and therefore is not expected to be visible from long distances.

25. Your comment referencing the "Sierra Madre Tunnel Freeway" is unclear.

26. We do not refer to the tunnel alternative as the new Sierra Club Tunnel Freeway. As noted in Figure 3-2, the tunnel alternative does include two bridges, each approximately 1000-feet in length to span the valley at Shamrock Ranch.

27. Obviously there would be no vistas inside the tunnel.

28. A copy of the Consistency Certification-No. CC-45-85 adopted by the Coastal Commission can be obtained by contacting the Commission directly.

29. As noted in response #15, the tunnel alternative has one lane in each direction.

30. The tunnel proposed by the Sierra Club in 1973 was considered and withdrawn from active consideration in the 1984 Draft EIS. While at that time, the estimated cost of the tunnel substantially exceeded the cost of the Martini Creek Alignment alternative, subsequent changes in the alignment and design, new technology, and additional environmental considerations have now made the tunnel a reasonable alternative to the Martini Creek Alignment.

31. Any alternative selected must meet Federal Consistency Determination requirements. On October 10, 2000, the Coastal Commission concurred with the consistency certification submitted for the tunnel alternative and found the Devil's Slide Tunnel to be consistent with the California Coastal Management Program.

32. The Devil's Slide project is included in the current TIP and RTP.

33. Your comment is unclear and confusing. The IGR is a process for review of projects by governmental agencies. It is not something which requires "compliance" by a project.

34. With regards to any actions on this issue in 1995 by the San Mateo County Board of Supervisors, note that Measure T was approved by the San Mateo County electorate in November 1996.

35. Any funding deadlines cited in the 1986 Consistency Determination would no longer apply to the current project.

36. The Martini Creek Alignment Alternative is not the current preferred alternative.

37. The periodic "rock slides" that you refer to are generally considered to be minor events that are routinely cleaned up by Caltrans maintenance crews.

38. We believe that any of the reasonable alternatives considered for this project, including the tunnel alternative, represents a permanent solution to the unstable condition at Devil's Slide and we also understand its priority to the public.

"Change is inevitable...
Survival is not."

Via Certified Mail

April 29,1999

To: Robert Gross & Edward Pang for Caltrans
Robert Tally & William Wong for FHWA
From: Oscar Braun & Coastal Family Alliance
Re: Comments & Questions regarding the Devil's Slide Project EIR/EIS and Supplements 1 & 2

I don't know who said **"The more things change, the more things stay the same!"** but I think they got it right. And the Coastal Family Alliance thinks that the California Department of Transportation and the U.S. Department of Transportation Federal Highway Administration **got it right in their June 1995 Final Supplemental EIS/EIR.**

"A tunnel alternative was considered and rejected as part of the CEQA/NEPA environmental review process in 1986. The U.S. District Court subsequently determined that the treatment of alternatives in the 1986 FEIS was proper. Although only noise-related issues were addressed in the 1995 Draft SEIS, comments were received indicating a tunnel alternative would avoid project noise impacts. Several comments requested investigation of the tunnel option. This issue has been reviewed, and it is determined that the tunnel is not a reasonable alternative because of its inconsistency with current planning policies, the lack of funding, and various safety and cost issues." 1995 Final Supplemental EIR/EIS response 34. 1

The good citizens of San Mateo County may have had a "change of policy preference" in 1996, but the statutory and judicial guidelines embodied within CEQA/NEPA remain the same today as they did in 1995. **It is not reasonable to replace the Martini Creek Alignment Alternative with a Tunnel Alternative that is significantly more hazardous and costly to build and maintain.** Caltran's Mr. Harry Y. Yahata may prefer to bend in the direction of the local political whims of San Mateo County but his fiduciary duty is to comply with the CEQA/NEPA statutes and protect the health, safety and welfare of all Californians.

I have enclosed a California Supreme Court ruling that I feel offers a great deal of support for the the findings that Caltrans and FHWA have concluded in their Devil's Slide EIS/EIR and Supplemental 1& 2. The case is Citizens of Goleta Valley vs Board of Supervisors of Santa Barbara County. The fine citizens of Goleta had some strong opinions as to where to place the Hyatt hotel in the coastal zone. CEQA provides clear guidelines for what is a feasible and reasonable alternative. The SOC/CATS challenged the 1986 Devil's Slide EIS/EIR and your agencies where upheld by the U.S. District Court. **The SOC/CATS have NOT produced a factual and reasonable findings for their determination that the Tunnel is a Safer and Cheaper alternative**. The Record of Decision in 1999 should be the same as in 1995.....The Martini Creek Alignment is Sooner, Safer and Cheaper! 2

We welcome all responses to the Coastal Family Alliance comments. Thanks again for the time and courtesy you extended John Plock and myself at your offices yesterday.

Sincerely,

Oscar Braun
Executive Director

SAVEOURBAY.ORG 1589 HIGGINS CANYON RD. HALF MOON BAY, CA 94019 PH 650-599-1954 FAX 650-726-2799

Coastal Family Alliance

1. Caltrans and FHWA are fully cognizant of, and are in compliance with their respective obligations under CEQA and NEPA. The costs and impacts of these alternatives under consideration are fully detailed in the 1986 FEIS, the 1995 FSEIS and this document.

2. The basis for the identification of the tunnel alternative as the preferred alternative is outlined in this document. SOC/CATS (Save Our Coast/Citizen's Alliance for the Tunnel Solution) was not a party to the litigation filed in 1986 regarding the proposed project.

THINK TUNNEL
VOTE TUNNEL
BUILD TUNNEL

Mr. Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
PO Box 23660
Oakland, CA 94623-0660

11 May 1999

Dear Mr. Gross,

It is with pleasure that I address to you comments on the Draft Supplemental Environmental Impact Statement for the tunnel at Devil's Slide. It has taken many years to identify an acceptable permanent solution for Highway 1 at Devil's Slide, but most in our community agree that it has been worth the wait. The tunnel will provide an elegant transportation solution which preserves the environmental integrity of our unique coastside communities.

On behalf of Citizens for the Tunnel, the grassroots committee which worked to pass the Devil's Slide Tunnel Initiative (Measure T) in 1996, I offer the following specific comments:

- We are in full support of tunnel Design Variation A with maintenance of existing Highway 1 for bicycles and pedestrians. We offer no objections to cyclists wishing to ride on the shoulder inside the tunnel, but as you well know, the community has always been opposed to dedicated bike/pedestrian lanes inside the tunnel. Measure T states specifically that "*a separate trail for pedestrians and bicycles shall be provided outside the tunnel* (Policy 2.50b). 1
- Section 5.1 Aesthetics-South Portal Area (pg. 43) addresses the south disposal area but fails to address the potential impact of this fill on the proposed extension of the California Coastal trail. During a 1998 visit to the tunnel site with various community representatives and with Dennis Bosler and Ed Pang of Caltrans, this trail linkage was identified and it was verbally agreed that the south disposal site could be constructed so that this vital trail linkage would be left intact. Discussion of this important environmental impact is absent from the current draft and should be included in the final Environmental Impact Statement. 2
- The aesthetics of the tunnel portal design is important to the communities living to the north and to the south of the proposed tunnel. We request that a Design Review Committee comprised of community representatives be convened to review the aesthetics of all tunnel portal design proposals. 3
- Because representatives from our coastal communities are committed to ensuring that the tunnel project is completed in a timely manner, we request that the Devil's Slide Coordinating Meetings with San Mateo County and Caltrans representatives continue to occur on a regular basis. 4

Thank you for your hard-work and diligence on the Devil's Slide Improvement Project. We are gratified by your responsiveness to the passage of Measure T in 1996 and we look forward to that day, in the not so distant future, when we shake hands over a job well done.

Sincerely,

Zoe Kersteen-Tucker
Citizens for the Tunnel

Sponsored by: SOC/CATS

Save Our Coast/Citizen's Alliance for the Tunnel Solution
P.O. Box 371296, Montara, CA 94037 (415) 737-1813
Paid for by SOC/CATS Treasurer: Robert Young Campaign ID# 960167

Save Our Coast-Citizen's Alliance for the Tunnel Solution

1. Your comments supporting tunnel design "variation A" and opposing a separate and dedicated bicycle access inside the tunnel are acknowledged.

2. During construction of the tunnel alternative, trail access will be maintained by means of trail detours. Currently there is no formal California Coastal Trail designation within the project area but we are aware that the existing section of State Route 1 has been suggested as an ideal segment of the Coastal Trail after it has been relinquished and is no longer used as a highway. Alternative grading plans will be considered to determine the feasibility of preserving existing trails. If it is not feasible to avoid affecting the existing trail, it will then be reconstructed around the affected area and reconnected to restore continuity. Extension of the current trail or major expansion of the trail system is beyond the scope of this project.

3. A Devil's Slide Tunnel Aesthetics Committee, comprised of representatives from the City Councils of Pacifica and Half Moon Bay, the Midcoast Community Council and the San Mateo County Board of Supervisors, was developed to provide the opportunity for community input regarding aesthetics issues.

4. Devil's Slide Coordination meetings will be continued as needed.

Pacifica Land Trust

P. O. Box 988
Pacifica, CA 94044

May 5, 1999

Mr. Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA. 94623-0660

Re: Pacifica Land Trust Response to Devil's Slide Improvement Project Draft Second Supplemental Environmental Impact Statement

Dear Mr. Gross:

Thank you for this opportunity to respond to the draft DEIS for the Project. Our purpose in responding to the Statement is to register our concern regarding the exacerbation of a safety problem for San Pedro Point Headlands Project and in turn, a problem for the Devils Slide Project. The Headlands project is an approximately 250 acre public property purchased with ISTEA and Coastal Conservancy grant funds for Open Space Park purposes and is located at the north end of the project. We were very surprised the safety issue was not mitigated after spending months at the project meetings organized by Supervisor Gordon's office, meeting with Caltrans' staff at multiple field meetings and being verbally promised otherwise. Furthermore, we were also disappointed that the property was not recognized in the parklands section of the statement.

As background information, the Pacifica Land Trust negotiated the purchase of the Headlands property, now owned by the California State Coastal Conservancy and City of Pacifica. It is intended to be open to the public as open space parklands. We remain the interim manager of the property. The San Pedro Point Headlands Project enjoyed broad political support and is a part of the National Parks System Golden Gate National Recreation Area, boundary expansion area.

Based on the foregoing information, we feel the Draft EIS is inadequate and offer the following comments:

- The draft EIS should include and discuss the San Pedro Headlands property in the Parklands section, including its potential for future, more intense parkland development and use. As noted, the Headlands property was purchased with ISTEA funds based on its location and relationship to an existing scenic highway corridor. The impacts of the proposed project on this relationship should be discussed as well as the opportunities to mitigate any adverse impacts. 1

- The present access to the Headlands property is on a blind curve off existing Highway One and represents an existing safety hazard, which is not mentioned in the draft document. With the construction of the proposed tunnel project, that access will be located approximately 100 feet north of the approach to the southbound north portal and may represent an even greater hazard, especially with future parkland development and the resulting increase in visitor traffic. The draft EIS contains no discussion of this access. The document also does not discuss the proposed cul-de-sac to be constructed on a stub of existing Highway One and the cul-de-sac's connection with the northern approaches to the tunnel. The document should be revised to address the location of the San Pedro Headlands access in terms of the proposed project and should also consider various means to mitigate the safety issue through the relocation of the Headlands access or other measures as a part of the tunnel project. 2 3

Thank you for your consideration of these comments. We are available to discuss any of these issues and to make available any and all applicable information we may have.

Sincerely,

Arlene M. Patton
Board of Directors

Cc: David Carmany, City Manager
City of Pacifica
170 Santa Maria Ave.
Pacifica, CA 94044

Christopher Kroll, Project Manager
California State Coastal Conservancy
1330 Broadway Suite 1100
Oakland, CA 94612-2530

Supervisor Rich Gordon
San Mateo County Board of Supervisors
455 County Center
Redwood City, 94063

Pacifica Land Trust

1. A discussion of the San Pedro Point Headlands properties has been included in this final environmental document. Please see Section 5.14 Parkland and Recreational Areas.

2. Access to the San Pedro Point Headlands is provided by a gated dirt road connecting to existing Route 1 approximately 200 feet from the northern approach to the project area. This existing access will not be affected by this project nor will the existing physical and operational conditions be altered.

   The tunnel alternative will have a new alignment for the roadway approach to the north portal. This new roadway approach will provide benefits in the form of improved sight distance because the new northbound alignment will be southerly of the current alignment and thereby will allow improved visibility and a more expansive view of what is ahead (including the driveway access) as opposed to the limited sight distance currently available due to the existing curve in the road. Sight distance will also be improved because the bridge and roadway will be "super-elevated" or banked. Motorist departing from the driveway access will have greater visibility of traffic approaching from the south.

   Caltrans is available to review and discuss any modifications to the highway, including the proposed relocation of the access southerly of the existing location, and can offer input and possible suggestions on the proposal which will require adherence to highway design standards. Any work within Caltrans right of way will require an encroachment permit.

   Accident records indicate that from the period January 1999 through December 2000, there were no accidents associated with vehicles entering or leaving the San Pedro Point Headlands access point on Route 1.

3. Final design and operational details of the cul de sacs and connections to the tunnel will be developed in consultation with the County of San Mateo and with input from GGNRA.

CALIFORNIA ASSOCIATION OF BICYCLING ORGANIZATIONS
HEADQUARTERS: P.O. BOX 2684 DUBLIN, CALIFORNIA 94568

Please reply to: Alan Wachtel
3446 Janice Way
Palo Alto, CA 94303-4212
(650) 494-1750
Wachtel@aol.com

7 May 1999

Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA 94623-0660

Dear Mr. Gross:

CABO, the California Association of Bicycling Organizations, is a nonprofit group of clubs and individuals dedicated to the improvement of conditions for all cyclists in California. For over 25 years, CABO has worked with Caltrans and other executive agencies, the Legislature, and local governments to provide a better bicycling environment in the state. These are our comments on the 1999 Draft Second Supplemental Environmental Impact Statement and Report (DSEIS/R) for the Devil's Slide Improvement Project.

We believe that two forms of bicycle access are essential: the existing Highway 1 alignment and a shared tunnel roadway (design variation A).

Outside the Tunnel

The 1996 Devil's Slide Tunnel Initiative, Measure T, as incorporated in the Local Coastal Program, requires a separate trail for pedestrians and bicycles outside the tunnel. The current Highway 1 alignment, of course, is a popular recreational route and forms part of the official state Pacific Coast Bicentennial Bike Route. San Mateo County Resolution No. 61060 identified this existing right-of-way as the county's preferred bicycle facility alignment.

We agree that this existing alignment, which according to the DSEIS/R Caltrans will relinquish to the County of San Mateo to own, manage, maintain, and operate, or to transfer to a public recreational agency, is the best choice for recreation and long-distance touring. But it is important to bear in mind that "There is a high probability that a seismic event of sufficient magnitude will eventually occur and result in permanent closure of the existing roadway" (§3.3, "No Project Alternative"), and that no alternative alignment has been found.

Inside the Tunnel

The DSEIS/R at times seems to treat bicycle access inside and outside the tunnel as mutually exclusive. Thus "Tunnel variation B provides for a separated pedestrian and bicycle access inside the tunnel, while variation A provides a pedestrian/bicycle path outside the tunnel" (§3.1.1, "Design and Cost"). But variation B might perfectly well provide bicycle and pedestrian access outside in addition to inside the tunnel. This variation, however, appears to conflict with the provision of Measure T that no nonmotorized facilities be constructed within the tunnel (perhaps because of fears that increased cost would impede tunnel funding and construction, or that these facilities might in time be converted to growth-inducing extra lanes).

Variation A is therefore preferable, and this variation, which provides a path along the existing alignment outside the tunnel, should likewise not be construed as thereby precluding bicycle access inside the tunnel. While the tunnel offers no fresh air, sunlight, scenery, or views, it does provide a direct route with a gentle grade for transportational bicycling. On this subject the DSEIS/R says:

> It was decided to incorporate into the project design the placement of informational/directional signs directing bicyclists to use the existing highway rather than the tunnel. In the absence of any ban or restrictions (which would need to be initiated by local government), some bicyclists may still choose to ride with vehicular traffic through the tunnel. (§3.1.1, "Design and Cost")

The proposed 8-foot shoulders are ample for bicycling through the tunnel, and, because they are not bicycle facilities, would not conflict with Measure T. But insofar as the DSEIS/R refers to "directing" bicyclists not to use the tunnel, or to a possible local ban or restriction, it is potentially misleading. So is the related statement that "One issue still under consideration as part of the proposed tunnel project is whether or not bicycle travel will be restricted through the tunnel" (§5.2, "Air Quality"). Although there are no known plans for local government to institute any ban or restrictions, it is important to note that neither Caltrans nor the County has the authority to regulate bicycle traffic through the tunnel.

Relevant California and Federal Law

The powers of local authorities to regulate traffic are strictly limited to those expressly granted by the Legislature (Vehicle Code §21). Under these powers, local authorities may prohibit bicycles only from freeways to which all rights of access have been acquired (§21960(a)). Caltrans has equivalent power (plus authority over toll bridges, which is not applicable to the tunnel). By the terms of the Coastal Act, Route 1 must remain a two-lane scenic highway, not a freeway.

Local authority to prohibit the use of particular highways by certain vehicles (§21101(c)) and to regulate vehicular traffic in subways, tubes, and tunnels (§21109(a)) are not relevant, because bicycles are not considered vehicles under California law (§§231, 670). Under §21200(a), operators of bicycles are generally subject to provisions that apply to drivers of vehicles. They therefore share in laws that apply to all vehicular traffic, but this section confers no authority to

regulate bicycles selectively. There is no doubt, however, about the ability of local authorities to restrict pedestrians from tunnels (§21109(a)).

The Vehicle Code definition of freeway is less restrictive than the conventional one, requiring only controlled access, not division or grade separation. But if the tunnel and its approaches happen to satisfy this definition, other equally effective statutory provisions would come into play. Streets and Highways Code §888 prohibits Caltrans from constructing a freeway that severs or destroys an existing major route for nonmotorized traffic, unless it provides a reasonable, safe, and convenient alternate route, or one exists. There is an analogous federal law (23 U.S.C. §109(n)). The existing alignment would not qualify as such an alternative, because its long-term availability cannot be assured.

Bicycling in Tunnels

The safety of bicyclists in the tunnel should not be an issue. Bicycles are allowed on over a thousand miles of California freeway shoulders, even in some urban areas, where traffic speed and volume greatly exceed what is expected in the Devil's Slide Tunnel. In San Mateo County, for instance, bicycles have been permitted on Interstate 280 between Trousdale Drive and Millbrae Avenue since 1978. 1

Bicycles are also permitted in many highway tunnels in California and elsewhere without incident. The following list is illustrative, not inclusive (tunnel length is shown where known): Collier Tunnel (1886 ft) on Route 199 in Del Norte County; Baker-Barry Tunnel (2364 ft) in Marin County; Broadway Tunnel (1850 ft) in San Francisco; Gaviota Pass Tunnel on Route 101 in Santa Barbara County; Second Street (1734 ft), Sepulveda Boulevard, Malibu Canyon, and Kanan and Kanan-Dume Road Tunnels in Los Angeles County; all tunnels in Oregon (most on two-lane roadways with 26 to 30 feet of pavement), except one on a freeway closed to bicycles in the Portland area; and many tunnels in Europe, at least one as long as 17 km.

Conclusion

The DSEIS/R should acknowledge that bicyclists would have access to the tunnel, and the tunnel should be designed accordingly. For instance, the DSEIS/R distinguishes different CO limits and number of jet fans for designs with and without nonmotorized facilities (§3.1.3, "Tunnel System Operations"). Since bicycles will have a legal right to use the tunnel, proper ventilation should be provided in all designs. 2

Sincerely,

Alan Wachtel

Alan Wachtel
Government Relations Director

California Association of Bicycling Organizations

1. Since this segment of Route 1 is a conventional highway, bicycles will not be prohibited from using the tunnel.

2. Bicyclist will have access to the tunnel and the ventilation system will be designed accordingly.

SIERRA CLUB
FOUNDED 1892

May 10, 1999

Mr. Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA 94623-0660

Dear Robert:

Thank you for the opportunity to comment on the Draft Second Supplemental Environmental Impact Statement/Report for the Devil's Slide Improvement project. We are extremely pleased that Caltrans has responded to the tremendous public acceptance of the tunnel alternative in November 1996 with a document that supports our contention that a tunnel represents the most environmentally sound alternative for solving the longstanding problems of Highway 1 at Devil's Slide. The work undertaken by Caltrans over the last 2 ½ years with the community and our elected officials to move forward the environmental review of the tunnel solution is deeply appreciated. 1

One aspect of the DSEIR does, however, cause us concern. We have reservations regarding the characterization of the environmental impacts of the Martini Creek Alignment Alternative in the document. Our understanding has been that since the passage of Measure T in 1996 and adoption of language recommended by that act in the San Mateo County LCP, the primary objective of preparing a SEIR was to move forward expeditiously with consideration of a tunnel. We understand that until adoption of a Record of Decision by the FHWA the Martini Creek Alignment Alternative remains the project of record. However we are disappointed that the problems with the inland bypass alternative were not drawn out more directly in this SDEIR, and for that reason we have commented on the inadequacies with the SDEIR's consideration of the environmental impacts of the inland bypass project. In our opinion, a clear rejection by Caltrans of the Martini Creek Alignment Alternative as a potential project based on the environmental impacts we identify would suffice in place of the extensive additional review and comment we feel would be appropriate if the inland bypass project remains as represented in this DSEIR. 2 3

The following comments relate to the Martini Creek Alignment Alternative:

- **Endangered Species.** The analysis of impacts to endangered species habitat for the Martini Creek alignment alternative is inadequate in that it fails to quantify the impact of siltation from construction, landslide and ongoing erosion of disturbed terrain on the population of Steelhead Trout in San Pedro Creek, now listed as Threatened by the National Marine Fisheries Service. Despite the recent designation, the DEIR states in respect to environmental impacts of the Martini Creek alignment alternative: 4

  "No mitigation is currently proposed for this alternative other than that included in the 1986 FEIS (pp. 136-138)."

Loma Prieta Chapter 3921 East Bayshore, Palo Alto, CA 94303 TEL: (650) 390-8411 FAX: (650) 390-8497

Given the magnitude of environmental impacts to the San Pedro Creek watershed presented by the Martini Creek bypass alternative, it is impossible to project the mitigation cost in any meaningful way. Consequently, the estimate of cost presented in the DEIR for the Martini Creek bypass alternative is fundamentally flawed and grossly underestimated. 4 5

- **Construction Impacts.** The run-off and siltation impacts from construction of the inland bypass are represented as short-term. The DEIS does not consider additional information which has become available since the 1986 Final EIS regarding the instability of the area, and the susceptibility of the area to debris-flows and landslide. The risk of the revegetation plan failing to adequately mitigate construction impacts must be re-evaluated considering new information compiled by the U.S. Geological Survey and presented as Map of Debris-Flow Probability, San Mateo County, California, by Robert K. Mark, Miscellaneous Investigations Series, 1992. 6 7

- **Noise Impacts.** The soundwalls proposed as mitigation in the first Draft Supplemental EIR in March 1995 were strongly objected to and deleted from the first Final SEIR. Nevertheless, the noise impacts to the park remain, and effective mitigation has not been identified. 8

- **Other Parkland Impacts.** Referring to the McNee Ranch Addition to Montara State Beach, the DEIS states:

  "The park was acquired by the California Department of Parks and Recreation in 1983 with the stipulation that planning and development of the park would not conflict with the realignment of State Route 1 inland around Devil's Slide." 9

  This statement completely mischaracterizes the agreement between State Parks and Caltrans at the time of acquisition of the parkland, and ignores the enormous impacts that the Martini Creek Alignment Alternative would have on the park. We refer you to our comment letters to the 1986 FEIS and the 1995 SEIS/EIR on noise impacts for additional detail.

The following comments relate to the comparison of the tunnel and Martini Creek alignment alternatives:

- **Air Pollution, Vehicular.** The DEIR inadequately evaluates the differences in air pollution resulting from the different alternatives. The document states:

  "The proposed tunnel project does not add any additional capacity beyond that of the Martini Creek alignment alternative project and since neither build alternative increases roadway capacity nor moves the roadway closer to receptors, there will be no violation of the State or Federal CO standards". 10

  This statement ignores the significant difference in air pollution generated by the alternatives: the Martini Creek bypass which would route traffic over a significant grade, vs the tunnel alternative, which eliminates that grade change. The DEIR should describe the quantitative difference between the alternatives in terms of fuel consumption, carbon monoxide, ozone, small particulates, and oxides of nitrogen.

- **Section 5.17 Traffic.** (pg. 89) Contrary to the conclusion of this document, the traffic patterns as presented and interpreted by the 1986 Final Environmental Impact Statement (FEIS) are no longer valid. The FEIS concluded that the majority of traffic demand from the San Mateo midcoast would be for travel via Highway 1, passing though the project area at Devil's Slide. In fact the trend has been just the opposite—the traffic demand on Highway 92, the only other major access corridor, has far surpassed traffic on Highway 1, a fact implicit in the current project to add continuous uphill passing lane to Highway 92 west of Highway 35, and supported by traffic volume records. In 1994, the distribution of traffic between Highway 1 and Highway 92 was 30% and 70% respectively. This trend toward utilization of Highway 92 materially affects the buildout traffic volumes projected for Highway 1. 11

- **Section 5.4 Consistency with Local and Regional Plans.** Design Variation B of the Tunnel alternative is inconsistent with the San Mateo County certified LCP, which permits "construction of a tunnel for motorized vehicles only", and states that "A separate trail for pedestrians and bicycles shall be provided outside the tunnel" (LCP Policy 2.50b). While the DEIR states that, irrespective of the final tunnel design selected, the old alignment of Highway 1 is to be maintained for pedestrian and bicycle use, Design Variation B goes on to provide facilities inside the tunnel dedicated exclusively to the use of bicycles—and is therefore inconsistent with the San Mateo County LCP. 12

The following comments relate to the Tunnel alternative:

- **Growth-Inducing Impacts.** The SEIS fails to identify the growth-inducing impacts of tunnel Design Variation B, alternative calling for 36' diameter tunnels. The potential for growth-inducement lies in the ease with which the 36' tunnel bores could be re-striped and immediately used as a four-lane tunnel, in violation of the California Coastal Act provisions restricting Highway 1 in rural areas to a two-lane scenic highway. The rationale for its consideration relates to bicycle safety, however comments from the cycling community have been extremely negative concerning the precedent of prohibiting bicycle traffic from the regular vehicular traffic lanes and instead providing a separate bike lane within the tunnel. Given the clear opposition presented by the bicycle community to a separate bike line in the tunnel, the action taken by the San Mateo County Board of Supervisors in passing Resolution #61060, and the provisions of the LCP as it pertains to the specifications of the tunnel, it is incumbent on CalTrans to adequately address the growth-inducing impacts of tunnel Design Variation B. 13

- **Ingress/Egress for Adjoining Properties.** The Devil's Slide Promontory is one of the 6 private properties referenced by this document which would be affected by the tunnel alternative. It is in a critical location in terms of providing safe travel for pedestrians traveling on the old alignment. No discussion is made of the alternatives for resolving the legal requirement to continue ingress/egress to this and similarly situated private properties. 14

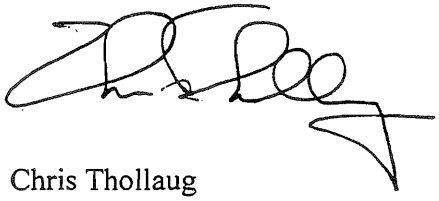
- **Pedestrian Safety.** There is no presentation of alternatives for how to get northbound pedestrians over to the old alignment, identified in the SEIS document as providing 15

pedestrian and bicycle access, as required by Measure T and the subsequent LCP amendment certified by the California Coastal Commission.

- **Revegetation Plans**. The discussion of the revegetation and mitigation of construction impacts is inadequate. A "plant establishment period" of ten years is referred to, but no details are provided of that plan. 16

Again, thank you for the opportunity to comment. We strongly support construction of the Variation A tunnel design, and look forward to working with CalTrans to implement this solution at Devil's Slide.

Sincerely,



Chris Thollaug
Chair, Devil's Slide Task Force
Vice-Chair, Executive Committee

Sierra Club-Loma Prieta Chapter

1. Comment noted.

2. The tunnel design variation "A" is identified as the preferred project alternative. However, for the purposes of NEPA and CEQA, the Martini Creek Alignment alternative has continued to be considered as a reasonable alternative.

3. Your opinion that the Martini Creek alignment alternative should be rejected is acknowledged.

4. While we agree that a full analysis of impacts to the Steelhead Trout would require additional studies, we believe that adequate information has been provided to make meaningful, qualitative comparisons between the alternatives.

5. Despite the fact that the Steelhead Trout designation is recent, concerns regarding siltation, landslides, and erosion have always been addressed in the environmental analysis of the Martini Creek Alignment alternative. There would be no required mitigation for Steelhead Trout with the Tunnel Alternatives. For the Martini Creek Alignment alternative, there would be significant grading in the Willow Brook area that would likely require mitigation for impacts to Steelhead Trout. While the costs of such mitigation have not been estimated, such costs would only increase the estimated cost of the Martini Creek Alignment alternative and such an increase is not a factor in the identification of the preferred alternative.

6. During the design phase of the project, all relevant information, including the U.S.G.S. Map of Debris-Flow for San Mateo County will be considered with regard to construction impacts and appropriate mitigation measures.

7. As a contingency, re-vegetation contracts span a period of years to ensure sufficient time to establish and nurture native plantings. Following planting and irrigation, a 5-year period for maintenance and/or plant establishment is to provide for a continuance of care for the plants. Typically, major mitigation or re-vegetation plans include 3 – 5 years of plant establishment. In the event that some of the planted areas are not successful, re-planting would be implemented for those areas identified as not successful. Once plant establishment is successfully achieved, a monitoring plan of 5 years would be implemented to measure the growth and success rates of the re-vegetated areas.

8. Existing noise levels within McNee Ranch State Park will not be affected by the tunnel alternative and therefore no mitigation/abatement is required. Impacts of the Martini Creek alignment alternative have been adequately addressed in this and previous environmental documents.

9. Section 5.14 has been renamed Parkland and Recreational Areas and the text has been revised substantially. The statement referenced in your comment is not included in the current text for this section.

10. The air quality analysis was prepared in compliance with applicable laws, regulations and policies. Essentially, the only requirement is to determine if a given alternative will cause an exceedance of state or federal air quality standards. None of the alternatives would cause violations of those standards. The project is included in the current approved RTP and TIP and therefore is found to be in conformity as required by the Clean Air Act and its amendments. No further studies are warranted.

11. Section 5.17 Traffic has been expanded to include more current traffic information.

12. Since this is a conventional highway, bicycles will not be prohibited from using the tunnel. For safety purposes, Variation "B" provides a separated pedestrian and bicycle access to protect the users from high-speed vehicular traffic within an enclosed space.

13. The tunnel alternative variation "A" is identified as the preferred project alternative in this Final EIR/EIS. Caltrans disagrees with the opinion that Variation "B" is growth inducing.

14. Any legal requirements to provide access to any private properties will be maintained.

15. Signed crossings between the northbound lane of Route 1 and the superseded highway will be installed to provide visible notification and warning to motorists of crossing bicyclists and pedestrians. Final design and operational details of the bicycle path, cul de sacs, and connections to the tunnel approaches will be developed in consultation with the County of San Mateo.

16. Temporary construction impacts would be mitigated by re-vegetation of the areas impacted. The risk of failure is minimized by the application of accepted and proven re-vegetation techniques recognized by professionals in this field.

    (a) In construction areas, the limits of clearing and grubbing and the areas to be impacted are to be delineated and identified or flagged to keep equipment within the zone of construction. Re-vegetation would begin at the completion of construction after equipment has been removed from the site.

    (b) In locations on hillsides, these efforts would include (but not limited to) scarification of soil in the areas compacted by equipment, or ripping if necessary. These methods allow soils to return to a non-compacted condition in order to promote plant growth. The disturbed soil and temporary access road will be re-contoured to blend with the original grade in the surrounding area. Use of soils native to the area and stockpiled during construction, will aid in re-vegetation efforts and also encourage pioneering (natural re-seeding) of the species native to the area.

    (c) For those areas where sedimentation of drainage-ways and water features is a concern, the disturbed sites will be contained.

    (d) In areas where fill is to be placed, soils native to the area will be stockpiled for re-use. It is anticipated that fill areas may erode before new plantings are established and

therefore erosion control, soil stabilization, and containment of sedimentation is proposed both during and immediately after placement of the fill material. Contour grading of the fill area will allow the new material to blend into the surroundings. The erosion control and re-vegetation efforts will be planned and coordinated to allow a transition from the implementation of erosion control practices to the establishment of woody plant species.

Re-vegetation will involve hydroseeding and supplemental planting of container material, propagated from native species collected from within the immediate area. Each planting area will undergo this type of treatment and native vegetation will be replaced in-kind. There will be an emphasis on controlling weeds and other noxious pests to create conditions conducive to natural recruitment from surrounding areas. Temporary irrigation systems will be necessary for full plant establishment.

HALF MOON BAY COASTSIDE
CHAMBER OF COMMERCE
AND VISITORS BUREAU

May 10, 1999

Mr. Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA 94623-0660

Dear Mr. Gross,

The Half Moon Bay Coastside Chamber of Commerce and Visitors' Bureau acknowledges the effort and dedication of your staff in producing the Draft SEIS for the Devil's Slide tunnel project. As you well know, a safe and permanent solution for Highway One at Devil's Slide is essential to the vitality of our business community here on the Coast. Citizens and visitors need a reliable transportation link with the rest of the Bay Area.

We applaud the decision by the San Mateo County Board of Supervisors to assume responsibility for the portion of the road at Devil's Slide which will be abandoned by Caltrans when the tunnel is completed (Appendix B in the Draft SEIS). The maintenance of hiking and biking trails on the abandoned roadway will offer an unsurpassed recreational opportunity for local residents and visitors alike. Tourism is one of the mainstays of the Coastside economy and we welcome the interest which will undoubtedly be generated by improved accessibility to sweeping coastal vistas.

In keeping with our desire to see a safe, economically responsible and user-friendly design for the tunnel project, we support Design Variation A, the design which provides for hiking and biking facilities outside of the tunnel itself. In the interest of continuing pedestrian access to the area, we also urge that existing hiking trails be linked to the abandoned alignment to provide a more comprehensive trail system. 1

We appreciate the time and effort which Caltrans has devoted to this project thus far and we urge you to continue with all possible speed so that our business community, our residents and visitors to our area can be assured of a safe and reliable route over Highway One.

Sincerely,

David R. Worden
President, Board of Directors

DRW/av

520 Kelly Avenue, Half Moon Bay, CA 94019
Phone (650) 726-8380 • Fax (650) 726-8389
Internet: http://www.halfmoonbaychamber.org • Email: info@halfmoonbaychamber.org

Half Moon Bay Coastside Chamber of Commerce

1. Your support of design variation A is acknowledged. Upon completion of the tunnel construction, Caltrans will relinquish the existing section of Highway 1 right-of-way to the County of San Mateo for use as a non-motorized facility. However, extension of current trails or major expansion of the trail system is beyond the scope of this project.

Surfrider Foundation.

15 Years of
Conservation, Activism, Research & Education

May 11, 1999

Mr. Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA 94623-0660

Dear Mr. Gross:

The San Mateo County Chapter of the Surfrider Foundation has the following comments on the Devil's Slide Second Supplement to the 1986 Final Environmental Impact Statement/Environmental Impact Report (SSEIS).

Surfrider believes the tunnel alternative is the environmentally superior alternative and recommends that the Martini Creek Bypass alignment be rejected. Our primary concerns with the tunnel alternative relate to potential impacts to the existing and proposed Coastal Trail and public access to San Pedro Point Headlands, McNee Ranch State Park, Grey Whale Cove State Beach and Montara State Beach. 1

Designation of Highway One at Devils Slide as a new segment of the Coastal Trail has the potential to provide trail links to parkland at San Pedro Point Headlands near the north portal entrance and McNee Ranch, Grey Whale Cove and Montara State Parks near the south portal entrance. Yet, the SSEIS does not address the environmental impacts to the existing segment of the California Coastal Trail along the historic Half Moon Bay-Colma Road resulting from the rock cut at the approach to the south portal and the south portal fill site. Mitigation measures are needed to ensure that the old road will be adequately preserved so that links can be established to parkland in and around the project area. 2

Finally, the tunnel alternative does not provide trail access through the project area because the proposed Devils Slide trail deadends near the south portal. Protection of the Half Moon Bay-Colma Road would protect future opportunities to link the Devils Slide Coastal Trail with the Half Moon Bay-Colma Road. Impacts of the rock cut and fill site at the south portal entrance should be mitigated to ensure that existing and potential Coastal Trail segments are protected. 3

Thank you for addressing our comments in the final SEIS.

Sincerely,

John Kucera

John Kucera
Chair, San Mateo County Surfrider Foundation
P.O. Box 0575, Montara, CA 94037

Surfrider Foundation

1. Your belief that the tunnel alternative is environmentally superior and your recommendation that the Martini Creek Alignment Alternative be rejected are acknowledged. Currently there is no formal California Coastal Trail designation within the project area but we are aware that the existing section of State Route 1 has been suggested as an ideal segment of the Coastal Trail after it has been relinquished and is no longer used as a highway. Existing public access to established recreation trails including McNee Ranch State Park, Grey Whale Cove State Beach and Montara State Beach will not be impacted by construction of the tunnel alternative.

2. During construction of the tunnel alternative, trail access will be maintained by means of trail detours. After construction, any trail affected by the project, including the impacted section of the old Half Moon Bay-Colma Road, will be reestablished or realigned and reconnected to maintain trail continuity. During the design phase of the project, supplemental studies will be conducted to finalize the location of the south portal terminus and determine the allowable depths and slope inclinations of excavation.

3. See above response #2.

Mid-Peninsula Bicycle Coalition
1804 Chula Vista Dr.
Belmont, CA 94002

May 11, 1999

Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA 94623-0660

Dear Mr. Gross:

On behalf of the bicyclists of San Mateo County, I am writing to communicate enthusiastic support for Design Variation A, a 30-foot wide bore with facilities for bicyclists and pedestrians, for the proposed Devil's Slide Tunnel.

This design is more appropriate in size, is less expensive, and allows bicyclists the option of a route along the existing portion of the road which will be closed after the tunnel is constructed, or access on the shared roadway within the tunnel itself.

The San Mateo County Board of Supervisors has gone on record in support of Design Variation A and has agreed to assume responsibility for the abandoned section of the existing road specifically for the maintenance of pedestrian and bicycling access. In your own EIR, you note that, "It was decided to incorporate into the project design, the placement of informational/directional signs directing bicyclists to use the existing Highway rather than the tunnel. In the absence of any ban or restrictions (which would need to be initiated by local government), some bicyclists may still choose to ride with vehicular traffic through the tunnel." (page 19) 1

There are no plans for local government to institute any bicycling bans or restrictions in the tunnel, so with Design Variation A, bicyclists will be free to choose the route they prefer. We are enthusiastic supporters of the EIR's current freedom of choice for bicyclists with regards to how they travel through the Devil's Slide area, and MPBC would vigorously oppose any effort to restrict bicycles within the tunnel. We do not anticipate that any such effort will materialize. 2

We trust that your final project design will reflect the wishes of the proponents of Measure T, who never desired to ban bicycle access within the tunnel, but also wished to maintain the existing scenic Route 1 for the enjoyment of bicyclists and pedestrians.

Sincerely,

Scott Mace

Scott Mace, Director

Mid-Peninsula Bicycle Coalition

1. Your support for the tunnel alternative Design Variation A and comments regarding bicycle access and choices are acknowledged. Since this segment of Route 1 is a conventional highway, bicycles will not be prohibited from using the tunnel.

May 12, 1999 By FAX 510-286-6374

Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA 94623-0660

Re: DRAFT Second Supplemental DEIS/DEIR for the Devil's Slide Improvement Project

Dear Bob,

The Committee for Green Foothills (CGF) appreciates the opportunity to comment on the Supplemental DEIS/DEIR for the above-referenced project. We also want to express our appreciation for Caltrans participation in the monthly meetings chaired by San Mateo County to make sure that the will of the electorate, as expressed in Measure T, is carried out in a timely fashion. We have been impressed with Caltrans willingness to work with representatives of the community and our elected officials, and we commend you for that.

Regarding the proposed tunnel design, CGF supports Alternative A, and we urge Caltrans to select that alternative. As authors and sponsors of Measure T, we believe this alternative most closely complies with the requirements in Measure T and the certified amended Local Coastal Program Policies 2.50 b, 2.54 b and 2.56 a that the tunnel be designed for motorized vehicles only consistent with restricting Route 1 to a two-lane scenic highway using minimum state and federal tunnel standards, and that a separate trail for pedestrians and bicycles be provided outside the tunnel. Alternative A most closely complies with Resolution 61060 by the Board of Supervisors that directs that the existing Devil's Slide right of way be used for a bicycle/pedestrian trail.

We also would like to see an alternative Access Road developed to access the bridges and north portal area that could reduce the impact on the North Pond and associated wetlands on Shamrock Ranch. Dana Denman and Mitch Reid are commenting in more detail regarding this issue. We urge Caltrans to work with Dana Denman to provide access for construction that would be less environmentally damaging than the proposed roads contained in Figure 3-2 of the DEIS/DEIR and that will also be acceptable to Shamrock Ranch. 1 2

We urge more specificity in the DEIS/EIR as to how to accommodate northbound pedestrians, hikers, or bicyclists who will need to cross Highway One safely near the south portal to continue along the old alignment. 3

Lastly, we urge Caltrans to avoid filling of wetlands and associated riparian habitat areas at the south portal. The San Mateo County Local Coastal Program, and Section 404 of the Clean Water Act require that filling of wetlands be avoided, and we believe that avoidance is possible at this site. 4

Again, thank you for the opportunity to comment. We look forward to continuing to work with Caltrans to implement the tunnel as the least environmentally damaging alternative which solves the problem of instability at Devil's Slide.

Sincerely,

Lennie Roberts

Lennie Roberts, Legislative Advocate
Committee for Green Foothills
339 La Cuesta
Portola Valley, CA 94028

Committee for Green Foothills

1. Instead of accessing work areas from the west as proposed in the 1999 Draft SSEIS/SEIR, construction access is now proposed from San Pedro Terrace Road through Shamrock Ranch. This proposal was developed in consultation with the USFWS and the property owner.

2. As noted above Caltrans worked with Dana Denman and the USFWS to develop this less environmentally damaging alternative construction access through Shamrock Ranch.

3. Signed crossings between the northbound lane of Route 1 and the superseded highway will be installed to accommodate crossing bicyclists and pedestrians. Final design and operational details of the bicycle path, cul de sacs, and connections to the tunnel approaches will be developed in consultation with the County of San Mateo.

4. Caltrans will coordinate with the Coastal Commission and San Mateo County regarding compliance with the Coastal Act and the Local Coastal Program regarding filling of wetlands and riparian habitat at the south portal area. Also see Responses to Comments from San Mateo County Planning.

Jim and Joan Owens
Box 48, 1024 Cedar St.
Montara, California 94037

April 14, 99

Dear Mr Gross,

I wish to add my voice to those who prefer the Martini Creek alignment to the Devils Slide Tunnel version.

I have lived on the Coastside for 50 plus years and have experienced many traumatic detours on Highway one - and mourned the many accident victims of this "Hell and appropriately named "Devils Slide." The Martini Creek version would be scenic and would provide a safe and reliable access for the residents and visitors. Tunnels are dangerous! And deadly in many cases - How about the danger of accidents within a tunnel - fires and fumes - not to mention the lack of open air - and limited access of fire - ambulance - police vehicle - Surely safety should weigh heavily in favor of an open air bypass not to mention cost - initial and maintence - upkeep.

Thank you for your consideration,

Jim Owens

Jim and Joan Owens

1. On November 5, 1996, the voters of San Mateo County passed the Devil's Slide Tunnel Initiative known as Measure T. This initiated the process to amend the County's Land Use Plan portion of their certified LCP. Their Land Use Plan now refers to, a tunnel for motorized vehicles only behind Devil's Slide through San Pedro Mountain, as San Mateo County's preferred alternative for Highway 1 around Devil's Slide, and deletes references to a two-lane highway bypass along the Martini Creek alignment.

   The Initiative requires that the tunnel be designed consistent with restricting Route 1 to a two-lane scenic highway using minimum state and federal tunnel standards, and that a separate trail for pedestrians and bicycles be provided outside the tunnel. The Measure also requires voter approval of any other alternative to the tunnel, except repair of the existing highway. On January 9, 1997, the California Coastal Commission voted to certify the LCP amendment as submitted by the County.

   Although Measure T is not determinative of the outcome of the environmental process, it is a significant consideration. The tunnel design variation "A" is identified as the preferred project alternative. However, for the purposes of NEPA and CEQA, the Martini Creek Alignment alternative has continued to be considered as a reasonable alternative.

Deane Gough
270 Humboldt Rd
Brisbane, CA 94005
DeaneGough@aol.com
415-467-7353
April 22, 1999

Robert Gross
Chief Office of Environmental Planning South
Caltrans District 4
PO Box 23660
Oakland CA 94623-0660

Dear Mr. Gross,

The purpose of this letter is to request that you give preference to the Martini Creek alignment rather than the tunnel alignment at Devil's Slide. When I was a Caltrans Design engineer, I worked on a Devil's Slide alignment which would have created a beautiful scenic freeway. I see no advantage in the tunnel. The main advantage stated by the tunnel advocates is that it can not be widened - thereby eliminating growth along the Coastside. Growth will occur in any event, making a surface road necessary in the future.

Sincerely

Deane Gough

Deane Gough

1. Comments regarding your preference for the Martini Creek alignment, your work experience, and growth along the Coastside are noted. The tunnel alternative design variation A is identified as the preferred alternative. However, for the purposes of NEPA and CEQA, the Martini Creek Alignment alternative has continued to be considered as a reasonable alternative.

Barbara VanderWerf
P.O. Box 1574
El Granada, CA 94018
(650) 726-3123

April 27, 1999

TO: Robert Gross, Chief, Office of Environmental Planning South, Caltrans District 4
RE: Draft Devil's Slide Second Supplement to the 1986 Final Environmental Impact Statement, March, 1999

TOPICS:
1. California Coastal Trail at South Portal and South Portal Fill Site
2. Non-native plants on Woodward-Clyde roadcut, San Pedro Mountain
3. South Portal architectural design and preservation of waterfall
4. Ocean Shore Railroad roadbed at South Portal Operations and Maintenance Center

Please note that the following information supports Tunnel Design A.

1. California Coastal Trail at South Portal and South Portal Fill Site

The March, 1999 SEIS is inadequate in that it does not address the environmental impact of the South Portal and South Portal Fill Site on the California Coastal Trail.

- The California Coastal Trail, a project supported by the California Coastal Plan of 1975 and the California Coastal Conservancy, will eventually extend between the Oregon state line and the Mexican border.

  Along the San Mateo County Coast sections of the Coastal Trail are already in place.

  The designated California Coastal Trail between Pacifica and Montara is the historic Half Moon Bay-Colma Road and Highway One/Devil's Slide right-of-way.[1] [See attached sketch map and refer to cover photo of March, 1999 SEIS for partial route of Half Moon Bay-Colma Road and Highway One/Devil's Slide right-of-way.]

  The San Mateo County Board of Supervisors (Resolution 61060, May 27, 1997) supports the existing Highway One/Devil's Slide right-of-way as a pedestrian/bicycle trail once the tunnel is in operation.

  Designation of Highway One as a recreational trail is an admirable step towards achieving an uninterrupted California Coastal Trail along the San Mateo County Coast.

[1] Association of Bay Area Governments. Coastside Subregional Planning Project: Pacifica, Midcoast, Half Moon Bay. September, 1998.

However, as currently designed, the Highway One/Devil's Slide Trail will deadend at South Portal. Trail users will not be able to continue their journey south. Nor will trail users have access to the trail from the south.

Caltrans can solve this problem by specifying preservation of the Half Moon Bay-Colma Road at South Portal and South Portal Fill Site in the Final Tunnel Plan. This requirement will assure trail users that the California Coastal Trail will be uninterrupted between Pacifica and Montara.

On June 19, 1998, at the invitation of California Coastal Trail advocates, Dennis Bosler, Project Manager, Edwin Pang, District Branch Chief, and Sid Shadle, District Branch Chief (Biology) participated in a site review of the California Coastal Trail at South Portal and South Portal Fill Site.

Participants agreed that it was feasible to preserve the roadbed of the Half Moon Bay-Colma Road[2] above South Portal and in Green Valley (South Portal Fill Site) for the Coastal Trail.

Caltrans needs to fulfill this agreement and make preservation of the California Coastal Trail (Half Moon Bay-Colma Road) a component of the Final Tunnel Plan at South Portal and South Portal Fill Site.

Please note that on November 20, 1997, the following agencies and groups participated in a trail site review of the Half Moon Bay-Colma Road and concurred that Highway One/Devil's Slide and the Half Moon Bay-Colma Road would serve as a link in the California Coastal Trail along the San Mateo County Coast. This link would connect Pedro Point Headlands (public property) and McNee Ranch State Park and would be of public benefit.

The agencies and groups included California Coastal Commission, California Coastal Conservancy, City of Pacifica, Coastsiders for Safe Bikeways, Citizens Alliance for the Tunnel, Midcoast Park Lands, Coastwalk, Coastal Alliance and Pacifica Land Trust. Notified but unable to attend were California State Parks and Recreation, San Mateo County Parks and Recreation and City of Half Moon Bay Parks and Recreation.

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[2] The historic Half Moon Bay-Colma Road was built by San Mateo County in 1879 and served as the main road between San Francisco and Half Moon Bay until 1915. Its integrity is nearly intact between Shamrock Ranch in Pacifica and Martini Creek in McNee Ranch State Park, where it serves as a trail.

- The May 20, 1997 San Mateo County Board of Supervisors Resolution 61060, states that the Board's "preferred alignment for a bicycle/pedestrian trail be located within existing Highway 1 Devil's Slide right-of-way, *with an alternate alignment around Devil's Slide should it fail.*" [emphasis added]

  The northern section of Half Moon Bay-Colma Road provides the alternate alignment around the Highway One/Devil's Slide Trail should it fail. [See attached sketch map.]

2. Non-native plants on Woodward-Clyde roadcut on San Pedro Mountain

As part of the Tunnel Feasibility Study, Woodward-Clyde graded an access road on San Pedro Mountain. On April 4, 1999, members of the public conducted a site review of the access road. The road has become a corridor for non-native plants, especially Pampas Grass, in what was a pristine Northern Coastal Scrub plant community.

The SEIS must address revegetation of the Woodward-Clyde access road.

3. South Portal architectural design and preservation of waterfall

The SEIS is to be commended for stating that aesthetic considerations will apply to the architectural design of the North and South Portals.

Caltrans should convene a citizens committee to help in portal design decisions.

One suggestion for South Portal is to use the lichen-covered granitic rocks at the South Portal site to outline the tunnel portal.

Of special concern is preservation of the seasonal waterfall/riparian corridor at South Portal in the tunnel design.

4. Ocean Shore Railroad roadbed at South Portal Operations and Maintenance Center

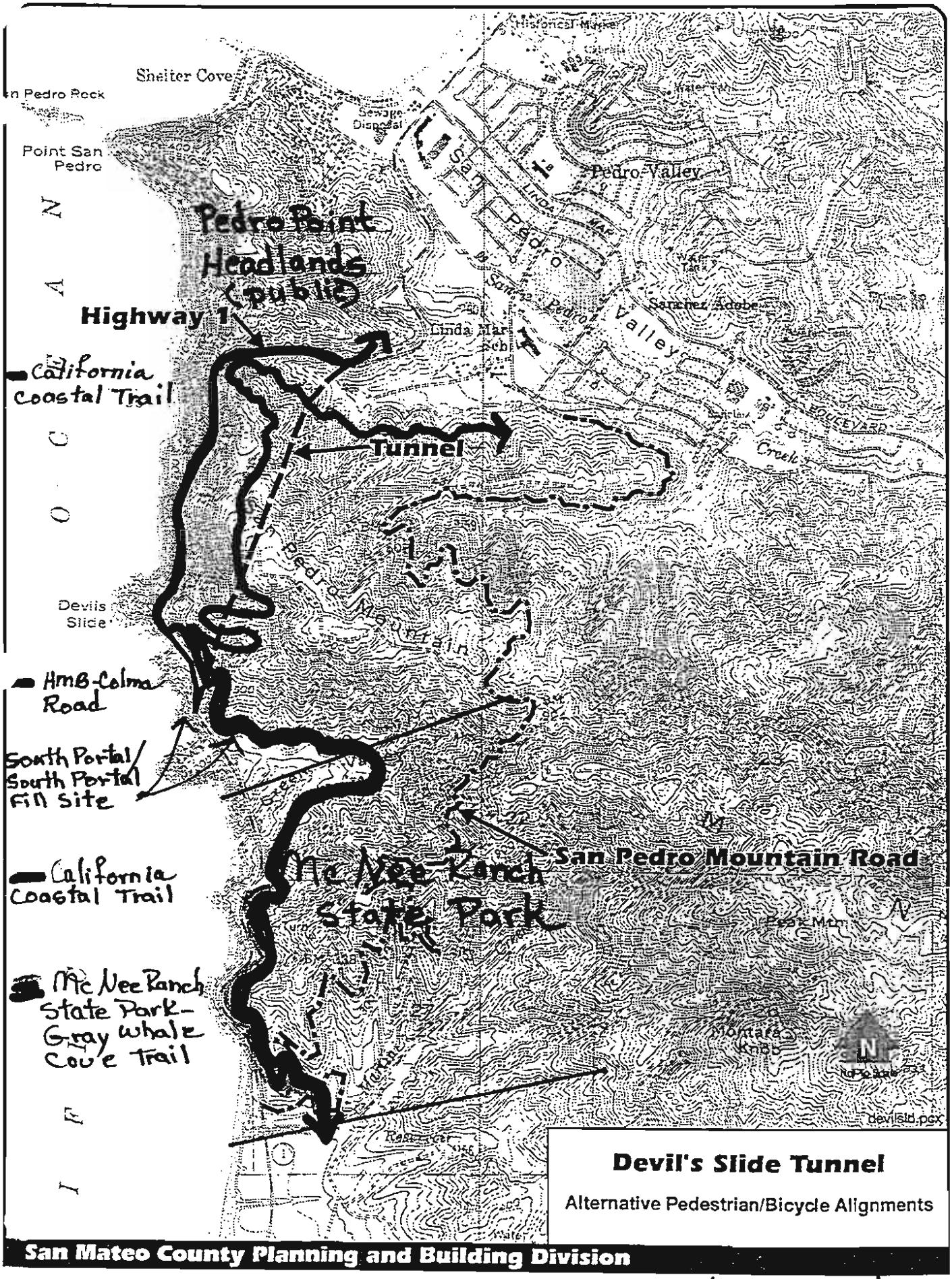
South Portal Operations and Maintenance Center is sited on or near the Green Valley roadbed of the Ocean Shore Railroad. The Ocean Shore Railroad ran along the San Mateo County Coast from 1908 to 1920. Green Valley was an important watering stop.

Caltrans should work with the San Mateo County Historic Resources Advisory Board to ensure that the site of this historic resource is acknowledged.

Thank you,

Barbara E. Vanderwerf

Barbara VanderWerf



Sketch Map: California Coastal Trail

Barbara VanderWerf

1. Currently there is no formal Coastal Trail designation within the project area but we are aware that the existing section of State Route 1 has been suggested as an ideal segment of the Coastal Trail after it has been relinquished and is no longer used as a highway.

   During the design phase of the project, supplemental materials studies will be conducted to finalize the location of the south portal and to determine allowable depths and slope inclinations of excavation. Alternative grading plans will be considered to determine the feasibility of preserving the existing trails (on private property). If it is not feasible to avoid affecting the existing trail, it will then be reconstructed around the affected area and reconnected to restore continuity. During construction of the tunnel alternative, trail access will be maintained by means of trail detours. After construction, any trail affected by the project, including the section of the old Half Moon Bay-Colma Road located in the south disposal area, will be reestablished or realigned and reconnected to maintain trail continuity.

2. The Woodward-Clyde access road may be used for future construction access. If so, the road will again be impacted to facilitate construction materials and equipment. It is preferable to use previously impacted pathways to minimize potential impacts to undisturbed vegetation. Once the access is no longer needed, it will be reclaimed or restored and re-vegetated.

3. A Devil's Slide Tunnel Aesthetics Committee, comprised of representatives from the City Councils of Pacifica and Half Moon Bay, the Midcoast Community Council and the San Mateo County Board of Supervisors, was developed to provide the opportunity for community input regarding aesthetics issues including portal design features. Based on more developed engineering plans the seasonal waterfall will be preserved.

4. Acknowledgement of a road as a historic resource is different than the determination of eligibility for National Register Listing. It has previously been determined by SHPO, that several trails, and the Ocean Shore Railroad roadbed were ineligible for national Register listing.

Comment Sheet

Route 1 Devil's Slide
EA # 112371
Public Hearing
Farralone View School, Montara
Tuesday, April 27, 1999

Name: JAN McCLURE Organization: COASTSIDERS FOR BY PASS (CAE

Address: P.O. Box 401 MONTARA, CA (STR. address: 300-16th ST MONTARA) Zip Code 94037

Phone/Fax/E-mail: (650) 728-3457, FAX is THE SAME NUMBER

Please print. Use the back of the sheet if necessary. April 27th at F.V. School Montara

I AM IMPRESSED WITH YOUR "VISUALS" ALSO YOUR WELL-ORGANIZED PRESENTATION.

I DID NOT VOTE FOR THE TUNNEL, NOR DID MOST OF US OLD-TIMERS WHO HAVE LIVED HERE FOR MANY YEARS. THE HEAVILY POPULATED AREAS OF THE COUNTY, WHO DO NOT LIVE WITH THE DEVIL'S SLIDE PROBLEM, OUTVOTED US, OF COURSE — VULNERABLE AS THEY ARE TO EXTREMIST PROPAGANDA BASED ON UNREALISTIC THEORIES.

NOW THAT IT'S A TUNNEL OR NOTHING, I'M GLAD TO SEE YOUR IMPROVEMENTS, PARTICULARLY 2 SEPARATE BORES FOR THE 2 DIRECTIONS. NO HEAD-ON COLLISIONS AT LEAST FOR THAT MILE OF HIGHWAY #1 A REAL PLUS!

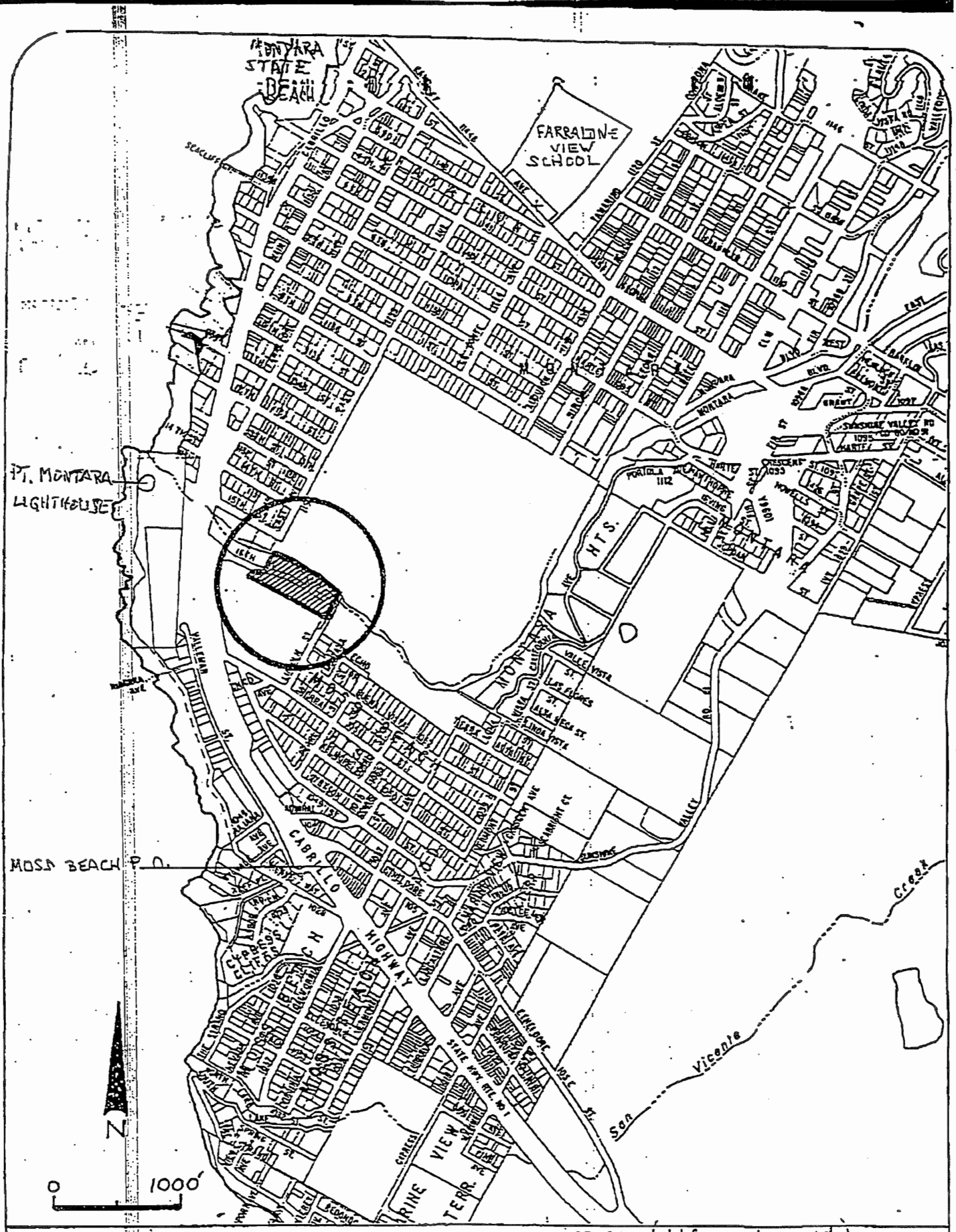
I WRITE THIS COMMENT BECAUSE OF ANOTHER COLLISION PROBLEM WITHIN THIS PROJECT'S AREA. PLEASE DO NOT SELL YOUR ALREADY OWNED RT. of WAY to the EAST OF MONTARA & MOSS BEACH, BECAUSE YOU WILL NEED IT IN THE FUTURE — WE WILL NEED IT. AS YOU CAN SEE ON THE ENCLOSED PLAT MAP, the present HIGHWAY 1 CUTS (with its THRU traff MOST OF MONTARA OFF FROM THE OCEAN & DIVIDES MOSS BEACH IN TWO.

UNFORTUNATELY, WAY BACK WHEN HWY 1 WAS BUILT (I WAS IN HIGH SCHOOL THEN) THE STATE HIGHWAY DEPT. PLACED IT ON THE OLD RAILROAD RT. OF WAY. THE RR. ROUTE CAUSES 8 OR 10 CLUMSY, DANGEROUS INTERSECTIONS BETWEEN MONTARA'S CHART HOUSE RESTAURANT & THE SOUTH END of MOSS BEACH. THERE HAVE BEEN COLLISION DEATHS AT ALMOST ALL OF THEM, WITH TODAY'S TRAFFIC. BY NOW, ITS ALMOST IMPOSSIBLE TO TURN LEFT AT MANY OF THEM. PUTTING SO MANY TRAFFIC LIGHTS WITH IN SUCH A SHORT DISTANCE IS ANATHEMA.

Sincerely, Jan McClure

PLEASE PLACE THIS IN THE COMMENT BOX TONIGHT OR MAIL TO:
Caltrans District 4, Office of Environmental Planning South, Attn: Robert Gross/Ed Pang
P.O. Box 23660, Oakland, CA 94623-0660.
Written comments must be received by May 12, 1999.

pg 1 of 3
pg 2 for plat map
pg 3 for additional comment



APPLICANT: McCLURE
LOCATION: 360 SIXTEENTH ST., MONTARA
SAN MATEO COUNTY PLANNING

REQUEST: SP 84-6 (stable permit granted)
PRESENT ZONE:
MEETING OF – FEBRUARY 7, 1985

Comment Sheet

Route 1 Devil's Slide

EA # 112371

Public Hearing

Farralone View School, Montara

Tuesday, April 27, 1999

Name: JAN McCLURE, 3rd generation Montara lumberman Organization:

Address: P.O. BOX 401, MONTARA, CA Zip Code 94037

Phone/Fax/E-mail (650) 728-3452 same number FAX

Please print. Use the back of the sheet if necessary. This comment continued from page 1

BACK IN THE '50s + '60s WHEN THE STATE HIGHWAY DEPT. REALIZED DEVIL'S SLIDE WAS A PROBLEM, WE LOCALS CAMPAIGNED HEAVILY TO HAVE OUR 2 LITTLE COMMUNITIES BYPASSED ALONG WITH THE UNSTABLE SLIDE AREA. GEOGRAPHICALLY IT MADE GOOD SENSE SINCE IT WOULD SHORTEN THE LENGTH OF HIGHWAY TO THE H.M.BAY AIRPORT. THE BYPASS ROAD (TO COME DOWN THE HILL + TO CROSS MARTINI CREEK) HAD TO GO EASTWARD ANYWAY. THEN, FROM THAT SPOT TO THE AIRPORT IS PRACTICALLY A STRAIGHT RUN. WHILE TURNING BACK WEST TO THE CHARTHOUSE RESTAURANT + THEN FOLLOWING THE OLD RR'S HILLS + CURVES IS LONGER WITH DISRUPTIVE, DANGEROUS INTERSECTIONS AT EVERY BLOCK. AT THAT TIME, THE HIGHWAY DESIGNERS AGREED WITH US; HENCE THE "ADOPTED RTE" DESIGN. HOWEVER, THEN AS NOW, NON-LOC EXTREMISTS OF THE SIERRA CLUB INTERFERED, USING LAWSUITS UNTIL THE BUDGETE CONSTRUCTION MONEY WAS SPENT ELSEWHERE.

AGAIN I URGE, DON'T SELL OFF THAT ALREADY EMINENT-DOMAINED RT. OF WAY. DON'T GIVE IT AWAY EITHER (EXCEPT BITS ALONG ITS SIDES WHERE IT'S WIDER THAN NECESSARY.) PRESENT THRU TRAFFIC IS MADE UP OF LARGE RECREATIONAL VEHICLES PULLING BOATS, PLUS THE NECESSARY TRUCKS TAKING FARM PRODUCE TO MARKET + BRINGING SUPPLIES TO THE HARBOR + the CITY OF H.M.BAY. THEY HAVE NO WISH TO STOP IN MONTARA OR MOSS BEACH AND OUR RESIDENTS DO NOT WANT THEM UNDERFOOT. SAFETY + LESS POLLUTION IS WHAT WE WANT.

Sincerely, Jan

PLEASE PLACE THIS IN THE COMMENT BOX TONIGHT OR MAIL TO:
Caltrans District 4, Office of Environmental Planning South, Attn: Robert Gross/Ed Pang
P.O. Box 23660, Oakland, CA 94623-0660.
Written comments must be received by May 12, 1999.

page 3 of 3

Jan McClure

1. Your comments regarding the bypass are acknowledged. The disposal of excess property will be in accordance with established laws and procedures, including those giving priority rights to recreational and other governmental agencies. In recognition of the local concern for the future use of all land in excess to the tunnel alternative, discussions of a planned program for disposal have been initiated with San Mateo County officials.

J. Plock
BOX 2136
EL GRANADA, CA 94018
(650) 712-1303

May 1,1999

VIA FACSIMILE
Robert Gross, Chief
Office of Environmental Planning
Caltrans District 4
P.O. Box 23660
Oakand,CA 946233-0660

Re: Devil's Slide
Second Supplement to the 1986
Final Environmental Impact
Statement/Environmental
Impact Report

I quote the Executive Summary as to the purpose of the project which is reiterated several times in the body of the report.

> "The purpose of this project is to provide a safe, dependable and stable State highway route to bypass the geologically unstable area of Route 1 at Devil's Slide in San Mateo County. Since the construction of the existing Devil's Slide portion of Route 1 in 1937, several geologic factors have contributed to landslides, falling rocks, and grade subsidence resulting in diminished roadway width."

This report only deals with a small section of this hazardous section of Route 1 in the immediate area of Devil's Slide. For several miles to the south of the proposed south portal the roadbed is subject to landslides, falling rocks and grade subsidence. During the 1998-1999 winter storms, there were several instances of landslides and/or rock falls which closed the highway south of the proposed tunnel. What is planned for this area to make this entire mountainous section of Route 1 a safe, dependable and stable State highway route? It is not prudent nor reasonable to spend over $155,000,000 to bypass a small sector of this highway when a failure to the south could shut down the highway and make the tunnel useless. Besides being substantially cheaper, the Martini Creek alignment avoids this entire section of highway.

Page 9 - summary of noise impacts under No-Build states "Existing alignment generates more noise impacts along beach portion of park." Under the tunnel heading "No noise receptors to be affected." The tunnel project is several miles from the beach portion of the park and the noise impact will be the same as "No-Build". 1

Page 22 - Fire Protection. Is sufficient water available from the North Coast County water District? Also, there are in existence regulations, rules, laws etc. prohibiting the extension of water mains to areas beyond the urban boundaries into the rural area. How are you going to provide an adequate water supply for fire protection? 2

Page 23 - Ventilation. What is the environmental impact of concentrating the exhaust fumes at point discharges at the traffic exit portals? Is the jet fan method of removing exhaust fumes from passenger vehicle tunnels a proven technology in California, or in any part of the USA? If not, what studies have been made to assure that this technology is a safe and prudent one for the travelling public? 3

Page 25 - The sketch shows Access roads and fill at the north portal. What are they for? 4

Page 28 -How much money has already been spent on the Martini Creek bypass? The work and land acquisition that this money was spent on will have to be abandoned and these costs should properly be reflected in the cost of the tunnels. 5

Page 55 - What will be the environmental impact upon the local plant and animal species (both local and migratory) of the exterior portal lighting? What effect will the sudden light change have upon the safety of the tunnel users as they go from pitch black darkness of a coastside highway to the full illumination at the tunnel portals (and vice versa)? 6

Page 72 - paragraph (c) - What is the cost of providing this water supply system and where is the source of the water? See comment re: page 22 above. What population of frogs is expected to be supported by this installation? 7

Page 86 - Environmental Justice - What studies have been made to identify and address the effects of the tunnels construction upon the stock of affordable housing, not only on the coastside but throughout San Mateo County? The county is experiencing a shortage of affordable housing for several income levels, to the extent that many employees are travelling from the other side of San Francisco Bay to their workplaces in San Mateo County. The coastside has the majority of vacant lands which might be available for housing, and the construction of the tunnels would have a limiting effect on the construction of new homes in the urban area and perpetuate the exclusion of low income wage earners from this area. Your report states "... 93% of the Coastside is represented by white population, compared with 72% for the rest of the county ..." The artificial constraints on the construction of housing in the county are having a negative effect upon the ability of low income populations to find affordable housing and for their service providers (i.e.: medical and counseling etc.) to obtain suitable affordable space to house their facilities. Were the studies on affordable housing by the association of Bay Area Governments reviewed in connection with this project? 8

Page 88 - In the event of a complete failure of the roadway south of the tunnels it would be prudent to retain any previously acquired right-of-way for the Martini Creek Bypass not required for the tunnels project. 9

Page 93 - section 5.19 - What is "natural productivity" and how is it measured? Was it measured for this project? If so, what were the results? 10

Sincerely

JOHN PLOCK

cc: Robert F. Tally
Ging P. Wong, PE
Dennis Bosler
Edwin Pang
Supervisors, San Mateo County
Oscar Braun

J. Plock

1. We recognize that there are other sections of Route 1 with areas of limited or smaller scale instability. This is typical for many coastal areas, however they are adequately managed by means of conventional slope stabilization methodology on an "as needed" basis.

   The summary of impacts has been updated and revised.

2. The North Coast County Water District has indicated there are no limitations or restrictions on the delivery of water to the proposed tunnel for fire suppression purposes.

3. The ventilation system will direct the exhaust fumes out of the tunnel near the portals where there are no immediately adjacent receptors and considering typical coastal wind patterns and air circulation, there is no anticipated air quality impacts.

   The Cumberland Gap Tunnel located in Tennessee is similar to the proposed Devil's Slide tunnel in cross section and length and is ventilated by jet fans. Several shorter tunnels utilizing jet fans have been constructed in Pennsylvania and Arkansas. Tony Caserta, Chief Tunnel Authority for the FHWA, and a member of the *San Mateo County Expert Advisory Panel* for the 1996 tunnel study stated that all of the tunnels are functioning as designed.

4. The sketch on page 25 of the draft document reflected previous construction access roads to the footing areas of the north approach bridges along each side of the Shamrock Ranch Valley. Construction access is now proposed from San Pedro Terrace Road through Shamrock Ranch.

5. Prior to the *1996 Tunnel Study* approximately $4,930,000 had been spent for bypass alternative activities. This total includes $4,150,000 for environmental and design studies, $630,000 in legal costs, and $150,000 for right-of-way.

   These costs cannot be considered as applying only to the tunnel alternative but would be applied equally to all alternatives evaluated.

6. The exterior tunnel lighting is not expected to result in any new adverse glare impacts to plants and wildlife. Because the south portal opens up directly onto the existing Route 1 roadway, no new areas would be subject to increased exterior lighting.

   Lighting levels will transition at the ends of the tunnel to help motorists adapt to changing levels of light when entering or exiting the tunnel.

7. The cost for the water supply for the pond will be nominal and the source will likely be the existing city (Pacifica) water supply. The California red-legged frog population utilizing the north pond will be the beneficiary of this installation.

8. Your comment is unclear. There doesn't appear to be "effects of the tunnels construction" on San Mateo County's stock of affordable housing. The ability to develop and provide available housing or affordable housing is primarily dependent on local planning and local zoning ordinances and regulations.
   Section 5.16 Socioeconomic Setting: Tables 5-1 and 5-2 of the Final SSEIS provides County and Coastside Population and Housing Characteristics.

9. No complete failure of the roadway south of the tunnel is anticipated.

10. Natural productivity refers to allowing for habitat for plants and animals, aesthetic qualities, open space and agricultural lands in it's natural state.

Chris Church
PO Box 18
Montara CA 94037
May 7, 1999

Robert Gross Chief
Environmental Planning South
Caltrans District 4
PO Box 23660
Oakland CA 94623-5623

Mr. Gross,

This letter is a very hasty comment to your much delayed Draft Second Supplemental Environmental Impact Statement, Devil's Slide Improvement Project. On the title page of the report, a note indicates comments are due by May 12, 1999, but no mention of whether these comments must be at your location by that date or a postmark is sufficient. Are there mandated deadlines or other requirements those making comments must meet, yet your agency can move as slowly as it wishes? Please extend this deadline to assure reasonable opportunity for comment to emerge on the supplement, the 1986 FEIS and new companion report, Dewatering Feasibility Study, November 1998, which I myself received weeks after the Draft Second Supplement. I see dire need to extend the comment period because of the complexity of the preferred project alternative, the tunnel, and the "Alternative Considered but Withdrawn, Repair/Maintain Existing Alignment (Slide Dewatering)." 1

As to the preferred alternative, the report does not address all aspects of basic suitability of a tunnel design as a solution for the problems Devil's Slide presents. It is a huge project that takes away the scenery from the two-lane scenic highway by burrowing underground, adds freeway-style lanes and features such as bridges, walls and access roads with cuts and fills at its northern approach to the detriment of Shamrock Ranch, extensive land disfigurement in pristine Green Valley areas below the south portal in the form of disposal and Operations and Maintenance Center with new road. Usually a tunnel works if it offers advantages such as avoiding twists and turns to get to the other side of high mountains. In this case, we have an easily negotiable pass (located near new cul-de-sac), and a few seconds of travel time are not critical on scenic routes.

Dewatering is less expensive and won't destroy the landscape. Because there is such wide discrepancy between the geologic reports of John Hovland and Thomas Whitman, I deem it inappropriate to curtail considering the alternative. It is too bad the test wells performed as poorly as they did, but in a public address Dr. Hovland made to a committee of the San Mateo County Supervisors, he showed that reducing soil pore pressure by small amounts reduces the likelihood of sliding. I'm therefore grateful Caltrans performed the test study during "El Nino," because the wells may have prevented traditional extended road closure at great cost and inconvenience to the Coastside, despite Mr. Whitman's assertion to the contrary. I cannot comment on whether the test wells were as good as they could have been, but apparently a drainage tunnel design might be better than drilling a preposterous number of wells (89). 2

It makes no sense that the broken and twisted shale and sandstone mass is permeable when it comes to holding water, and impermeable when it comes to drainage. Many similar rock or soil cliffs along the road both north and south failed repeatedly because they became saturated, yet they rarely failed in previous years, and most of the time they are dry and stable. As reported in the well study, water is able to find its way through cracks in the upper shale mass and eventually exits down the face of the slide. There is ample opportunity to take advantage of this effect in a sloping drainage tunnel design, while water just sits in the test well design. Surely, properly designed and located construction will resist seismic forces.

I hesitate to raise the issue of bias in the study, but it is an issue, when you consider how Caltrans District 4's incredibly unfortunate test results quash a just-fix-it project alternative while the big, monster project gets the nod. I am neither looking forward to footing the bill nor looking at the utter devastation the tunnel represents. 3

When Measure "T" passed I overheard a woman in the supermarket saying she did not want to be in the tunnel when there was an earthquake. At the time, I hoped there would be some balance in considering project alternatives under this initiative. Now, there is the prospect of daily danger no amount of artificial lighting at the portals ever seems to help, which is that long moment of blindness when you enter a tunnel during the day. Perhaps tunnel accidents and incidents over the cliff cancel each other out, but the vista clear across the Pacific and down the edge of our country will simply disappear. Reconsider dewatering!

Sincerely,

Chris Church

Chris Church

1. Your comments and opinions regarding tunnel design features and impacts versus an overland scenic route are acknowledged.

2. Please see detailed responses to John Hovland regarding dewatering.

3. Your comment and opinion are acknowledged.

Mary Clayton
199 Rainier Circle
Vacaville, CA 95687
May 9, 1999

Mr. Robert Gross, Chief
Office of Environmenal Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA 94623-0660

Re: Bypass

The San Mateo coast had a certified, adopted route, the Martini Creek alternative, approved by local, regional, state (including the Coastal Commission) and federal agencies, and the U.S. District Court, all of whose approval was required before application could be made for federal funding. I fail to understand why we spent over $200,000 dollars to explore the Tunnel Initiative, which can never meet federal safety standards because the Initiative calls for a two-lane tunnel. Furthermore, Federal funding cannot be transferred from one route to another, especially when the final route has not been set. 1

State Highway routes can only be determined by the Metropolitan Transportation Committee and the State Highway Commission. The initiative process doesn't extend to administrative decisions by local government.

To quote the Initiative, "the LCP [Local Coastal Program] restricts Highway 1 to a two-lane scenic highway". What is scenic inside a tunnel? 2

The Initiative's two-lane tunnel is neither safe nor dependable. In addiion it fails to solve the slide problem, as it leaves the balance of the cliff-hanging route subject to closure at the three unstable slopes south of the south portal.

The proposed four-lane tunnel design does not meet the LCP limitation to two lanes nor avoid the three other potential slide areas.

In 1983 during the three-month Devil's Slide closure, a massive slide also closed Highway 92, the coast's only other route to the bayside. For a long time only a single lane there was open and traffic in both directions 3

took turns, moving very slowly because of the trucks.

The closure and partial closure were a nightmare for commuters and affected business up and down the coast. Some restaurants and stores which depended on tourist trade closed for good. Our U-Pick operation, thirty miles south of Half Moon Bay, lost one-third of our customers. Devil's Slide was closed for the entire seven-week berry season. Farmers and businessmen alike need safe and reliable access to and from markets and transportation centers. 4

Caltrans estimates that the total cost of building the Bypass will be $82.84 million vs. the $179.98 cost of the impermissible four-lane double-bore tunnel; annual costs for the Bypass will be $0.34 million vs. $2.26 million for the latter. There would be no delay in building the Bypass vs. four years delay in constructing the tunnel. We've needed the Bypass since 1993. It was voted in by people (who don't have to use it) because some environmental activists described the 2-lane road as a growth-inducing six-lane freeway.

In 1997 the Coastal Commission certified the tunnel alternative. This certification is invalid as the 2-lane amendment to the LCP fails to provide a safe, dependable highway. 5

I question the assumption of a 5.5% linear increase in fog occurrence per 100' rise in elevation (pg 55, 2nd Sup.). People who travel the coast know that where there is a road cut or stand of trees west of the highway, fog is blocked and rises above the road. The highest elevations of the Bypass run through a deep road cut at the San Pedro Mountain saddle; fog would pass over the road, not on it, allowing good vision. Any fog at lower elevations could be mitigated by planting native trees to block the fog. 6

Respectfully submitted,

Mary Clayton

Mary Clayton

Mary Clayton

1. On November 5, 1996, the voters of San Mateo County passed the Devil's Slide Tunnel Initiative known as Measure T. This initiated the process to amend the County's Land Use Plan portion of their certified LCP. Their Land Use Plan now refers to, a tunnel for motorized vehicles only behind Devil's Slide through San Pedro Mountain, as San Mateo County's preferred alternative for Highway 1 around Devil's Slide, and deletes references to a two-lane highway bypass along the Martini Creek alignment. Such a tunnel would meet applicable Federal safety standards.

2. Both tunnel variations are considered 2-lane facilities. The Martini Creek alignment alternative is also considered to be a 2-lane road, although it has uphill climbing lanes in both directions. Several scenic roads incorporate tunnels, and in some circumstances tunnels help preserve the scenic nature of the surrounding area.

3. There is no proposed "four-lane" tunnel design.

4. Your comments regarding the problems and inconveniences of highway closures at Devil's Slide are noted. Cost estimates for the various alternatives have been updated and revised. See Sections 3.1.1 and 3.2.1. As a result of the Federal court litigation, it was determined that further evaluation of the Martini Creek Alignment alternative was necessary. Furthermore, the 1995 Record of Decision for the Supplemental EIS for the project indicated that re-evaluation of the project should consider a tunnel alternative. Since 1995, there has been no situation in which the tunnel construction would be delayed beyond any construction of the Martini Creek Alignment alternative.

5. Your opinion regarding the validity of the 1997 Coastal Commission Certification is acknowledged.

6. Fog, whether mitigated or not by road cuts or planting of trees, is only one factor under consideration in the planning process. Fog is not considered to be a major determinant for which an alternative is selected.

Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4

Sunday, May 9, 1999

Dear Mr. Gross:

Thank you for this opportunity to comment on the Draft of the Second Supplemental EIR on Devil's Slide. I am a longtime hiker and hike leader on Montara Mountain and am very familiar with Shamrock Ranch, which I visited again two days ago. I wish to address the issue of the access road(s) proposed to lead from Highway One to the bridge pillars near the north portal of the tunnel.

I find it hard to believe that Caltrans would propose these roads, with their extensive grading, in a narrow, fault-laced valley that drains directly into the pond that a $16 million bridge will be constructed to preserve. Nothing built on the surface in this area lasts. Your agency has futilely been trying to repair the road slump immediately south of this pond for years. I know; I commute over this road. Severeerosion from these proposed access roads is sure to result and drain into the pond. And what about the debris slides and slumps they will foment? I had the USGS geologic map of the area with me two days ago, and there is no question that both sides of the valley are quite unstable. 1

So why is Caltrans promoting these roads? Why not go in through the ranch? I understand there are several ways to do this. At the least you could eliminate half the proposed new roadway by utilizing the old Half Moon Bay/Colma Road already in place above the proposed access road on the eastern wall of the canyon.

I do appreciate the opportunity to have made these comments. I also hope that Caltrans will continue its recent spirit of better cooperation with the public and give very serious consideration to any ideas that would lessen the damage to Montara Mountain and Shamrock Ranch and its red-legged frog pond. 2

Sincerely,

Joe Barnwell

Joe Barnwell
PO Box 3137
Moss Beach, CA 94038
(650) 728-0468

Joe Barnwell

1. Instead of accessing work areas from the west as proposed in the 1999 Draft SSEIS/SEIR, construction access is now proposed from San Pedro Terrace Road through Shamrock Ranch. This proposal was developed in consultation with the USFWS and the property owner.

2. Your comments regarding "the spirit of cooperation" and "consideration towards the lessening of damage to Montara Mountain and Shamrock Ranch and its red-legged pond" are noted.

May 10, 1999

Mr. Robert Gross, Chief
Office of Environmental Planning South
Caltrans District 4
P. O. Box 23660
Oakland, CA 94623-0660

Dear Mr. Gross:

The conclusion drawn in the draft of the Devil's Slide Second Supplement of the 1986 Environmental Impact Report that dewatering is not a viable project alternative (page 37) is not supported by the facts. The principal fact ignored is that the 1997-98 El Nino year was the second wettest in history, yet no landsliding occurred. The only reasonable conclusion that can be drawn is that the limited dewatering achieved by the two vertical wells and the remaining horizontal drains prevented a land slide.

Given this conclusion and the cost differential, it would appear that completing the dewatering as proposed in Dr. H. J. Hovland's Report (1998), "Devil's Slide - A Study of the Feasibility of Stabilizing the Landslide Area Along Highway One, San Mateo County, California, by Dewatering" would be appropriate.

Many thanks for your consideration of these comments.

Sincerely,

Roger S. Goodrich

Roger Goodrich

1. Your conclusion regarding the limited de-watering effort during the 1997-98 El Nino period is acknowledged. Please see detailed responses to John Hovland regarding de-watering.

H. John Hovland, Geotechnical Engineer, Ph.D, PE
781 Alvarado Road
Berkeley, CA 94705

Phone 510 549-1672

May 11, 1999

Mr. Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA 94623-0660

Regarding: Devil's Slide - Second Supplement to the 1986 Final Environmental Impact Statement/ Environmental Impact Report - Draft - March, 1999

Dear Mr. Gross:

Transmitted herewith are my comments on the above named report, specifically on the feasibility of dewatering at Devil's Slide. My comments are based on a careful review of Caltrans' report "Dewatering Feasibility Study" (Whitman, 1998), and an independent analysis of the data obtained from the investigations in 1997-98 (Whitman, 1998).

I disagree with the conclusions reached by Caltrans. My conclusions are contrasted with those of Caltrans in the summary of the attached report. It is clear to me, and should be to the reader of the attached report, that the study by Caltrans does not provide "conclusive cause for rejection" of dewatering. I conclude that dewatering of Devil's Slide is feasible, and that even with the existing very preliminary drainage efforts, dewatering is already improving slope stability at Devil's Slide.

Based on my previous studies (Hovland, 1998), dewatering of Devil's Slide could probably be done for less than 10 million dollars. My understanding is that the proposed tunnel would cost about 135 million dollars. Thus, it seems to me, that the taxpayers would be interested in an objective and scientific evaluation of the feasibility of dewatering. Maybe the time has come for an independent third party investigation of the feasibility of dewatering Devil's Slide.

Devil's Slide is a large and complex landslide. Additional investigations will generate additional opinions, but will not answer all questions. It is important that additional investigations be designed to become part of the eventual dewatering and/or monitoring effort. As we already know, investigations cost money, but only installed drainage systems improve the stability of the slide.

Sincerely,

John Hovland

H. John Hovland

DEVIL'S SLIDE

REVIEW OF CALTRANS' 1998 "DEWATERING FEASIBILITY STUDY"

and

CONSIDERATION OF NEW DATA FROM CALTRANS' 1997-98 INSTALLATIONS AND PREVIOUS DRAINAGE SYSTEMS

by

H. John Hovland, Ph.D., P.E.

May, 1999

H. John Hovland, Geotechnical Engineer
781 Alvarado Road, Berkeley, California, 94705

TABLE OF CONTENTS

SUMMARY

The writer has completed a review of Caltrans' "Dewatering Feasibility Study," (Whitman, 1998), and an independent evaluation of new data obtained between 1997 and 1998. The report (Whitman, 1998) draws the conclusion that dewatering Devil's Slide is not feasible. The writer disagrees with Caltrans' conclusions. The writer concludes that dewatering is feasible, and that it is already having a stabilizing influence at Devil's Slide. A summary of the main conclusions that contrasts Caltrans' and the writer's position is presented below.

1. Caltrans concludes that dewatering with wells is not feasible because their Table 1 (Whitman,1998) shows it is difficult to have a productive well in ground that has a low permeability. As explained in this report, the Table 1 that Caltrans uses is developed for domestic water needs and cannot be used to draw any conclusions about the feasibility of dewatering.
2. Caltrans refers to Turner and Schuster, 1996, (page number not given) in concluding that dewatering is not feasible. Turner and Schuster, 1996, in discussing dewatering states: "Can not be used effectively when sliding mass is impervious." But Devil's Slide is not impervious. Table I-5 (Hovland, 1998) presents several case histories in different parts of the world, and in comparable or less permeable materials, where dewatering has been used effectively.
3. The report (Whitman, 1998) tries to interpret peculiarities in the response of the water levels in observation wells along the road. As discussed in this report, the lack of any observation wells downslope or upslope from the road is a major weakness in Caltrans' study, and makes such interpretations questionable.
4. On the basis of the 1997-98 pumping test at the site, Caltrans concludes that the hydraulic conductivity (permeability) is too low to achieve an adequate drawdown of the water level. Our analysis of the data shows an impressive drawdown in boring 1998 P-1.
5. The pumping test of well W-1 by Caltrans in 1997-98 produced a pumping rate of 0.5 to 6.9 gpm. The writer (Hovland, 1998) estimated pumping rates of 1.0 to 3.0 gpm. Therefore, the writer's estimates have been confirmed.
6. Dewatering is already having a stabilizing effect on Devil's Slide. Analysis of an 1866 map shows that the wettest year in this area, 1861- 62, caused rainfall-induced landslides at Devil's Slide. The fact that no landsliding ocurred at Devil's Slide during the next wettest year, 1997-98, the El Nino year, can be explained by the dewatering achieved from the presently existing drainage systems at Devil's Slide.

INTRODUCTION

The purpose of this report is to review and comment on the conclusions arrived at by Caltrans, and to analyze the additional data obtained by Caltrans for an improved understanding of Devil's Slide. The 1997-98 data, Caltrans' report (Whitman, 1998), and the "Devil's Slide Second Supplement to the 1986 Final Environmental Impact Statement/Environmental Impact Report, March 10, 1999," was received by the writer in late March of 1999.

An extensive evaluation of the feasibility of improving the stability of Devil's Slide by dewatering is contained in my report dated May, 1998. The basic conclusion arrived at in that report is that Devil's Slide can probably be stabilized by dewatering at a cost of less than 10 million dollars. It was recommended that the feasibility of dewatering be further studied. In response to that recommendation and to related discussions, the San Mateo County Board of Supervisors requested Caltrans to perform a feasibility study of dewatering. Caltrans has prepared a report entitled "Dewatering Feasibility Study" (Whitman, 1998), which presents their conclusions and the results of pumping tests and measurements to the end of May, 1998.

CALTRANS' REPORT "DEWATERING FEASIBILITY STUDY, 1998"

The recently completed report by Caltrans (Whitman, 1998) presents new data that needs to be considered. Conclusions reached by Caltrans are discussed below. (References to page numbers in this section of this report refer to Caltrans' report.)

CONTRADICTIONS AND LIMITATIONS IN CALTRANS' STUDY

Caltrans concludes that dewatering of Devil's Slide is not feasible because the pumping rates obtained in the test wells were too low (p.1), and because the hydraulic conductivity or permeability, as determined from the test results, for the subsurface materials is too low (pp. 1,4, and 17). The report also concludes that "infiltration of additional water into the subsurface during heavy rains occurs rapidly" (p. 2), and that "Pumping rate data from W-1 indicates that the water passes through the system relatively quickly." (p. 14) These conclusions are contradictory.

Referring to well W-1, the report makes the following statement on p. 9: "From the drawdown within the pumping well, 66 meters (218 ft), the transmissivity of the landslide mass was calculated to be 0.24 square feet per day using an average pumping rate of 1.8 gpm (Jacob Straight-Line Time-Drawdown Method). This rate of transmissivity, as shown in Table 1, shows that the potential for developing a productive well is very poor to infeasible."

How is 1.8 gpm an average pumping rate? According to p. 2, and Fig. 7, 1.8 gpm is approximately the lowest or the dry-season pumping rate. The average pumping rate from Fig. 7 equals approximately (6.9 + 1.8)/2 = 4.35 gpm. The average pumping rate from Fig. 5, by numerically integrating the areas under the curve, equals approximately 4.3 gpm. Using 4.3 gpm, the transmissivity = 0.24(4.3/1.8) = 0.57 square feet per day. Entering Table 1 with 0.57 indicates a fair-to-poor, not an infeasible, likelihood of developing a productive well for domestic water needs. (Domestic water needs are arrived at by recognizing that in our culture each person, on an average, needs/uses approximately 70 gallons of water per day. This coupled with past experience and the cost of well drilling allows an investigator to arrive at required transmissivities and a Table 1.) But domestic water needs have nothing to do with dewatering. Therefore, Table 1 cannot be used to draw any conclusions about the feasibility of dewatering Devil's Slide. As will be explained later, for dewatering purposes, a well can function as a vertical drain without any pumping.

Regarding water levels measured by the piezometers, the report includes the following interesting statements: "After long-term pumping began, pumping rates increased with the onset of winter rains in early January 1998 in W-1, and to a lesser degree in W-2, from an initial sustained pumping rate of 0.5 in December 1997 to 6.9 gpm by late February and March, 1998. By May 30, 1998, after winter rains had ended, pumping rates had decreased to an average of 1.7 gpm." (p.2) "Given this winter's heavy rainfall (1997-98), any impact from rainfall should be clearly shown in the groundwater data." (p. 6) "The upper three piezometers, (P-1d, e, and f) have shown no change since pumping began." (p.13) "P-2e and P-2f showed no change since long-term pumping began." (p.13) The report recognizes an apparent discrepancy and attempts to explain it as follows:

"There is a discrepancy between the increased rates in the test wells and the non-response of shallow water levels. The increased pumping rate would indicate increased amounts of

groundwater available to the test wells; however, this increased groundwater should have been evident in rising groundwater elevations in the monitoring wells, which did not occur. It appears that the upper piezometers are monitoring an unconfined groundwater system; groundwater flowing downslope is free to flow out of the nearby cliff face. Groundwater would exit the cliff face at a constant rate, resulting in no rise or fall in shallow groundwater levels in the vicinity of the monitoring wells. With the installation of the pumping wells, groundwater that would have exited the cliff face was instead removed by pumping; but, because of the open groundwater system in the upper landslide mass, there is little effect on the shallow groundwater levels. It is also believed that the source of the increased amounts of groundwater recorded in the pumping wells and horizontal drains due to winter rains is this upper landslide mass area." (p. 14-15) (What is referred to as shallow water levels are measurements of piezometers at depths of approximately 100 feet; the nearby cliff face would be about 200 feet away.)

An unconfined groundwater system in the upper landslide mass does not explain the small fluctuation of water levels in the upper piezometers. With pumping of W-1, for example, water pressures in the upper piezometers would in time reduce to a level at the bottom of the unconfined stratum or the bottom of the piezometer. Removing water that would have otherwise exited the cliff face obviously reduced the amount of water in the landslide downslope of the road and, therefore, probably had a positive effect. The increased pumping rate in W-1 in the rainy season obviously removed water at an increased rate from somewhere in the landslide, but no consideration is given to and no observations were made in the upper area of the landslide. The only measurements in this study were from installations along the road. This is a major weakness of Caltrans' study.

The small fluctuation of the water levels in the upper piezometers could also be explained by perched water levels in thin, confined, and probably discontinuous layers. It will be demonstrated subsequently that a small drop in the water level of the upper piezometers along the road could be indicative of a significant drop in the water level in the upper area of the landslide upslope from the road. The fact that the heavy winter rains did not significantly raise the water levels in the upper piezometers can also indicate that the wells and horizontal drains prevented a rise that would have otherwise taken place.

SPECIFIC POINTS BY CALTRANS AND ANSWERS BY HOVLAND

* Caltrans:

" --Due to -- small volume of water removed -- limited lateral influence -- pumping from the two wells produced a negligible enhancement of roadway stability --. It seems likely that, -- the roadway would have performed in the same manner whether the test wells were operating or not." p.3

Answer:

These conclusions are premature. With only two wells, and only a few months of pumping, the roadway probably would have performed the same way. However, with time, the lateral influence will enlarge. Pore water pressures are not directly related to the volume of water removed; a small amount of water removed can significantly decrease pore water pressures.

* Caltrans:

"Both the landslide mass and the surrounding bedrock have low hydraulic conductivity; and, based on this fact alone, Devil's Slide is not an appropriate site for dewatering using pumping wells." p. 17

Answer:

Increased pumping rates and increased flow from the horizontal drains after heavy rainfall suggests a much higher permeability of the landslide mass. Pumping of W-1 shows an impressive drawdown at P-1.

* Caltrans:

"During both drawdown and recovery tests, no measurable movement of the water levels was detected in any of the six multiple level observation wells which indicated very low hydraulic conductivity for the formations." p.1

Answer:

The only observation wells (1998 P-1 and P-2) where a drawdown would be expected (because of the existence of a continuous, unconfined aquifer), experienced a significant drawdown.

* Caltrans:

"-- Pz-2 and Pz-3 --1988 to May 1998 -- minor fluctuations of 5 m (16 ft) up or down during the 10 year period. The trends are gentle and extend over many months. There was no measurable change in ground water recorded just prior to and after the 1995 landslide failure." p.2

Answer:

Fluctuations of 16 feet can have a significant effect on stability (Hovland, 1998). The 1995 landslide was mostly downslope of the highway. Since no measurements have been made in that area, there is no way of knowing the groundwater conditions there.

* Caltrans:

"Of the 54 horizontal drains installed throughout the project area, only 35 remain in working order as of May 30, 1998. Many of the 19 horizontal drains not in working order were buried or destroyed due to continual landslide activity." p.3

Answer:

Of the two deepest horizontal drains installed into the active slide in 1980, both are still working. Of the 10 horizontal drains installed in 1995 that also drain the active slide,

10 are still working. The drainage from these drains is presented in Figs. 8, 9, and 10 in this report. The writer suspects that very few drains have been damaged by the landslide, Most of the drains that have been lost were probably dry and not worth keeping, or were damaged or lost due to surficial erosion.

* Caltrans:

"Groundwater data collected from the -- 1980 ? -- unsealed open standpipe slope inclinometers -- is considered unreliable because the water levels recorded -- were likely contaminated by surface water inflow." p. 12

Answer:

Can the tops be sealed and measurements continued?

EVALUATION OF NEW DATA OBTAINED BETWEEN 1997 AND 1998

REVIEW OF DEVIL'S SLIDE AND THE GROUNDWATER REGIME

A thorough description of Devil's Slide is contained in my report dated May, 1998, which presented an evaluation of the feasibility of improving the stability of Devil's Slide by dewatering. This report presents an assessment of the new data from Caltrans' 1997-98 investigations, and correlates the new data with previous information. All data obtained in 1997-98 is from installlations along the road (Highway 1). This includes data from previous borings, horizontal drains, wells W-1 and W-2, and the observation or monitoring wells. The locations of these, as related to the central or active slide, are shown in Fig. 1. (See also Fig. II-1, Hovland May, 1998). Due to the close proximity of the 1980 borings 1, 2, and 3 and the 1988 borings 5 (SI-5) and 6 (SI-6), the locations of these borings in Fig.1 are approximate.

The horizontal drains that were selected for this study are those that are close enough to influence the groundwater in the central, most active slide. As shown in Fig. 1, they are the 1980 horizontal drains 3, 7, and 8, and the 1995 horizontal drains 2, 3, 7, 8, 9, 10, 11, 12, 30, 31, and 33. The length and direction of the 1980 drains are known, and are shown to scale. The length and direction of the 1995 drains are not known, and they are indicated in Fig. 1 by a short line perpendicular to the highway. Horizontal drains south of the 1995 drain 12 are not used in this study; they are considered to be drilled into the granitic mass and are not likely to influence the groundwater significantly in the active slide. The measured flow from the selected horizontal drains will be discussed subsequently in this report.

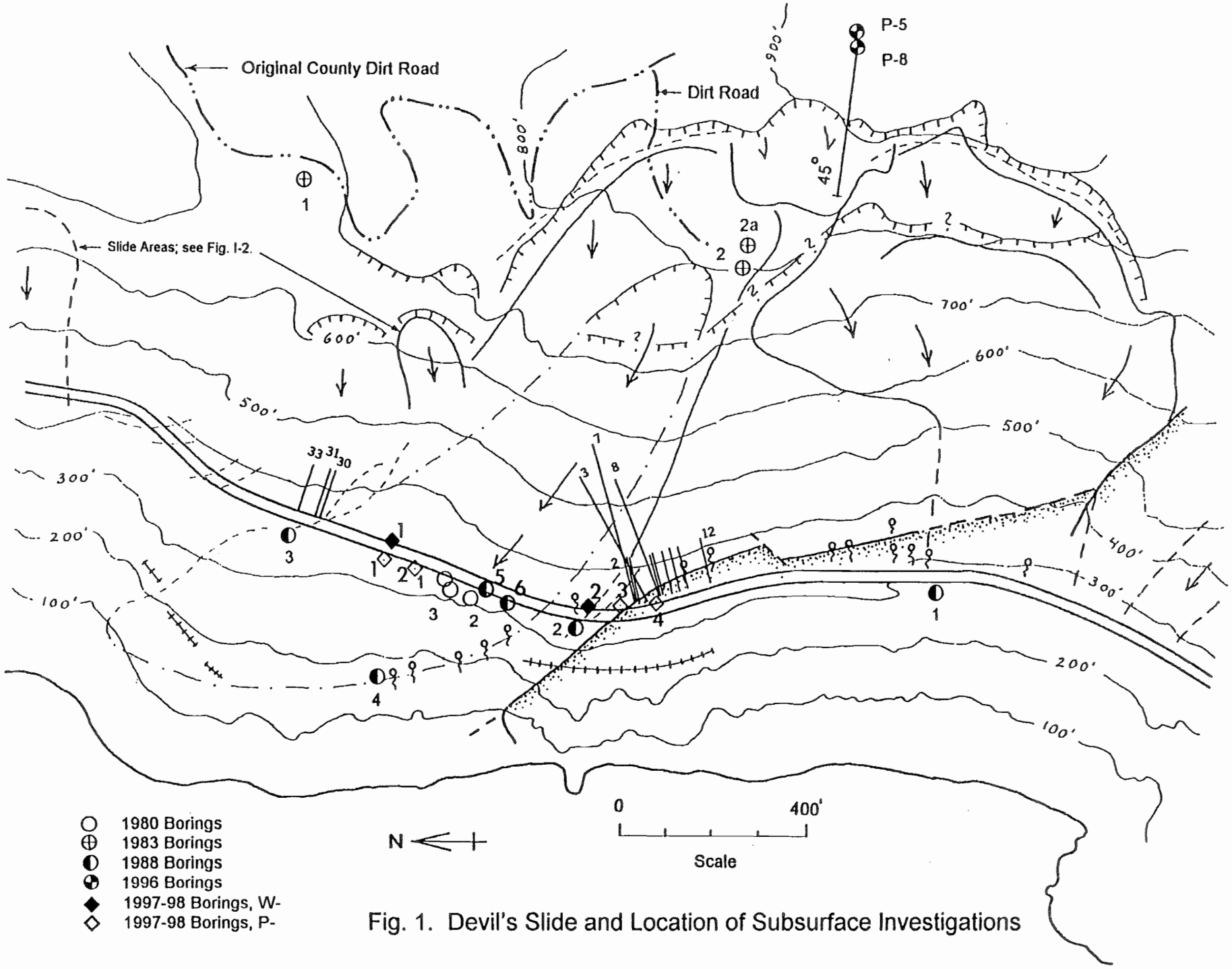


Fig. 1. Devil's Slide and Location of Subsurface Investigations

Water level information from the borings along the road is presented in Fig. 2. This figure is a vertical section along Highway 1 looking upslope. The spacing of the borings (wells, observation wells, piezometers, and inclinometers) is based on Fig. 1 and the data that supports it, and on Whitman, 1998, Fig. 4. Due to the scales used, some compromise on the accuracy of the spacing was taken; the spacing between 1998 W-1 and P-1, 1998 W-2 and P-3, and 1980 SI-1,2,3 and 1998 SI-5 was slightly increased in Fig. 2 for illustrative purposes.

Basically, two types of water level measurements are obtained from these borings. The wells (W-1 and W-2) and the inclinometers or slope indicators (SI) are open to the subsurface for the full depth, except purhaps for a short section at the top. They measure an average water level. The piezometers measure water levels (pressures) at the depth of the piezometer. Where piezometers at different depths in the same boring indicate essentially the same water level, such as, for example, for the lowest three or four in 1998 P-1 and P-2, and to a lesser extent in 1988 PZ-3 (MDA PZ-3), the subsurface water regime can be interpreted as continuous. Where piezometers at different depths in the same boring indicate very different water levels, such as in boring 1988 PZ-2 (MDA PZ-2) and to a lesser extent in the upper piezometers in borings 1998 P-1 and P-2, and in 1988 PZ-3 (MDA PZ-3), the subsurface water regime is discontinuous; it consists of separate layers of water, also called perched water levels (see also Whitman, 1998, Fig. 4). These two types of groundwater regimes, continuous in the deeper, northern portion, and discontinuous in the upper northern portion and the southern portion of the central, active, slide, require different interpretations.

SOUTHERN PORTION OF THE CENTRAL (ACTIVE) SLIDE

As shown in Fig. 2, the vicinity of borings 1988 PZ-2 and 1998 W-2 above the granitic contact can be interpreted as a discontinuous groundwater system. What is happening in pumping 1998 W-2 is illustrated in Fig. 3. Before or without pumping, water enters the boring from perched layers, and if the water level (pressure) at the bottom is less, the water flows out at the bottom. As shown in Fig. 2, this has been going on in boring 1988 SI-2 since 1988, and it has not significantly raised the water level in SI-2 above the water level of 1988 PZ-2a. That is, borings 1988 SI-2 and 1998 W-2 are working as vertical drains without any pumping. This is one reason why domestic water needs and the need for dewatering can be so different. The writer thinks much of the confusion can be avoided by calling these borings vertical drains instead of wells. But if the water does not go out at the bottom, it can be pumped out, as is the case at 1998 W-1.

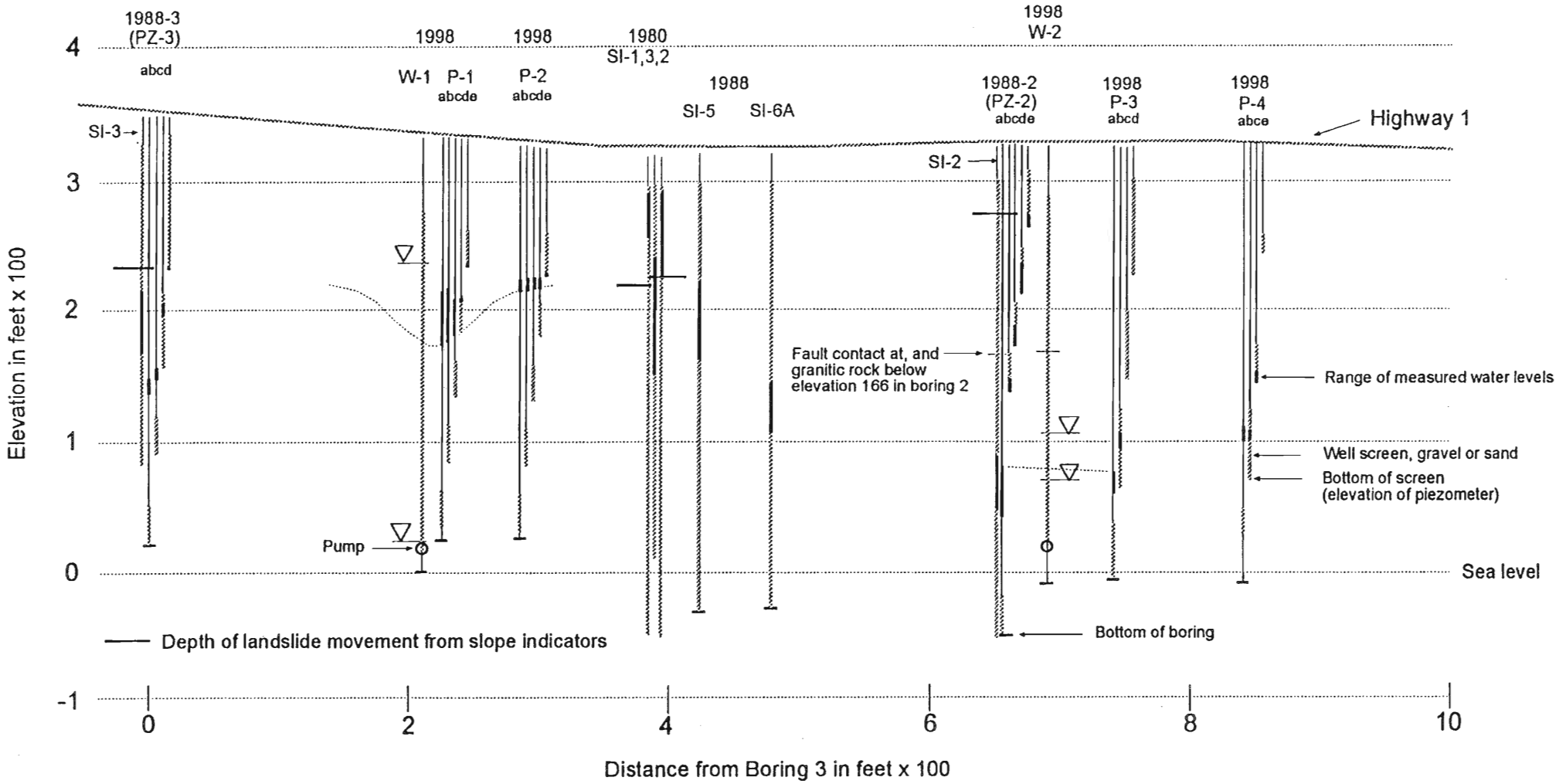


Fig. 2. Range of Water Levels Associated with the Piezometer and Slope Indicator Installations in the 1980 Borings from March 1980 to January 1983, in the 1988 Borings from September 1988 to February 1996, and in the 1997-98 Wells and Observation Wells in 1998.

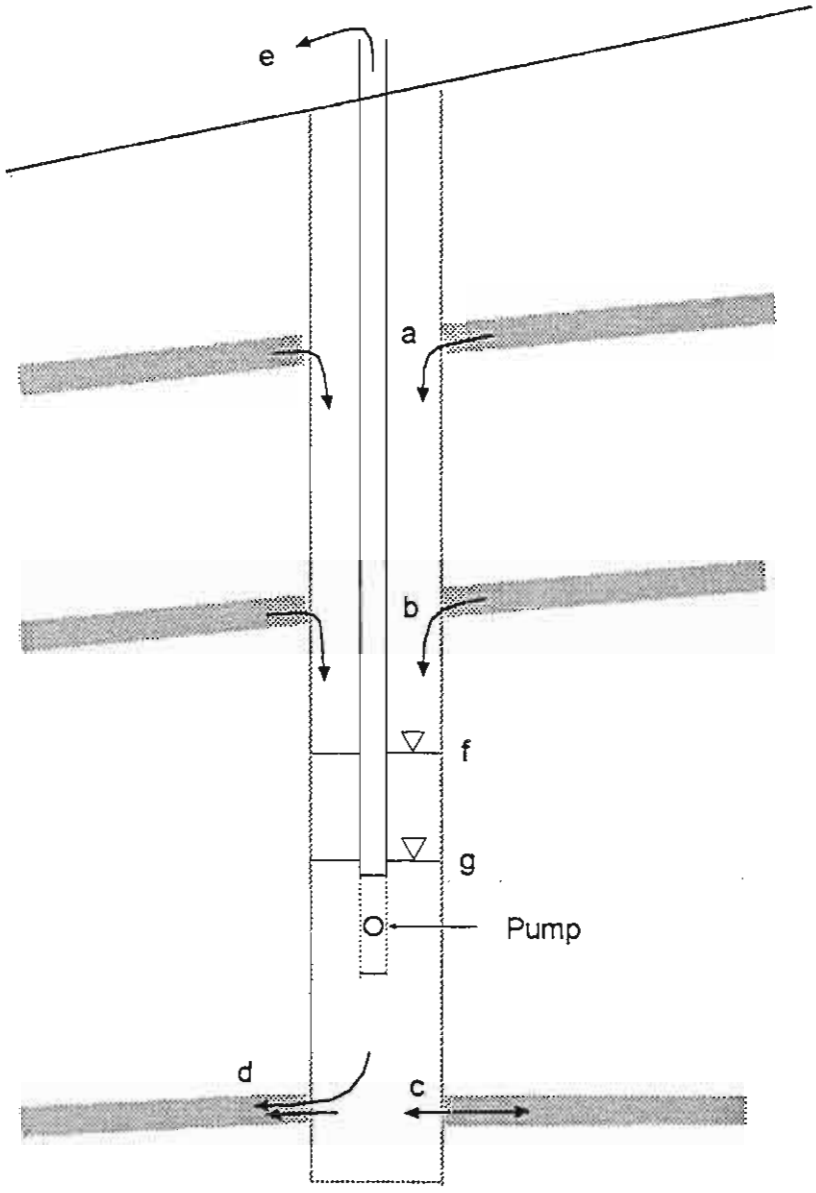


Fig. 3. Fully Perforated Boring Working as a Vertical Drain.

Now, if the vertical drain in Fig. 3 is, instead, pumped and water removed at 'e', removal of water at e reduces the flow out at 'c' and 'd' in proportion to the head loss from lowering of the water level from 'f' to 'g'. Comparing the drawdown in 1998 -2 (the vertical distance between the two triangles) in Fig.2 with the water level of the piezometers in 1988 PZ-2a and 1998 P-3a, it is noted that more than 2/3 of the drawdown is above the faint dotted line drawn from the top of the water level in PZ-2a to the top of the water level in P-3a. As long as the water level in W-2 is above that line (above the water level in the surrounding ground at that depth) water will flow out at 'c' and 'd', and water pumped from W-2 comes mainly from the perched water levels higher up. When the water level in W-2 gets below the water level in the surrounding ground at that depth, water pumped out comes from both the higher perched water layers and from the groundwater system within the granodiorite.

It is difficult to estimate how effective 1988 SI-2 and 1998 W-2 will be in removing water from the landslide, the upper perched water layers, when left to work as unpumped vertical drains. The Caltrans 1998 report does not present a long-term, winter-time, pumping rate for W-2. However, it can be assumed that winter rains caused a comparable increase in the pumping rate at W-2 as at W-1. On that basis, the peak 1998 winter-time pumping rate is estimated to be about 2.9 gpm, and the water removed from the landslide would then be 2.9(0.67), which equals approximately 2 gpm per vertical drain.

NORTHERN PORTION OF THE CENTRAL (ACTIVE) SLIDE

With reference to Fig. 2, the section from approximately 1988 SI-5 and north to SI-3 is herein considered as the northern portion of the central (active) slide. Information obtained from the 1998 W-1, P-1, and P-2 is herein considered reasonably representative of this section. As shown by 1998 P-1 and P-2, the deepest 4 piezometers measured nearly the same water level. This is taken as evidence that these measurements represent a continuous groundwater system. However, piezometers 1988 PZ-3d and 1998 P-1e and P-2e are interpreted to indicate perched or discontinuous water layers. The implications of these water layers will be considered separately.

The deeper subsurface groundwater system (based on the writer's understanding) can best be characterized as a continuous, unconfined or semi-confined aquifer with nonequilibrium radial flow to well W-1. Although specifically for a confined aquifer, the Jacob Sraight-Line Time-

Drawdown (SLTD) Method may apply to the interpretation of a semi-confined aquifer, at least for intermediate, if not for very early or very long-term, time-drawdown data.

The Jacob SLTD Method was applied to the data obtained from Whitman, 1998, Appendix B. The average drawdown for P-1a, b, and c is plotted against time in hours in Fig. 4. As anticipated by the Jacob SLTD Method, the data result in an approximately straight line on semilog paper. So far, the data shows an impressive drawdown at 1998 P-1. The water level was drawn down 10 meters (about 33 feet) in 42 days. In 145 days the water level would be down 20 m (about 66 feet); see Fig. 5, and if the initial trend holds, in one year, the water level at P-1 would be down about 27 meters (about 88 feet). The estimated drawdown at the end of May, 1998, along a section from P-1 to P-2 is shown in Fig. 2 by the dotted, inverted bell-shaped curve. It is important that measurements continue. With only one well in that area, the rate of drawdown will probably slow due to the influence of water levels north and south of the single well, but with a row of wells along the road spaced at approximately 90 feet or less, the trend showed by Fig. 4 may hold.

The cross section in Whitman, 1998, Fig. 6, modified for the purpose of this discussion is presented as Fig. 5. The upper dashed line is the inferred potentiometric (water level) surface of the deeper continuous groundwater system before pumping W-1. After pumping, the potentiometric surface is drawn down, as shown by the dashed lines to the pump. These curved lines are estimates. The upper of these lines on the right side is anchored at the depth shown by measurement of the drawdown in P-1 after 42 days of pumping. The lower line on the right side is based on a projected drawdown depth from Fig. 4 after 145 days of pumping.

The arrows along the faint dotted lines at the top represent seepage from separate (discontinuous) cracks or layers, based on measurements from the uppermost piezometers in Fig. 2. This is approximately the same depth where landslide movement has been identified by the slope indicators (Fig. 2). (Landslide movement has not been identified at any greater depth below the road.) It is possible seepage along these discontinuous or perched water layers follows interfaces of the 1980 and 1983 landslides (Hovland, 1998). If this is the case, it is important that these layers be drained, since any shift in the landslide could significantly increase pore water pressures along these layers. A good but small attempt in this direction has been made by W-1. Pumping of W-1 has intercepted seepage along these layers and thereby reduced the likelihood of such increased pore water pressures developing downslope of the road in the vicinity of W-1. On the upslope side, as soon as the water level in W-1 is lowered below the perched water layers, the pore pressure for such layers at W-1 is reduced to zero. When a

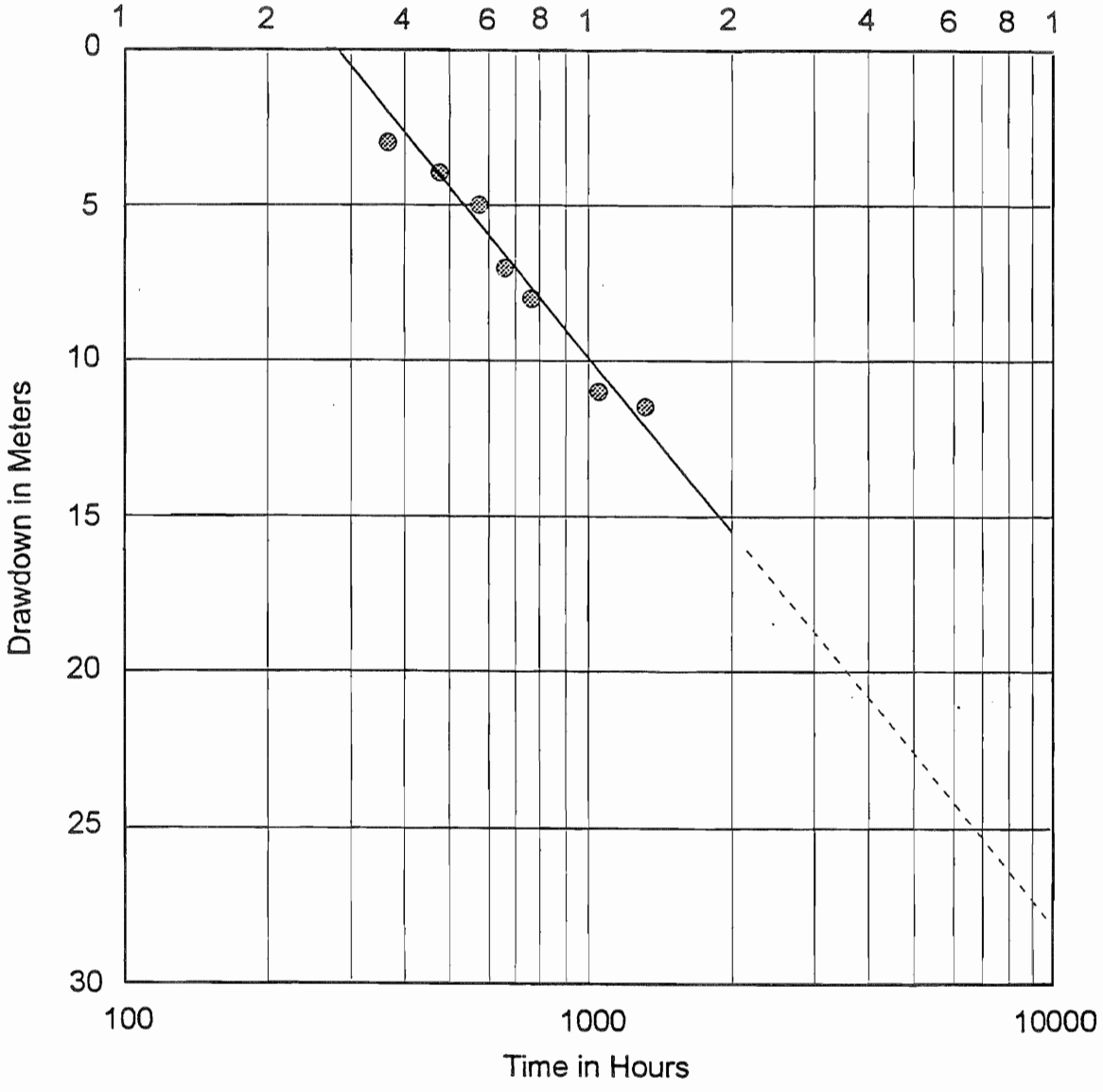


Fig. 4. Jacob Straight-Line Time-Drawdown Method for Pumping Test Data from W-1 and P-1a, b, and c. Devil's Slide, 1998.

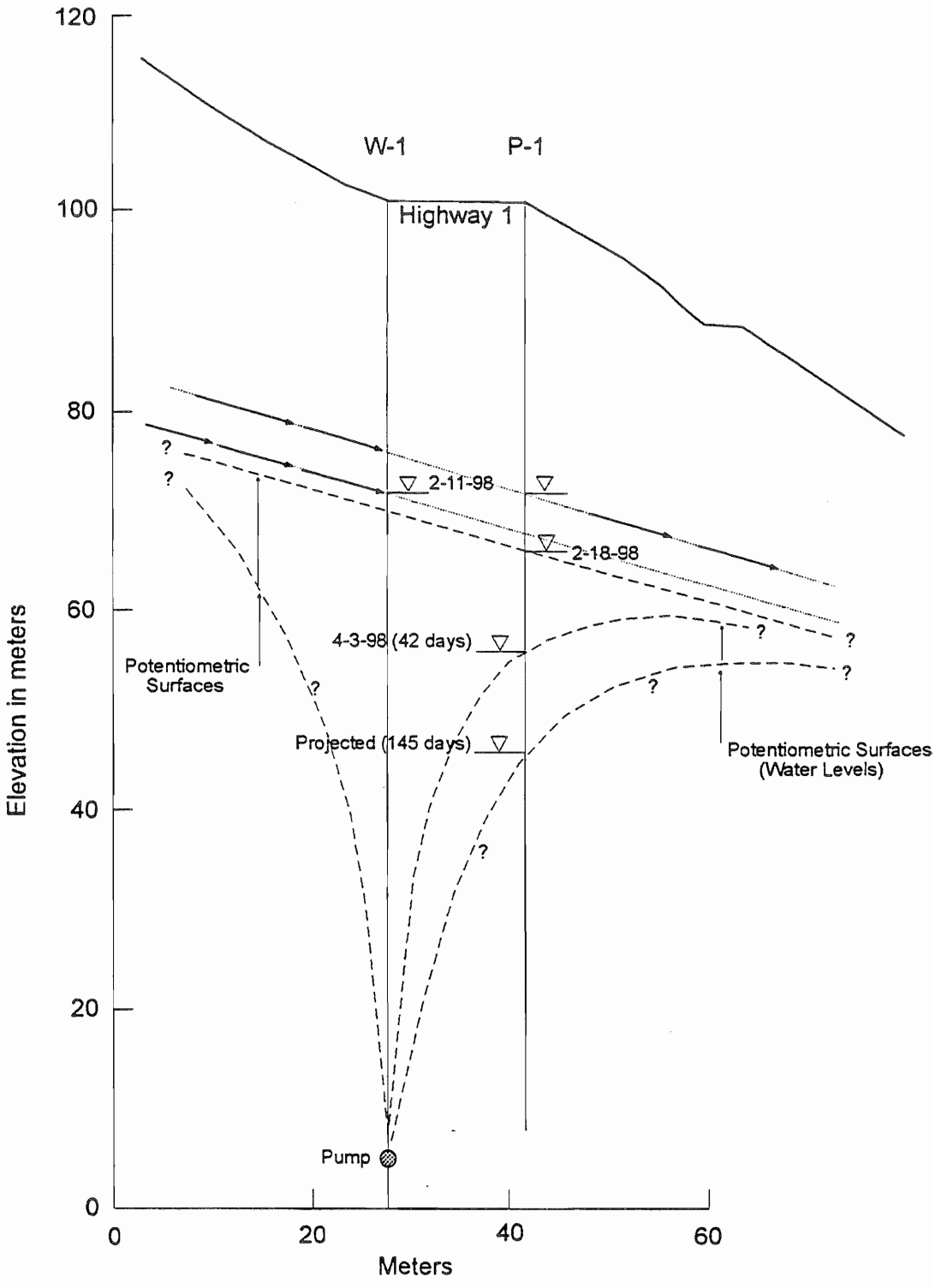


Fig. 5. Cross Section at Well W-1 and Observation Well P-1 Devil's Slide, 1997-98.

steady state is eventually reached, pore pressures will have been reduced all the way back to its source. This will have a stabilizing effect although very little water may have been removed.

Regarding the upslope side of the road, from the road to the top of the landslide, the small fluctuation in the water levels measured in the upper piezometers can be explained as follows. Based on evidence from the drilling of the 1983 borings 2 and 2a, circulation of drilling fluid was lost throughout the drilling operation. This suggests that rain water would easily infiltrate into the subsurface in this upper area. Changes in P-1 can't be considered since P-1 is in the shadow, so to speak, of W-1, but changes in P-2 can be considered. From the beginning to the end of pumping in 1998, the water level dropped a barely measurable 0.3 m (one foot) in P-2e. The upper area of the active slide is approximately 800 ft horizontally east. The water level at that distance upslope is estimated to be about 250 ft higher than at P-2. For steady state seepage conditions, a change in the water level in the upper slide area would cause a change in the water level at P-2 of $\Delta h(P\text{-}2) = \Delta h(upper)(85)/800$. Thus a one foot drop at P-2e could have been caused by the water table in the upper part of the slide having been lowered by about 10 feet by the horizontal drains as well as by the pumping of W-1. In reality, the fluctuations in the water level in the piezometers is influenced by all of pumping, horizontal drains, and natural drainage from the slope. Since no measurements of the water level at the top of the slide were made, these influences can be considered but not quantified.

Implications of an "open" groundwater system above the upper piezometers also need to be considered. By "open" herein is meant essentially vertically downward percolating rainwater which reaches the perched or water bearing layers without encountering a continuous water table. This would raise the water level in the piezometers unless the water bearing layer has a much higher permeability than the above ground. Fig. 7 (Whitman, 1998) shows a delay of about 45 days between the beginning of increased rainfall and a sudden increase in the rate of pumping from W-1. (Figs. 8 and 9 of this report show a similar delay between the beginning of increased rainfall and flow from the horizontal drains.) If this increased pumping rate was caused by increased flow from the perched or upper layers, which are at a depth of approximately 100 feet, the vertical permeability could be estimated as 100ft/45 days = 2.2 feet per day. This is approximately 100 times the permeability or hydraulic conductivity computed from the drawdown data and the pump tests. If the delay between the rainfall and the pumping rate is considered too long, the vertical permeability would be even higher. This suggests that the permeability of the upper 100 feet (the landslide we are trying to dewater) is much higher than the permeability of the deeper sedimentary strata.

AQUIFER PARAMETERS FROM TIME-DRAWDOWN DATA

As described above, the continuous deeper aquifer in this section of the active slide can, in the writer's opinion, best be characterized as unconfined or semi-confined with nonequilibrium radial flow to the well. A confined aquifer is one that has an impervious, horizontal confining layer at the top of the aquifer (the water bearing stratum). There is no evidence for the existence of such a confining layer at Devil's Slide. Instead there may be many semi-impervious and discontinuous "confining" layers. Assumptions made regarding confinement are important because the hydraulic conductivity (k), the parameter of primary interest, is obtained by dividing the transmissivity (T) by the thickness of the reservoir; the thickness of the reservoir depends on assumptions of the location or depth of confining layers. The Jacob SLTD Method for nonequilibrium radial flow in a confined aquifer is considered a good compromise. It satisfies the nonequilibrium condition of the measurements, since a steady state probably has not yet been reached. While it may not satisfy the confinement requirement, a lowest estimate of hydraulic conductivity can be obtained by using as a thickness the full wetted depth of the unconfined reservoir (from 1998 P-1 in Fig. 2). Using the head loss for one log cycle from Fig. 4 (15 m or 49 ft), a reservoir thickness of 150 feet, and an average pumping rate of 4.3 gpm, the writer computes a hydraulic conductivity of 0.021 ft/day. The average of hydraulic conductivities presented in Caltrans' report (Whitman, 1998) is 0.032 ft/day. These values are shown in Table 1.

The assumptions required, or the main conditions (Fetter, 1994) for the applicability of the formulas used by Caltrans and by the writer to obtain the above values, in addition to the conditions discussed above, are presented below:

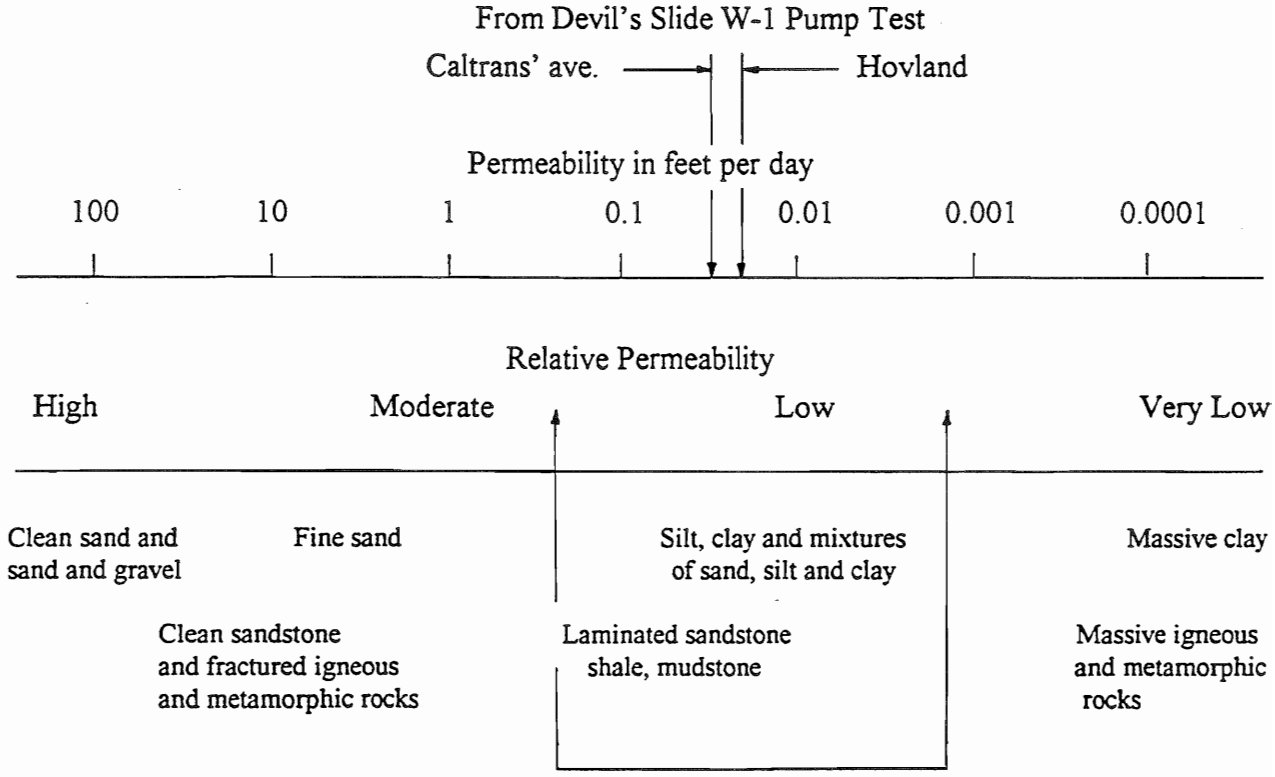
1. All geologic formations are horizontal and of infinite horizontal extent.
2. The potentiometric surface of the aquifer is horizontal prior to the start of pumping.
3. All changes in the position of the potentiometric surface are due to the pumping alone.
4. The aquifer is homogeneous and isotropic.
5. All flow is radial toward the well.

None of these conditions were satisfied. Therefore, in the writer's opinion, it is in this case just as good or perhaps better to estimate the likely range of hydraulic conductivity from our general knowledge of subsurface conditions at Devil's Slide (sedimentary rocks and landslide materials consisting of laminated sandstone, conglomerate, shale and mudstone, and mixtures of gravel,

Table 1

Comparison of Permeability and Representative Aquifer Materials

(From Ground Water Manual, US Dept. of Interior, 1985, Fig. 2-5)



From Devil's Slide Materials

sand, silt and some clay). The range of hydraulic conductivity (permeability) obtained by this method is also shown in Table 1.

THE LANDSLIDE UPSLOPE OF THE HIGHWAY

The best way to drain the slope above the highway is by a drainage tunnel and horizontal drains (Hovland, May, 1998). The writer never recommended a well field above the highway. Measurements along the road are obviously insufficient to draw conclusions about the entire slide. Therefore, the upper slope and the existing horizontal drains are considered next.

The Upper Slope - Comparison of 1861-62 and 1997-98 Rainfall Years:

The unusually wet 1997-98 "El Nino" year poses the interesting question: Why was there no deep-seated sliding , no dropping of the road, at Devil's Slide in 1997-98? As shown in Fig. 6, the rainfall recorded at San Pedro Valley Park (SPVP) in 1997-98 was about 60 inches. For the Bay Area, 1997-98 was one of the wettest years on record; it was surpassed only by the 1861-62 rainfall year, as also shown in Fig. 6. Based on previous studies relating rainfall to the occurrence of sliding at Devil's Slide, some deep-seated sliding should have taken place. We must admit that we don't yet know enough about the slide to have all the answers. It is, however, important to pursue the question further.

The rainy 1861-62 year is thought to have produced numerous landslides in the Bay Area. A topographic map published in 1866 (provided by Lajoie in 1999) appears to have captured these landslides in the Devil's Slide area. The writer has now had a chance to study this map. An enhanced version of a portion of this map enlarged to a comparable scale is shown in Fig. 7. An upper line is highlighted, as on the map, which seems to indicate scarps and/or an upper limit of erosion. Downslope of this upper line, the map shows (not shown in Fig. 7) numerous narrow and pointed erosion rilles going straight down the slope. The heavy dashed line is the upper scarp approximately as it is today; it first appears on a 1928 aerial photograph (provided by Lajoie in 1999). The spacing of the contour lines suggests significant landslide scarps at 'a' and 'b' but not at 'c'. The spacing of the intermediate 20-foot contour lines below 'a' suggest a nearly vertical 40-foot scarp just downslope of 'a'. It can be concluded that 1861-62 produced significant rainfall-induced landsliding at Devil's Slide.

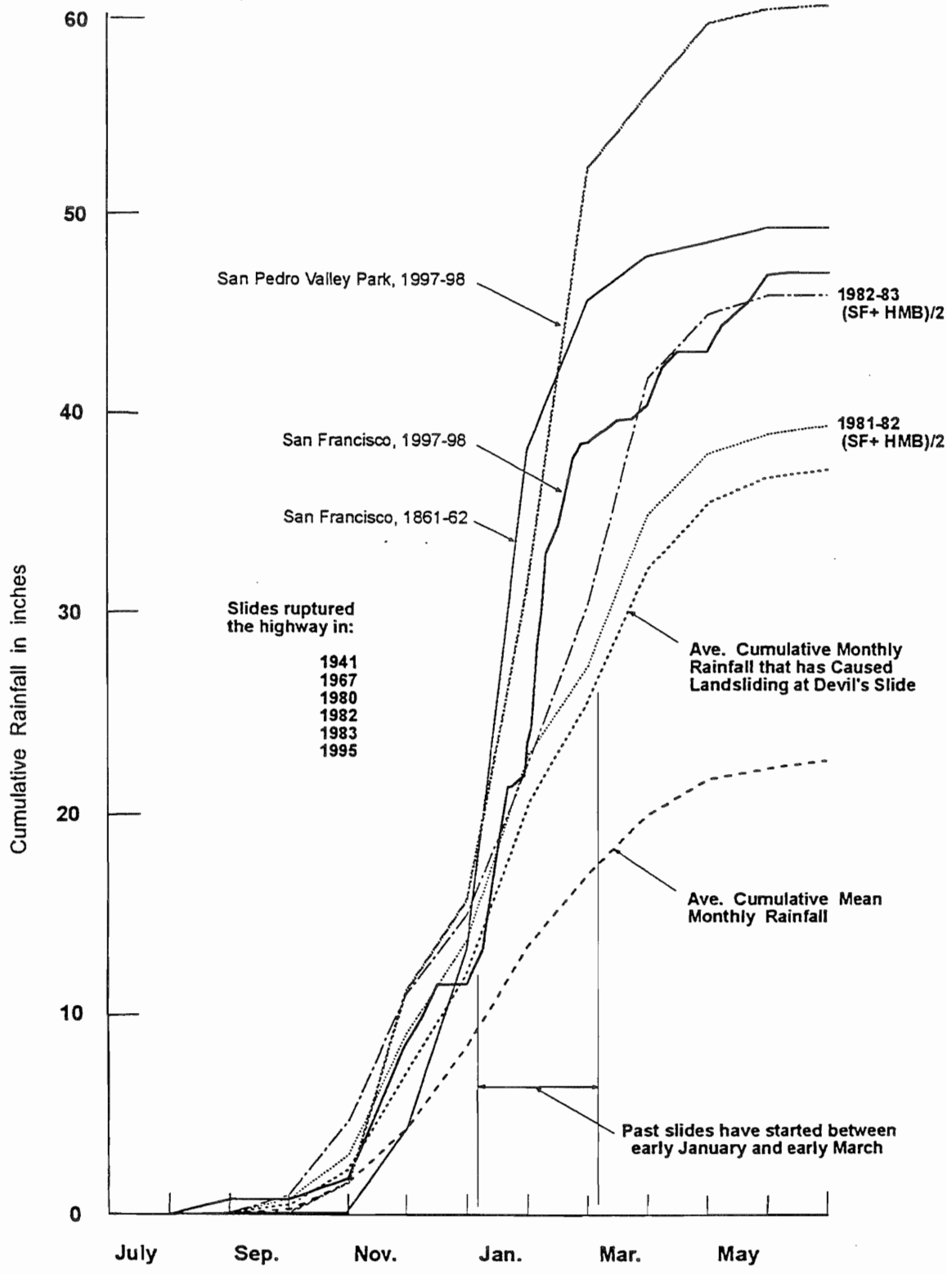


Fig. 6. Rainfall that has Caused Deep Seated Landslide Movement at Devil's Slide. (Added to this figure are also years of unusually heavy rainfall, including 1997-98 and 1861-62.) Hovland, May, 1999.

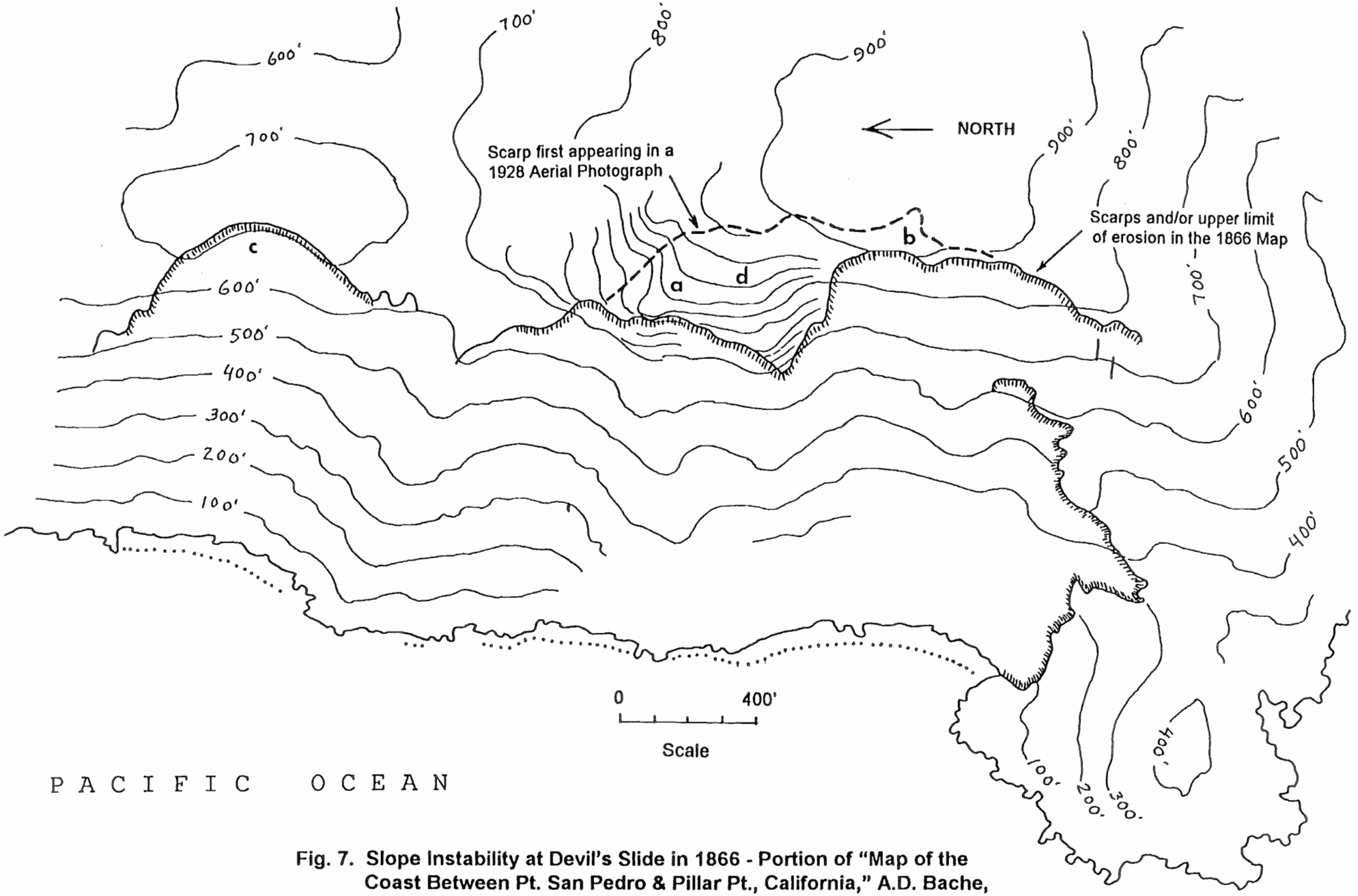


Fig. 7. Slope Instability at Devil's Slide in 1866 - Portion of "Map of the Coast Between Pt. San Pedro & Pillar Pt., California," A.D. Bache, U.S. Coast Survey, 1866. Scale: 1/10,000 - Enlarged and Enhanced by H.J. Hovland, 1999.

The scarp below 'a' in Fig. 7 is approximately at the same elevation as the top of the 1983 landslide, one of the slides that has occurred within the central, active slide area. The writer interprets the heavy dashed line as identifying the scarp produced by the 1906 earthquake, and that this scarp is evidence of a deep fracture that, however, did not generate a thoroughgoing landslide interface. This conclusion is based on the sag pond that formed at location 'd', indicative of the formation of a graben, and the apparently open and fractured matrix of materials at 'd' as suggested by the loss of circulation of the drilling fluid during the drilling of the 1983 borings 2 and 2a. The existence of a deep 1906 landslide toeing out at sea level is being questioned (Lajoie, 1999). It is possible that the 1906 earthquake did not produce a deep landslide fracture at all, but instead produced a relatively shallow slide responding, for example, to the oversteepened 40-foot scarp below 'a'. Although the existence of a deep 1906 landslide interface is not demonstrated, in fact, it is an assumption; the writer believes this assumption should be considered in bracketing slope stability analyses at Devil's Slide.

Dewatering by the Existing Drainage Systems:

So, why did the 1997-98 El Nino year, which was just about as rainy as the 1861-62 year, not result in any landsliding at Devil's Slide? The horizontal drains and the combined improvements to drainage are considered next. Flow from the horizontal drains that influence the stability of the active slide, as shown in Fig. 2, is presented in Figs. 8, 9, and 10. As shown in Figs. 8 and 9, suddenly increased flow from the horizontal drains begins more than one month after the start of heavy rainfall. Note in Fig. 9 that, unless readings are taken frequently, spikes of increased flow can be missed. This, for example, may be the case from 1992 to 1996. This tendency to miss heavy flows from the horizontal drains, unless readings are taken frequently, is even more clearly illustrated in Fig. 10. The spikes just after 'a' and just before 'b' suggest the need to take readings at least once a week. Due to the infrequent readings during the wet, 1997-98 year, spikes of heavy flow between 'c' and 'd' in Fig. 10 were probably missed. The possibility of the spike at 'b' being a fluke or a mistake was considered, but heavy flows were measured from all drains on that particular day. One conclusion is that the readings are generally too infrequent to record peak flows during the rainy season. Thus, the total flow and the average of peak flows from the horizontal drains may be significantly greater than indicated.

The total flow from all drainage systems installed at Devil's Slide is presented in Table 2. Except for the 1988 MDA-2 and the 1998 W-2, the values shown are based on measurements. The flows from 1988 MDA-2 and 1998 W-2 are estimates based on the earlier discussion in this report. The average values are simply averages of the available data. The peak values are

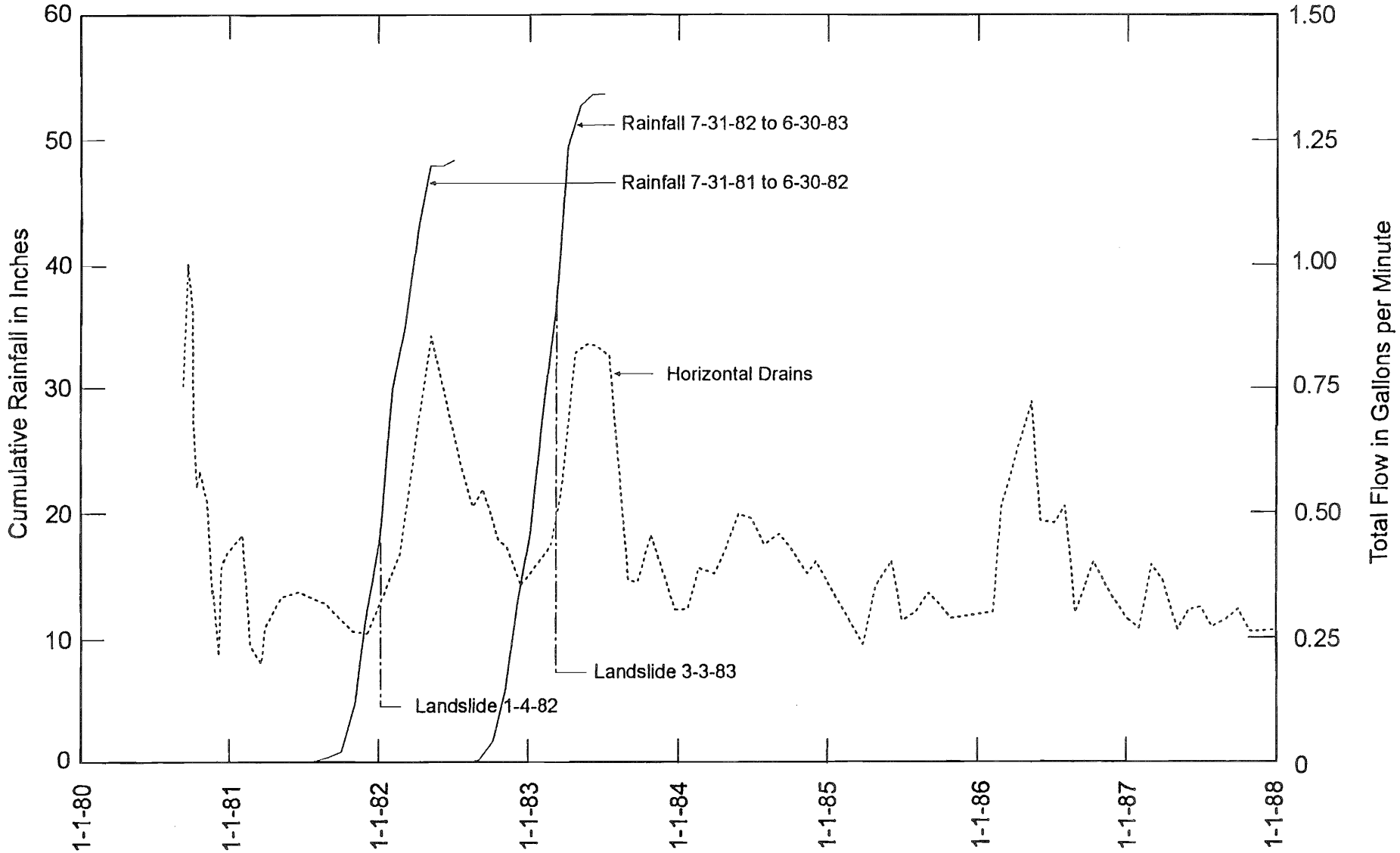


Fig. 8. Comparison of Rainfall Recorded at Half Moon Bay and Flow from Horizontal Drains 3, 7, and 8 Installed in 1980 at Devil's Slide.

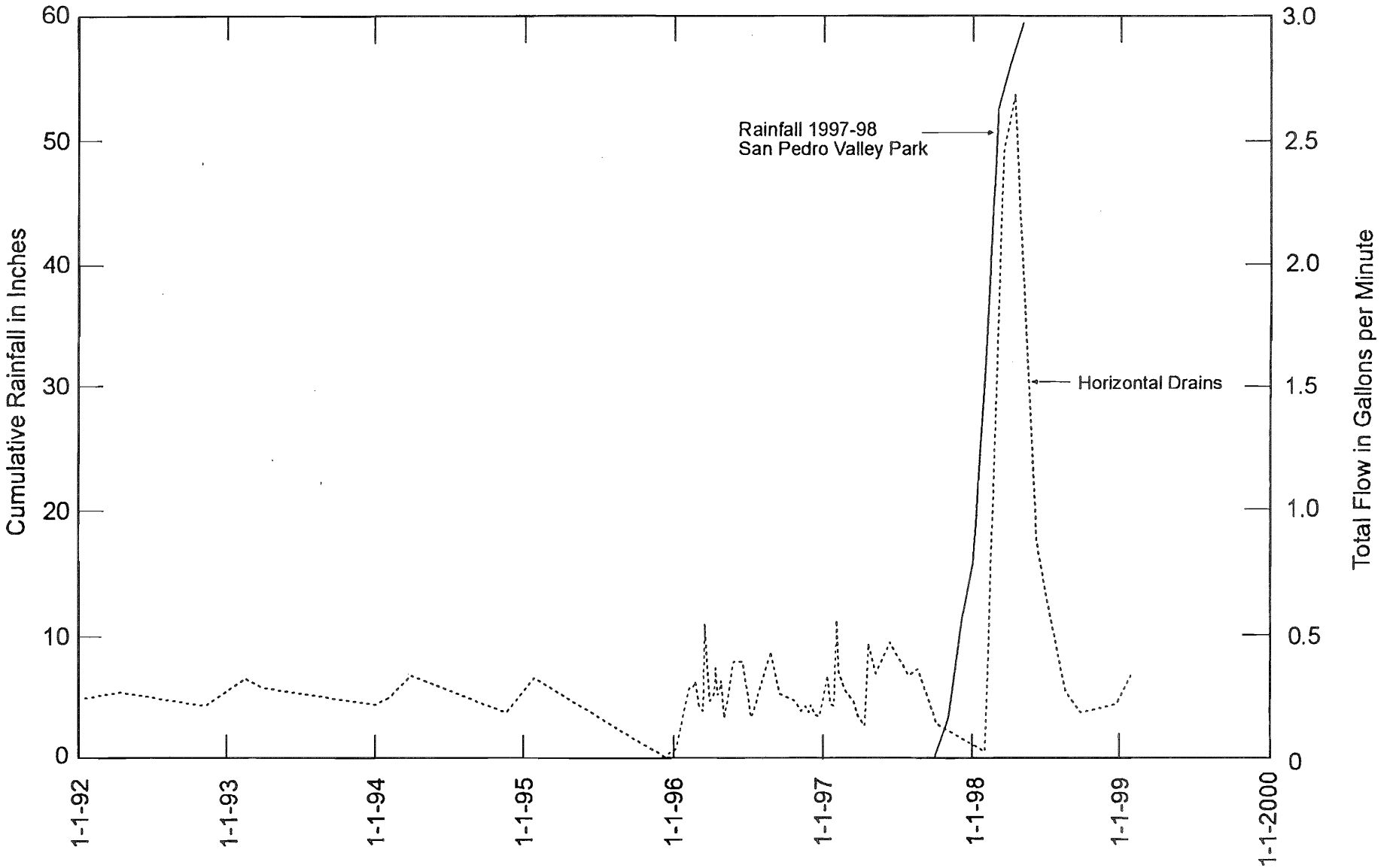


Fig. 9. Comparison of Rainfall Recorded at Half Moon Bay and Flow from Horizontal Drains 3, 7, and 8 Installed in 1980 at Devil's Slide.

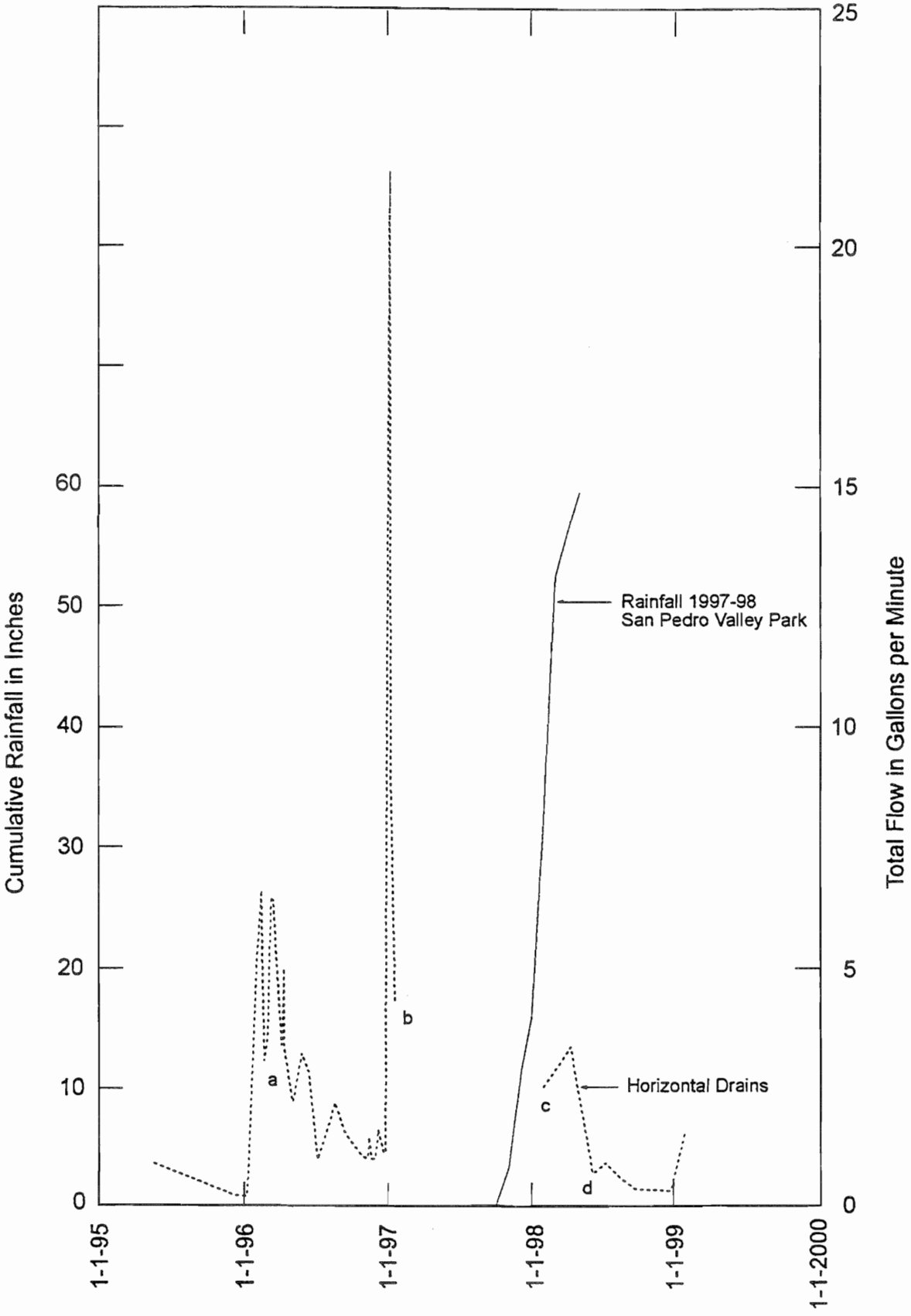


Fig. 10. Comparison of Rainfall Recorded at San Pedro Valley Park and Flow from Horizontal Drains 2,3, 7,8,9,10,11,12, 30,31,and 33 Installed in 1995 at Devil's Slide.

Table 2

Total Flow from Drainage Systems Draining the Central (Active) Landslide at Devil's Slide

Drainage Systems	Dewatering - Flow in gpm							
	1980-87		1988		1996-97		1997-98	
	Ave.	Peak	Ave.	Peak	Ave.	Peak	Ave.	Peak
1980 Horizontal Drains	0.42	0.60	0.42	0.60	0.28	0.34	0.91	2.57
1988 MDA-2			1.00	2.00	1.00	2.00	1.00	2.00
1995 Horizontal Drains					4.70	5.95	4.86	7.83
1998 W-1							4.30	6.90
1998 W-2							1.00	2.00
Total Flows	0.42	0.60	1.42	2.60	5.98	8.29	10.07	21.30

averages of peaks or heavy flows during the rainy season. They are likely to be low for the reason given in the previous paragraph. The increase in flows from 1996-97 to 1997-98 is due to higher rainfall and the 1998 wells or drains W-1 and W-2.

It is possible to estimate the extent to which the peak flows in 1997-98 kept up with the rainfall during this El Nino year. This requires a comparison between the volume of rainwater infiltrating the landslide that would cause sliding with the volume of water removed by the present drainage systems.

The volume of rainwater that would have caused sliding in 1997-98 is the volume of rainwater in excess of the maximum amount of rainwater in past years that has not caused sliding. As will be explained later, for dewatering purposes, a well can function as a vertical drain without any pumping. Reviewing past records, 1957-58 is the highest rainfall year that apparently did not cause sliding at Devil's Slide. The total rainfall recorded in San Francisco (SF) for 1957-58 was 36.6 inches. The rainfall recorded by San Pedro Valley Park (SPVP) in 1997-98 was approximately 60 inches. The rainfall recorded by San Francisco for that year was 47 inches. We adjust the rainfall recorded in SF in 1957-58 to what it would have been if recorded at SPVP, giving approximately 36.6(60/47) = 46.72 inches. Therefore, the ratio of the rainfall for which Devil's Slide could have remained stable in 1997-98 to the actual rainfall is 47.72/60 = 0.78.

As shown by Figs. 8, 9, and 10, there is about a one to two months delay between the beginning of havy rainfall and the sudden increase in flow from the horizontal drains. From Fig.7 (Whitman, 1998), January and February of 1998 were the two months of heaviest rainfall with an average of (14.9 + 20.0)/2 = 17.45 inches. Then, the monthly rainfall for which Devil's Slide could have remained stable is estimated as 17.45(0.78) = 13.59 inches, and the rainfall that would have to be accounted for by dewatering = 17.45 - 13.59 = 3.86 inches. For a rate of infiltration of 30 %, the rainfall that would have to be accounted for by dewatering would be 1.16 inches.

The area contributing rainwater to the slide has been estimated to be about 2 million square feet (46 acres). The actual area of the active landslide is about 23 acres. For 2 million square feet, 1.16 inches of rainfall gives a volume of water of 1.44 million gallons per month. For the comparable rainy season flow from the drainage systems of 21.3 gpm, the volume of water removed equals 0.92 million gallons per month. The ratio of water removed to the required amount of removal = 0.92/1.44 = 0.64 or 64 %. If, instead, one considers only the rain that falls

on the active slide itself, the same ratio is 128 %, and if one assumes that the rate of infiltration is 60 % and one considers only the rain that falls on the active slide itself, the same ratio is again 64 %.

The conclusion is that the water removed from the landslide by the various drainage sytems during 1997-98 can explain why Devil's Slide remained stable. This means that compared to previous years of much more than normal rainfall that did not cause sliding, there is a fair probability that the reason Devil's Slide remained stable in 1997-98 was because of the water removed from the subsurface by the existing drainage systems. It does not mean that in all years of comparable rainfall Devil's Slide will remain stable. But stability has already been improved, and dewatering efforts should continue.

CONCLUSIONS

1. Devil's Slide is a complex landslide, with a complex groundwater regime. The subsurface and groundwater conditions revealed by the borings drilled from the road (Figs. 1 and 2) suggest that along this section groundwater conditions can be separated into
    a. An area at the southern boundary of the central, active slide,where a fault separates landslide materials from the underlying granodiorite. Perforated with borings, the deep unconfined aquifer in the granodiorite acts as a drain for the landslide above.
    b. A deep, central and northern area of the active slide with an unconfined or semi-confined aquifer.
    c. An upper, within 100 feet of the ground surface, section with perched and probably discontinuous water bearing layers.

    Upslope and downslope from the highway, subsurface and groundwater conditions could be very different.

2. In the southern area, borings 1988 SI-2 and W-2 act as vertical drains without pumping. A rainy-season and a dry-season pumping rate should be established for W-2 to help interpret its effectiveness as a drain without pumping.

3. The pumping test performed in W-1 shows quite an impressive drawdown in 1998 P-1, see Fig. 4. This suggests that the water table downslope of the highway can be lowered with a row of wells along the highway in this area. The writer estimated (Hovland, 1998) pumping rates of 1.0 to 3.0 gpm. The tests by Caltrans gave pumping rates of 0.5 to 6.9

gpm. Therefore, the writers estimates have been confirmed.

4. Analysis of an 1866 map shows that the wettest year in this area, 1861-62, caused rainfall-induced landslides at Devil's Slide. The fact that no landsliding occurred at Devil's Slide during the next wettest 1997-98 El Nino year can be explained by the dewatering achieved from the presently existing drainage systems at Devil's Slide.

REFERENCES

1. Fetter, C. W. (1994). *Applied Hydrogeology*, Third Edition, Prentice Hall

2. Hovland, H. J. (1998). "Devil's Slide - A Study of the Feasibility of Stabilizing the Landslide Area Along Highway One, San Mateo County, California, by Dewatering." Phone: 510-549-1672

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5. U. S. Depertment of the Interior. (1981). *Ground Water Manual*, U. S. Printing Office, Washington, D. C., p. 29.

6. Whitman, T. G. (1998). "Devil's Slide - Dewatering Feasibility Study," Roadway Geotechnical Engineering (North) - Section 4, State of California, Department of Transportation - District 4.

John Hovland

The responses below correspond to Prof. Hovland's comments, which are itemized in the summary page 1 of his Devil's Slide "Review" and "Consideration".

1. Our studies determined well transmissibility and formation conductivity to be low and unfavorable for pumping to lower the site hydrostatic surface. We did not state that de-watering with wells is not feasible "because it is difficult to have a productive well in ground with low permeability." Table 1 was included in the study because it is a table commonly used in textbooks to place transmissibility and hydraulic conductivity in perspective. We used it to demonstrate that de-watering would be a slow process and successful stabilization of the landslide with this method is doubtful. Our concern, regarding the use of pumping wells at Devil's slide to stabilize the slide, is that there was a relatively small draw down in hydrostatic head in monitoring wells in response to pumping, and the area of influence of pumping was quite small. Long term pumping over the winter months did provide a moderate response at P-1. However, without significant and substantial draw down of hydrostatic head over a broad area, regardless of the amount of water pumped, wells will offer little benefit in an attempt to stabilize the slide.

2. We agree with the reference to Turner and Schuster, 1996 (no page given) that de-watering "can not be used effectively when sliding mass is impervious." We also agree that the rocky material comprising Devil's slide is not impervious. However, since the hydrostatic head in the monitoring wells had relatively little response to pumping (except for P-1), we conclude that the permeability within the slide mass is either low, variable with depth, or directional with a convoluted path. In any event, attempting to de-water a slide mass with these erratic hydraulic characteristics would require a large number of deep wells and a gamble that many of the wells would intersect the hydraulic path and thereby lower the piezometric head over a broad area.

3. We recognized that having all of the observation wells located along the road, makes it difficult to interpret the response of water levels to pumping where permeability is erratic and variable. The placement of the pumping wells and monitoring wells within the highway right-of-way was dictated by what was reasonably possible at the time and consideration of the site constraints and time of year. The extremely steep and rugged terrain both below and above the highway, the onset of the rainy season and predicted high rainfall due to an El Niño weather pattern, and the necessity of maintaining traffic flow, all severely limited where wells could be located. You were informed of all aspects of planning and based on the site visit, seemed satisfied with the location and installation techniques. In the past, borings and drains have been drilled on the slope below the roadway with great difficulty, however, shallow slides and rock-falls on the face of the bluff have obliterated them to the point that they were destroyed and portions of the side hill bench no longer remain. Installing monitoring wells above the road would require major construction of pioneer roads, extensive site preparation, and the use of helicopters to airlift drill rigs to leveled sites. Conventional site preparation with bulldozers for vehicular transport of the drill rigs is not feasible because of environmental constraints and slope stability. This type of work can only be done during favorable weather conditions, which was not available when this study was

conducted. Our conclusion is that the study was adequate and provided valuable information on the groundwater conditions within one portion of the slide mass.

4. Monitoring well P-1 is located 14 meters west of pumping well W-1 and is 93.9 meters deep. The piezometers in P-1 are at 6 isolated intervals. During the pumping period between 2/13/98 and 5/27/98, the three lower piezometers indicated a drop in the piezometric head of between 8.08 to 12.6 meters. The three upper piezometers showed either a slight drop or a slight rise in piezometric head during that time. The initial 48-hour pump test during the latter part of December 1997 had little effect on any of the piezometers, including P-1.

   We conclude that the deeper piezometers, at depths of 61-91 meters, did show some lowering of piezometric head from long term pumping, which may provide some increase in stability for deep-seated sliding. However, long-term pumping did not significantly affect the shallower piezometers in P-1, ranging from 6 to 46 meters in depth. Stability in the area of the shallower landslides that occurred during 1983 and 1995 would not have been improved by lowering the deep piezometric head. This conclusion is supported by inclinometer data that indicates slide creep has been occurring below the roadway at a relatively shallow depth of 15-30 meters throughout the period of 1990 to 1999, which includes the pumping period for this test.

5. Your estimate of a 1.0 to 3.0 gpm pumping rate is close to the actual pumping rate achieved which was 0.5 to 6.9 gpm. However, confirming a relatively low pumping rate is not the measure of success in slide stabilization but rather the lowering of hydrostatic head over a broad area is the goal and that has not been demonstrated.

6. There is only speculation as to the size of Devil's Slide in 1866 and whether the heavy rainfall of 1861-62 caused any sliding. In his letter to Caltrans dated May 11, 1999, Mr. Kenneth Lajoie of the U.S. Geological Survey, is of the opinion that significant sliding was initiated after construction of Route 1 in 1936.

   If Mr. Lajoie is correct and there was no major slide present in 1861-62, it is incorrect to cite the wettest rainfall year (1861-62) in this area as having caused rainfall-induced landslides at Devils Slide and consequently no direct comparison can be made with the second wettest rainfall year (1997-98). It is Mr. Lajoie's contention that the landslide scarps formed mainly after Highway 1 construction in 1937-38.

   Historical rainfall records for San Francisco show that rainfall did not exceed 7 inches above normal between 1925-26 and 1939-40 (greatest rainfall was 27.10 inches while normal rainfall is 20.52 inches). Slide movement affecting the highway occurred in 1941, 1967, 1980, 1982, 1983 and 1995 with corresponding annual rainfall amounts of 35.0, 29.4, 24.4, 37.1, 38.1 and 34.0 inches. It should be noted that during year 1980 with 24.4 inches of rainfall, a major wedge of rock eroded out of the roadway and was most likely due to mass wasting of the bluff below the highway and not related to rainfall.

   There were also years of high rainfall but no slide movement such as 1951-52 with 32.5 inches, 1957-58 with 36.4 inches, and 1972-73 with 34.3 inches. Rainfall for 1997-98 was

the second wettest rainfall season on record (47.2 inches) for the past 149 years, however no sliding occurred. Assuming that the threshold for sliding is 29.4 inches of rainfall, during the past 149 years rainfall has reached or exceeded the 29.4 inch threshold a total of 22 times. Since 1937-38, when the Highway 1 was constructed, the threshold has been reached or exceeded 9 times while only 5 episodes of slide movement related to rainfall have occurred. This calculates to 56% of the time (5 out of 9 times) that annual rainfall exceeded 29.4 inches. Attributing the lack of slide movement in 1997/98 to the pump test ignores the previous non-association of rainfall and slide movement (44%) and the influence of the substantial work done at the site in 1995. The work done in 1995 is not believed to be sufficient to provide long-term security against landslides but it undoubtedly has been effective, particularly in the short term.

De-watering Devils Slide does not provide adequate assurances of long-term roadway stability free of geologic and geo-technical hazards, which both the tunnel and bypass alternatives do provide. Attempting to de-water Devil's Slide may or may not be a successful method for providing long-term stability for deep-seated slides. However, it is certain that de-watering will not provide long-term stability for other existing hazards. These include the nearby shallower slides, which resulted in lengthy road closures in the 1980's and in 1995, and the continuing rock fall and mass wasting of the bluff below the roadway which will eventually undermine the roadway bench. In addition, seismic stability was not addressed in the de-watering proposal. The steep unstable slopes above the road and the precipitous slopes below it, are vulnerable to massive failure in the event of a nearby earthquake. The Lawson report states that the entire Ocean Shore roadbed was swept away during the 1906 earthquake. The slopes existing in 1999 are no safer or better able to withstand a similar event when it occurs, than the slope present in 1906.

Date: May 11th , 1999

To: Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA 94623-0660

From: Mitch Reid
Pacifica's Alternative for Highway-1 (PTA-1)
P.O. Box 269
Pacifica, CA 94044

Re: Response to the Devil's Slide Improvement Project - 1999 Draft Second Supplemental Environmental Impact Statement/Second Supplemental Environmental Impact Report

Dear Mr. Gross,

Thank you for the opportunity to comment on the Devil's Slide Tunnel Bypass Project. I would like to request a written response from Caltrans to my comments detailed in this letter.

[1] I strongly support "design variation A" as the preferred tunnel alternative. Bikes should use the abandoned highway -1 alignment as the bike path, which eventually will become one of the most beautiful bike paths in the country.

[2] I have concerns about the negative visual impacts regarding the South Portal location which might destroy the intermittent waterfall just south of the portal and historic trail. Every effort should be made to move the portal location in order to preserve this area.

[3] I have concerns about the negative impacts regarding the North Portal location. The document fails to identify the impacts on the historic trail at the North Portal location, nor does it offer any mitigation comments to reconnect this trail above or below the portal location.

[4] The document fails to clearly provide topographic detail for the location of the access road to the water tank, nor does it provide detail about potential hillside cut and fill damage and possible environmental mitigation.

[5] I disagree with the following statement in the document: *"At the north pond, one of the original design options for the proposed tunnel alternative would have resulted in fill effects to portions of this pond and its associated drainages. However, the proposed alternative now includes bridge structures which will clear-span the north pond and its associated drainages. Therefore, the proposed tunnel alternative will result in no fill impacts to the north pond."*

The specific reasoning for selecting the "Bridge Option" rather than the "Fill Option" was to avoid filling in the valley / forested canyon west of the pond. However it appears that the extensive cuts and fills from the proposed construction of the Temporary Construction Access Roads to the bridge piers will in fact decimate at least more than 35% of the same valley / forested canyon area. As a result the proposed Temporary Construction Access Roads will also seriously threaten the California Red-Legged Frog.

The proposed Temporary Construction Access Roads are located on two up slope sides of the canyon which drain directly into the north pond. Caltrans has seriously failed with erosion control and mitigation efforts on similar projects such as the current Highway 92 improvement project. Based on this track record, it is quite likely that the effects of Temporary Construction Access Roads will have similar failure potential, seriously threatening endangered species.

The environmental document is seriously inadequate as it fails to provide a less damaging alternative to access the bridge pier area. The document states: "*Construction vehicles must use temporary access roads from existing Route 1 (rather than the existing Shamrock Ranch road system) to access the pier construction to minimize the probability of harming any frogs or disrupting any migration areas*". The document fails to provide detail as to why it is not possible access the bridge pier area from the existing Shamrock Ranch road system. The document fails to provide a detailed comparison of environmental harm/benefits of the two possible options: existing Shamrock Ranch road system versus existing Route 1.

Outlined below are the negative impacts of the proposed Temporary Construction Access Roads:

- Over one half mile of new road construction in undisturbed coastal landscape
- approximate construction cost $2.4 million
- Permanent hillside cuts
- Destruction of a significant semi-forested valley / canyon area with 75+ year old trees
- Significant loss of terrestrial foraging habitat for the Red-Legged Frog
- Extensive cuts and fills in a geologically unstable area surrounding the upstream drainage area that drains directly into the North Pond
- Massive 10 year re-vegetation and restoration project
- Massive erosion control and mitigation project
- Increased potential for landslides and hillside failure
- Increased potential for erosion control failure and sediment runoff
- increased potential for pond siltation
- Increased potential to threaten endangered species
- Visual destruction in a major view corridor near the ocean
- Highway-1 access resulting in traffic delays
- Loss of commerce as result of traffic delays
- Necessary Highway-1 access traffic control endangering health and safety

Based on my 5/7/99 conversation with Michael Thabault from USFWS, I believe that using the existing Shamrock Ranch road system to reach the bridge pier area is a reasonable, prudent and less environmentally damaging alternative than the proposed access from Highway-1. Mr. Thabault expressed that there is reasonable potential to temporary bridge (from East to the West) the frog migration area between the South and North Ponds, thereby allowing access to the bridge pier area from the existing Shamrock Ranch road system, without disrupting the Endangered Species Area. I believe that there are several other reasonable ways to reach the bridge pier area from the East side of Shamrock Ranch without disrupting the Endangered Species Area.

I would like to request that Caltrans fully explore the *Shamrock Ranch Temporary Construction Road Access Alternative* as detailed in the previous paragraph. Please respond in detail with respect to whether or not this alternative is a reasonable, prudent and less environmentally damaging alternative than the proposed access from Highway-1.

I believe the benefits of the *Shamrock Ranch Temporary Construction Road Access Alternative* that I am proposing, outweigh the risks and negative impacts of the proposed construction of the Temporary Construction Access Roads. (see attached map)

Outlined below are some of the anticipated negative impacts of the *Shamrock Ranch Temporary Construction Road Access Alternative*.

- Disruption of day to day operations at Shamrock Ranch due to construction vehicle traffic
- Disruption of tranquillity at the residential home located near the North Pond due to construction vehicle traffic
- Monetary compensation for temporary right-of-way easement, and anticipated negative impacts to Shamrock Ranch

Outlined below are some of the benefits of the *Shamrock Ranch Temporary Construction Road Access Alternative (SRTCRA)*.

- Minimal amount of new road construction, reduced construction time
- Dramatically reduced construction activity in an environmentally sensitive area
- Approximate construction cost for the SRTCRA alternative would be far less than $2.4 million dollars estimated for the proposed Temporary Construction Access Roads
- Minimal hillside cuts, minimal re-vegetation
- No destruction of a significant semi-forested valley / canyon area with 75+ year old trees
- No significant loss of terrestrial foraging habitat for the Red-Legged Frog
- No extensive cuts and fills in a geologically unstable area surrounding the upstream drainage area that drains directly into the North Pond
- No need for 10 year re-vegetation and restoration project
  Dramatically reduced erosion control and mitigation project

- Reduced potential for landslides and hillside failure
- Reduced potential for erosion control failure and sediment runoff
  Reduced potential for pond siltation
  Reduced potential to threaten endangered species
- No visual destruction in a major view corridor near the ocean
- No Highway-1 access resulting in traffic delays from Half Moon Bay to Pacifica
- No loss of commerce as result of traffic delays
- No need for necessary Highway-1 access traffic control which would endanger health and safety

Thank you for your consideration of these comments.

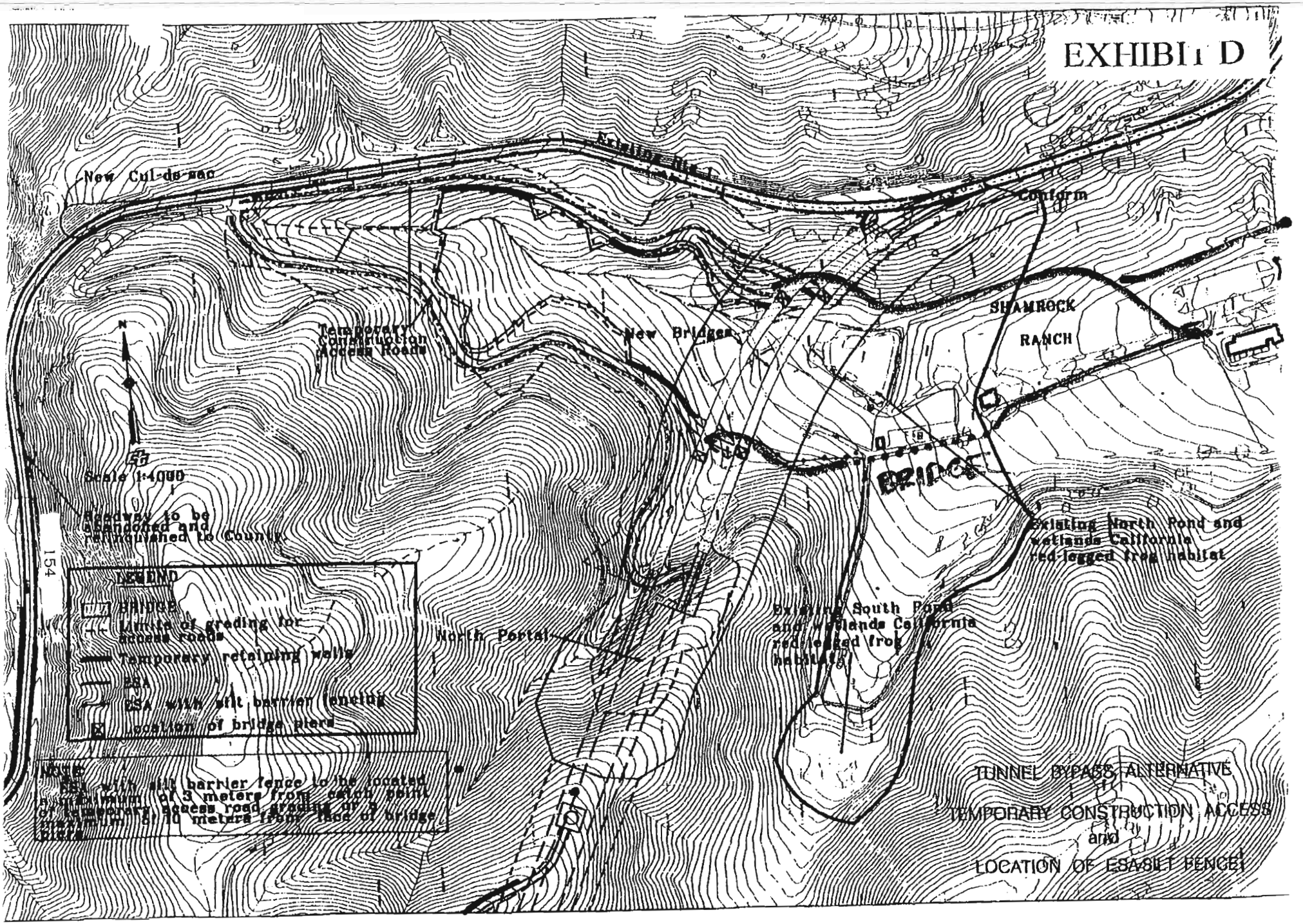
Sincerely,

Mitch Reid

Pacifica's Alternative for Highway-1 (PTA-1)
P.O. Box 269
Pacifica, CA 94044

CC: U.S. Army Corps Of Engineers
U.S. E.P.A., Region IX
U.S. Fish And Wildlife Service
California Coastal Commission
California Department of Fish And Game
California Dept. of Water Resources
California Scenic Highway Program
California Transportation Commission
California Water Resources Control Board
Metropolitan Transportation Commission
Regional Water Quality Control Board
City of Pacifica
City of Half Moon Bay
Mid-Coast Community Council
San Mateo County Board of Supervisors
San Mateo County Transportation Authority

Attachment: Map Exhibit D with drawn in *Shamrock Ranch Temporary Construction Road Access Alternative*
Caltrans 5/12/99 Estimate of the Proposed Highway-1 Temporary Construction Access Roads



..... TEMPORARY BRIDGE — SHAMROCK RANCH ROAD

Mitch Reid

1. Your support of design variation A as the preferred alternative is noted.

2. A more specific location of the south portal and adjoining retaining walls will be determined after additional geo-technical testing and finalized in the detail design phase of the project. Based on recently developed engineering plans the seasonal waterfall will be preserved and not be impacted.

3. The dirt road, which you refer to as historic and which connects the lower areas of Shamrock Ranch with its higher areas and other properties, will be severed by construction in the vicinity of the north tunnel portal. The manner in which this private road will be reconnected will be coordinated with the property owner during the right of way process.

4. The 800 feet of new dirt road to be constructed for access to the new water tank, as shown in Figure 3-2, will be graded to conform as close as possible to existing contours.

5. Instead of accessing work areas from the west as proposed in the 1999 Draft SSEIS/SEIR, construction access is now proposed from San Pedro Terrace Road through Shamrock Ranch. This less environmentally damaging construction access through Shamrock Ranch was developed in consultation with the USFWS and the property owner.

   We appreciate your extensive list of negative impacts of the previously proposed construction access as well as your extensive list of benefits of an alternative construction access through Shamrock Ranch.

Mr. Robert Gross
Chief, Office of Environmental Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA 94623-0660

3992 Beechwood Drive
Concord, CA 94519
May 11, 1999

Subject: Devil's Slide Tunnel
Comments on Draft Second Supplement
to the 1986 Final EIS/EIR

Dear Mr. Gross:

The subject draft EIS/EIR document presents information regarding the complex issues involved in the Devil's Slide Tunnel / Martini Creek alternatives evaluation in a brief but meaningful format. The following comments are offered in an effort to help clarify some issues regarding the project:

1. The document refers to "bridge" in a number of places, but also refers to "bridges" and Figure 3-2 shows two bridges. On page 42 , under Impacts, 2nd paragraph, 1st two sentences, seems to imply one bridge with separation of the lanes in the short distance between the "bridge" and the north portal. This was probably not the intent. In addition, the use of the terms "tunnel" and "tunnels" appear to need review.
2. On pages 21 and 22 reference is made to "refuge rooms". The October 1996 Devil's Slide Tunnel Study indicates that refuge rooms are not desirable, and that one of the reasons that twin-bore tunnels are used is that crosspassages are significantly better evacuation facilities. It appears that reference to refuge rooms should be deleted.
3 Figure 3-2 shows the disposal area but the drafting detail does not adequately display the real extent of the filled area.
4. On page 38 no comment is made on the schedule for the improvement of the portions of Highway 1 from Pacifica to the north tunnel join point and from the south tunnel join point to Montara, which, together with the tunnel, covers the overall section of Highway 1 bypassed by the Martini Creek alternative. While not fundable from the emergency funds, and apparently not in any near -term plans, it would be helpful if some brief comment were included in the document regarding this matter.
5. On page 43 in the 2nd to last paragraph, the word "short" is misleading; give a distance in feet. Also, since this area is to be man-made by fill, the O&M Center building will not be visually intrusive because the fill will be constructed to shield the building from view (verses having to build a special berm because no disposal fill is being placed).
6. On page 51, last paragraph, change the word "depository" to "disposal".
7. On page 52, last paragraph, 1st sentence, change the term "borings" to "excavation", and insert "south" before the word "portal". In the 2nd sentence change the term "underground" to "overhead" (there are no existing underground electrical facilities), and expand the sentence to cover the overhead power line work from Montara to the O & M Center.
8. On page 59 , Impacts, 2nd paragraph, the last sentence might best be reworded. There will be beneficial impacts to the south pond and its red-legged frogs due to the tunnel project's planned resource management program.
9. On page 79, the paragraph on Impacts is a significant oversimplification of the entire basis of this long running EIS/EIR process. The public's impression of the "impact" of the tunnel alternative is that it is a beneficial impact: avoid the use of part of the McNee Ranch for non-park purposes, and avoid significant negative visual impacts of the Martini Creek alternative as viewed from the McNee Ranch State Park and elsewhere.

10. On page 88 there is no specific discussion of the handling of the property along the "abandoned" section of Highway 1. Such abandonment of access to a public road often requires some action, such as aquisition by the highway agency of property whose access is taken.
11. On page 88 there is no discussion of the portion of McNee Ranch which will not be used for highway purposes if the tunnel alternative is used. While Caltrans reportedly paid for this right of way, its final disposition is a very sensitive issue with the public. Consequently, the "return" of this property to the Park could be considered part of the tunnel project, and therefore not be subject to the risk that some other outcome might occur due to some long, tedious and convoluted right of way process. Its return, if need be, could be mandated as part of the selection of the tunnel alternative. Such return could still entail payment by the State Parks Department.
12. Tunnel Design Variations.

    The two tunnel design variations presented in the draft document are not the only design variations that might be considered. The draft document already indicates that a bicycle /pedistrian path outside the tunnel along the abandoned highway has been approved by the County, and that the tunnel design experts and the fire department specifically recommended that pedestrians and bicycists not be allowed in the tunnel for significant safety reasons. The total project cost (construction plus engineering) difference between these design variations, as shown on page 6, is $2,650,000 (variation A-$134,900,000, variation B-$137,550,000). This difference is less than the $7,400,000 difference presented in the October 1996 Study (Appendix X - Page 70). While there are some changes in the tunnel cross sections, what is the bases for the new total project costs verses the costs in the October 1996 Study? (The term "total project costs" in the EIR/EIS apparently includes only construction and engineering; this is different than the same term in the October 1996 Study.)

    A second more notable design variation issue which might be presented is the one dealing with the fill versus bridge at the North Portal area. The October 1996 Study recommended the fill design variation. Does new environmental information presented in the draft document and a reported significant increase in bridge costs (not included in the draft document) justify the need to discuss these competing design variations?

Thank you for considering these comments. If you have any questions please call me at 925 798-4183.

Very truly,

S. Gordon Marsh

S. Gordon Marsh

1. The references to "bridge" or "bridges" was based on the context of the discussion such as the "bridge" option versus the "fill" option and the use of "bridges" in Fig. 3.2 was to reflect separate structures.

2. The reference to refuge rooms has been deleted.

3. The graphic quality of Figure 3.2 has been improved and provides greater detail for the disposal area after grading and re-contouring of the area.

4. In May of 1997, a feasibility report was prepared for a proposal to improve shoulders along the segments of Route 1 adjoining the project limits of the tunnel alternative. The proposal was not considered to have sufficient priority among the transportation needs of San Mateo County to compete for available funds. No further effort has been expended on this proposal.

5. The operations and maintenance building will be located approximately 1,000 feet south of the south portal, on a portion of the disposal site for excavated material. Its location will be determined in conjunction with the design of final grading plans for the disposal site. Although it is intended that the site be graded so the building is shielded from view from Route 1, the building will still be visible from nearby hiking trails.

6. Comments # 6-9 regarding editorial changes were considered and text revised as needed.

7. See above response # 6.

8. See above response # 6.

9. See above response # 6.

10. Disposal of excess property will be in accordance with established laws and procedures including those that provide priority rights to recreational and other government agencies. The section of existing Highway 1 will be relinquished to the County of San Mateo for use as a non-motorized facility. Acquisition of access rights or purchase of the land-locked parcels will be considered.

11. We recognize the local concern regarding future use of land previously acquired for the bypass project. The right of way will likely be declared as excess and will be disposed of accordingly. As noted above, disposal of excess property will be in accordance with established laws and procedures including those that provide priority rights to recreational and other government agencies.

12. Bicyclists and pedestrians will not be restricted from the tunnel. The tunnel will be designed to safely accommodate both bicyclists and pedestrians. The current total estimated project cost for the preferred alternative (Tunnel Alternative Design Variation A) has been updated

and included in the revised discussion in Section 3.1.1. The costs for construction, engineering, and right of way are typically included since these are used for project programming and funding.

The design variation (fill versus the bridge), recommended in the October 1996 feasibility study, was removed from consideration as a viable project proposal after it was clear from the NEPA/Section 404 Integrated Process kick off meeting, that such a proposal would require implementation of this very involved process with all the signatory Federal Agencies as well as an Individual Permit from the U.S. Army Corps of Engineers. It was also clear that Formal Endangered Species Consultation with the U.S. Fish and Wildlife Service for such a proposal would result in a Jeopardy Biological Opinion and the project would not advance.

SHAMROCK RANCH
Street End of Peralta Road
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May 11, 1999

Mr. Robert Gross, Chief
Office of Environmental Planning, South
Cal-Trans District 4
P. O. Box 23660
Oakland, CA 94623-0660

Re: Comments on the Draft Second Supplemental Environmental Impact Statement/Second Supplemental Environmental Impact Report March 1999

Dear Mr. Gross:

Thank you for the opportunity to comment on the Devil's Slide Draft Supplemental EIS/EIR. As you know, approximately three quarters of the project is proposed to be placed on my land. Although according to the "Executive Summary" on page 6 it sounds like the roadway will just cross "the valley at Shamrock Ranch," in fact it crosses the valley on the Ranch, goes through a small ravine on the Ranch and then enters the tunnel beneath San Pedro Mountain which is also on the Ranch. Rather than downplay the impact of the project to Shamrock Ranch I would like it understood that this project has significant cumulative impacts to the property.

I would propose to go through the document section by section and comment in that manner.

Section 3.5 The San Pedro Flood Control Project sponsored by the Army Corps of Engineers (COE) and the City of Pacifica has begun. 1

Section 5.1 Aesthetics/Impacts
What will the haul route be for the material that is removed from the tunnel boring? Specifically, from the north? How will this material be transported to the "South Disposal Site"? 2

North Portal Area

I think it is important to note that this area is a valuable part of a working ranch and is not developed. It is a primary link to the watershed and ecological system that supports the entire property. Work in this area must be done with the utmost sensitivity. I am extremely concerned about the proposed haul roads entering the area from west of my property, as well as the proposed clearing and grubbing of vegetation on the hillside adjoining the present Highway #1 alignment. Not only will these areas present a negative visual impact they will also present a much larger problem with erosion, siltation and sedimentation. I am not even addressing the portal here. I am addressing the area north of the portal (the opposite side of the valley) and the area west of the proposed project. As the Supplemental EIS/EIR states on page 42, "...this small valley...currently enjoys minimal intrusions from development." 3

How many total acres are going to be disturbed, i.e, graded, cleared, grubbed, cut or filled? On Shamrock Ranch? On the Pavka property to the west of Shamrock Ranch?

Section 5.5 Cultural Resources/Mitigation Measures

Will you please expand upon and make clear the following statement, "Electrical utility linkages supporting the tunnel facility will connect through overhead power lines utilizing existing underground facilities at the Shamrock Ranch." 4

Does this mean that the existing under ground line will be expanded? Will overhead lines be placed on the Ranch? Where are the power poles going to be placed?

Section 5.6 Farmlands

I still take exception that Shamrock Ranch was never considered under this Section in the 1986 FEIS. 5

Section 5.7 Fog/Mitigation Measures

There is presently no artificial light intrusion in this area. Having this area lit every night is going to make a significant difference. Whatever measures can be taken to minimize light intrusion on to the Ranch would be appropriate. 6

Section 5.11 Natural Environment/4.California Red-Legged Frog (Rana aurora

dravtonii)

I would like it to be noted that no "shoreline stock grazing" has taken place at the north pond since the inception of Dr. McGinnis' studies. Please also note that the practice of disposing of leftover feed from the kennel operation into a pit in the area of the pond was discontinued as of the beginning of Summer 1998. Prior to the study the stock drank from the pond, my kids swam in the pond, sometimes with their horses, they paddled around the pond in a little boat and the same water birds and raccoons existed. We had a flourishing frog population. Now, since the study, there are concerns about reproductive failures. In a recent correspondence from Joe Barnwell, a local naturalist, he wrote, "I mainly wanted to tell you about a couple of things I saw at your ponds. The North Pond is healthier with the fencing, and there is more emergent vegetation for the frogs. I saw/heard (plops), about 30 CRLF"s, all in the tulles and under the bank near them on the western edge of the pond. The frogs might migrate around during the day, or the western edge might be their permanent pad." I don't see how things have changed for the worse, except my kids complain to me all the time about not being able to swim in the pond! 7

Joe Barnwell also mentions seeing an adult Western pond turtle (Clemmys marmorata) at the south pond on his visit of May 7, 1999. I do not believe I saw this turtle listed in the Supplemental EIS/EIR. 7

I do however share the concerns of the study about siltation at the north pond. Approximately 10 or so years ago the Maintenance Division of Cal-Trans began two practices that I think have had an adverse impact on the Ranch's water ways, including the north pond and the stream running through the center of the Ranch, which I might add negatively affects San Pedro Creek which is the home of the styled (Oncorhynchus mykiss) and is the site of the present Flood Control Project cosponsored by the Army Corps of Engineers and the City of Pacifica. One, Cal-Trans cut through the berm running along Highway #1 and funneled run-off from the roadway onto the Ranch. Two, Cal-Trans piled loose debris from the roadway along the berm and this in turn got washed down into the Ranch and the corresponding waterways. There is also a landslide to the north-west of the pond which just keeps getting filled in with asphalt to keep the roadway in place. The slide material is finding its way into the pond through the channel that leads directly to the pond coming from the west. These Cal-Trans practices should not be allowed to continue. These practices have also had negative effects on other areas of the Ranch not included in this study but which also drain into San Pedro Creek. Before the existing roadway is converted to any other entity these issues of siltation, etc., should be corrected. 7

CALIFORNIA RED-LEGGED FROG/TUNNEL ALTERNATIVE

It sounds good to state that the ESA will be protected because "...the transport of construction vehicles, equipment and personnel will only be allowed to occur on temporary access roads from existing Route 1." But, I disagree with this conclusion because that entire area drains east into the existing pond and waterways. I have already asked in Section 5.1 North Portal Area how many acres will be disturbed. I have grave concerns about the long term effects of the proposed disturbances and your ability to maintain the integrity of this area once it is disturbed. I have read Mitigation Measures "'a' through 'g'" on Page 71 and remain pessimistic about the scale of the disturbance to the area. 7

Page 72 "h) During the operational phase, roadway runoff on the bridges will be contained and directed northward to a drainage on the existing Route 1 roadway which will not be affected by the project and which does not drain to the ponds and their surrounding habitats." NO! This area does drain into the Ranch and down its waterways and into San Pedro Creek! The "drainage on the existing Route 1" is no more than cuts in the berm directing runoff on to my property which cause erosion and siltation problems for me and San Pedro Creek, and therefore, for the new Flood Control Project. The present system does not work and additional water should not be added to it. 7

Page 72 "a) Conservation easements will be obtained for both the north and south ponds in order to protect the habitat for the California red-legged frog in perpetuity. Permanent fencing and signs will be installed to protect the ponds from any future livestock intrusion and human trespass." So, you are going to fence off my stock ponds from my stock? And put up signs? Are the horses and cows going to read the signs? I can tell you from experience that humans won't. "No trespassing" signs get torn down and destroyed as fast as we can put them up! This is the first I've heard about an "in perpetuity" easement. 8

What does that mean to me? Do I lose the use of the land? Can I use the ponds? What do you mean you are going to fence them off? What kind of fencing? And why do I have to bear the brunt of your mitigation measures? Why are you taking property away from me? 9

"c)" I thought the reason that red-legged frogs did well in "stock ponds" was because the ponds do dry up. Doesn't creating a "permanent pond 10

habitat" create a habitat favorable to the bull frog? I understand the bull frog is the red-leggeds worst enemy, because the bull frogs gobble up the red-leggeds.

10

"d)" Because of my concern for the frogs I have already discontinued the practice of disposing of feed waste where it will draw the raccoons to the detriment of the frog.

Section 5.12 WATERS OF THE UNITED STATES/Impacts
Wetlands And Riparian Habitat/Tunnel Alternative

I disagree that the "tunnel alternative will have [only] minor impacts to wetlands." I believe that as the project is currently proposed, the construction period and the period following construction have the potential to have a significant impact, not only to the wetlands on the Ranch, but on San Pedro Creek as well. It would seem to me that you would need to err on the side of caution so as not to cause turbidity and sedimentation.

11

Section 5.13 NOISE/Setting

"A system of trails also exists throughout the mountains and valleys between Pacifica and Montara." I did not note any consideration being made for the disruption of the trail which leads from the Ranch to the ridge line above Devil's Slide. It should also be noted that this is an Historic Trail as outlined by Barbara VanderWerf.

How do you propose to remedy this? Where will the connection be made? Will the people from the stables lose their ability to use this valuable trail during construction? What other arrangements could be made for trail access to the ridge line from the Ranch?

12

Impacts

I do not believe that it is accurate to say that there are, "no noise receptors that will be affected by the proposed tunnel project." It is true that there is not a housing development at the foot of the proposed bridge. But, there are people living several hundred feet from the proposed bridge and there are people that come to use the stables on a daily basis that will be affected by the noise generated by the new facility. It is one thing to have the present road run along side the Ranch it is quite another to have that same roadway cross into and onto the Ranch. The new construction will be at the small end of a megaphone and I won't be surprised to hear highway noises in front of my house a quarter of a mile away. Nor would

13

I be surprised if the people in Linda Mar Valley adjacent to the Ranch experience more highway noise. I already sometimes hear trucks gearing down as they come down the existing Highway #1. Placing the trucks inside the valley, coming out of the tunnel headed immediately downgrade will surly cause them to gear down and will surly permanently diminish the quite we now enjoy. 13

There should be further mitigation measures to address this issue.

Section 5.16.4 RIGHT OF WAY ACQUISITIONS/RELOCATIONS

Impacts

How many acres will be required, including easements, for the proposed tunnel alternative from Shamrock Ranch? 14

Again, thank you for the opportunity to comment. I look forward to your responses.

Very truly yours,

Dana Denman

/dd

cc: Sanctuary Manager, Gulf of the Farallones National Marine Sanctuaries
Manager, Monterey Bay National Marine Sanctuary
District Engineer, U.S. Army Corps of Engineers
Michael Thabault, U.S. Fish and Wildlife Service
Roger Walcott, National Marine Fisheries Service
Rebecca Tuden, U.S. E.P.A., Region IX.
Regional Manager, California Department of Fish and Game
Executive Director, California Department of Water Resources
District Director, California Coastal Commission
Executive Officer, Regional Water Quality Control Board
Neil Cullen, Director, San Mateo County Public Works Department
Sam Herzberg, San Mateo County Planning Division
Arlene Patton, President, Pacifica Land Trust
Pedro Valley Improvement Association
Lennie Roberts, Committee for Green Foothills
Eulalia Halloran, Vice-Presedent, San Pedro Creek Watershed Co-operative

Dana Denman - Shamrock Ranch

1. The Final SSEIS acknowledges that the San Pedro Creek Flood Project has been initiated.

2. Under the current proposed construction phasing, bridge and tunnel construction would begin simultaneously with the tunnel excavation starting at the south portals. Construction of the bridge is estimated to take approximately two years while the tunnels are expected to require three years. It is expected that excavated material from the tunnel will be removed from the south portals and hauled to the disposal site on a separate construction road east of and adjacent to Route 1. By the time tunnel excavation reaches the vicinity of the north portals, it is expected that, if necessary, excess material could be taken out over the new bridges to Route 1 and then south to the disposal site. If an unforeseen delay occurs in the bridge construction, the excess material could be hauled over the access roads to and from Route 1.

3. The haul roads originally proposed from the west, as presented in the 1999 Draft SSEIS/EIR, are no longer considered. A less environmentally damaging construction access from San Pedro Terrace Road through Shamrock Ranch was developed in consultation with you and the USFWS.

   As proposed, 7.3 acres of Shamrock Ranch and 3.1 acres of the Pavka property will be affected by construction activities. During the design phase of the project, consideration will be given to reducing this acreage.

4. The section with the referenced statement has been revised. The electrical power from the existing poles and overhead power lines at Shamrock Ranch was previously extended up the slope to the existing highway to serve the electrical needs at the slide site. Power for the tunnel facility will be provided from this existing power supply, which if necessary, can be upgraded utilizing existing underground conduit and existing poles and overhead power lines but it does not need to be extended on your property.

5. Your exception to Shamrock Ranch not being considered in the Farmlands Section of the 1986 FEIS is noted, however as indicated in the 1986 document (page 93), the Soil Conservation Service found the Shamrock Ranch site "ineligible for prime or statewide designation."

6. Appropriate lighting will be implemented to minimize light intrusion onto the Shamrock Ranch.

7. Your comments regarding the discontinuance of past shoreline stock grazing and other activities as well as the current revitalized population of frogs and their habitat are noted.

   We were not aware of the presence of the Western pond turtle at the south pond. Although the Western pond turtle is a "species of concern," it is neither listed, proposed for listing, or considered as a candidate for listing and therefore was not discussed in the Draft Supplemental document. Now that we are aware of a claim that the species was sighted

there, appropriate measures will be taken to avoid affecting the species when work activities are conducted in the vicinity of the south pond.

The earth berm along the northbound edge of Highway 1 is designed to contain flows from the pavement and intermittently pass them to the natural waterways which drain to Shamrock Ranch. The referenced opening in the earth berm was not a deliberate cut. Stormwaters overflowed the berm at this location during a significant storm event and resulted in a permanent breach. The earth berm at this location will be repaired and the runoff from the pavement can be directed to the next natural waterway. The loose stockpiles of material were the result of emergency maintenance operations to clear the roadway of slide material. Caltrans will avoid the permanent stockpiling of slide material within the Shamrock Ranch watershed. Temporary stockpiling of material will now be subject to the San Francisco Regional Water Quality Control Board's requirements for Best Management Practices (BMPs) such as covering the material with plastic tarps and providing perimeter ditches to contain the sediment runoff. The referenced landslide to the north-west of the pond has been repaired.

Your comment referred to the construction access originally proposed from the west, as presented in the 1999 Draft SSEIS/EIR. See response #3 above.

With the exception of a small amount of bridge runoff from the vertical crest of the bridges southward, most of the roadway and bridge deck runoff can be contained and directed northward within the State right of way and down the hill away from the ponds and their surrounding habitats. Consistent with the natural drainage pattern for this area, the collection system would discharge onto Shamrock Ranch property and eventually to San Pedro Creek. Details of this drainage system will be finalized during the design phase of the project. Implementation of BMPs will include provisions for the removal of roadway generated sediment.

8. Caltrans will seek conservation easements both for the existing north and south ponds as well as the new pond constructed in the fall of 2000. It is apparent that the California red-legged frog is successfully coexisting with current management practices at Shamrock Ranch. Therefore, we are no longer proposing fencing and signing to strictly prohibit livestock and human access to the ponds. However, some form of limited access may be advisable during certain critical periods of the frog's life cycle.

9. The primary intent of conservation easements is to ensure adequate protection in the event of a change in ownership or basic operational philosophies at the ranch. Accordingly, Caltrans will be working with Shamrock Ranch management and the U.S. Fish and Wildlife Service to develop conservation easement language that provides maximum protection to the frog and its habitat without undue changes to existing ranch functions and practices.

   At the meeting with you on July 28, 1999, it was clarified that historical uses by the Denman family, friends, and boarders will still be allowed at the pond. However, all trespassers should be restricted from the pond site. It was agreed that the immediate area around the

pond would be off-limits to stock, but water from the pond could still be available by running a line to a nearby stock trough.

Mitigation is usually required by the Endangered Species Act, the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA) if a proposed project may affect any species of concern. The proposed Tunnel alternative could result in potential construction impacts to the California red-legged frog population at the pond habitat areas of Shamrock Ranch if protective mitigation measures are not implemented as part of the proposed project. It is the policy of the CDFG and the USFWS that mitigation be proposed on-site where the impacts could occur, in this case, the pond habitat area of the Shamrock Ranch. The protective measures at Shamrock Ranch do not preclude historical uses by the current property owner, but rather are intended to restrict outside trespassers from the mitigation area.

10. The red-legged frog completes its metamorphosis in one season while the bullfrog tadpoles require two seasons. Any additional water supplied to the pond by the pressurized water line could be turned off at the end of August so that the pond can dry out in the fall. This is the normal course for natural ponds and ponding areas in California. By eliminating the supplemental water source at the end of August, the pond will dry out and there will be no suitable habitat for the bullfrog. Once the sediment load in the north pond has been removed and a supplemental water supply system installed to maintain adequate water depths through the summer, depredation by raccoons is not expected to be a major problem requiring constraints on current disposal of kennel waste. However, with the potential for a permanent, year-round pond, monitoring will be required to ensure the ponds not be colonized by the bullfrog. In the event of a bullfrog invasion, measures would need to be established and enforceable to quickly eradicate the threats posed by the bullfrog.

11. With the bridge structure spanning the valley rather than filling the valley to support a highway, permanent impacts to wetlands associated with the tributary to San Pedro Creek at the Shamrock Ranch will be avoided. Also with the less environmentally damaging construction access from San Pedro Terrace Road through Shamrock Ranch instead of from the west as previously proposed, the tunnel alternative would not have significant impacts on the wetlands at Shamrock Ranch.

12. The operational needs of Shamrock Rock Ranch during and after construction will be discussed and considered in the right of way process. Disruptions to existing trails will be temporary during project construction. The existing trail from the ranch valley to the summit of San Pedro Mountain will be cut off by the approach to the north portal but the trail will be rerouted and reconnected to maintain continuity. This new trail alignment will be coordinated with you, as the property owner.

    The existing trail at the south portal crosses the proposed disposal site. This trail will also be rerouted across the disposal site once the project is completed.

13. You are correct in pointing out our oversight in the Draft SSEIS. Since then, the residence on your property has been identified as a receptor and is acknowledged as such in this Final SSEIS. Based on computer modeling at an acoustically equivalent site near the south portal, the highest hourly future expected noise levels would be 62 dBA, Leq(h). However, these results are based on the following assumptions, which are extremely conservative and which will rarely, if ever, occur.

    Traffic Volumes (1,800 vph per lane)

    In the analysis, 1,800 vehicles per hour per lane was assumed to reflect the worst condition. In reality, the capacity of the roadway will be approximately 1,200 vph per lane. These traffic volumes will not occur in both directions at the same time based on previous observations.

    Speed: 55 mph

    Because of the terrain and highway configurations, sustained speeds of 55 mph can not be maintained. The posted speed limit for this area is 45 mph and the grade for the new roadway facility will be much lower than the grade of the existing highway.

    Therefore, based on these two major factors, realistically the highest expected hourly noise at the receptor identified on your property will be 58 dBA, Leq(h). Noise abatement must be considered if noise levels approach or exceed 67 dBA, Leq(h) and if abatement can be provided that is both feasible and reasonable. Approach is defined as one dBA below 67 dBA. Because there is only the one residential receptor and there are no feasible and reasonable noise abatement mitigation measures, none are recommended. This project will not alter traffic characteristics significantly; no further noise abatement is planned.

14. As currently proposed, the tunnel alternative would require acquisition of 11.0 acres of right of way and 15.9 acres of easements rights. These amounts are subject to change as the design process proceeds and it may be possible that easements through the acquired areas may be granted back to Shamrock Ranch for it's operational needs. These types of details will be addressed in the course of negotiations for the purchase of the required rights.

May 12, 1999

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Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
PO Box 23660
Oakland, CA 94623-0660

Subject: Comments on Draft Second Supplemental Environmental Impact Statement/Second Supplemental Environmental Impact Report, March 1999

Thank you for the opportunity to comment. Even though my original copy of the Draft never arrived, I was able to obtain a copy by phoning and asking. While the time left was insufficient to allow me to provide the kind of reference material I would otherwise have tried to provide in my comments, I trust that Caltrans has sufficient resources to adequately research any issues raised in my comments below.

Comment 1:
On page 36, the conclusion is drawn that dewatering, to be viable, "would need to be able to effectively remove groundwater at a rate equal to the inflow." In addition, it appears to draw the conclusion that all water would need to be removed from all sections of the slide.

The data and logic presented makes clear that any hypothesis about what causes sliding has not been proven or even substantially confirmed. It is not clear what portions of the slide mass actually need dewatering. In addition, it is not clear that removal of all water in the sections of the slide that might actually require water removal would need all of the inflow removed immediately.

The slide mass clearly has a substantial carrying capacity.

Although it provides no proof, perhaps an example helps make this point. If the hypothesis that the pumping done during El Niño had a sufficiently-beneficial effect, and no sliding occurred during El Niño, then clearly less-than-complete dewatering would be useful. Also, clearly the slide has tolerance for holding and conveying some significant quantity of water, and that amount need not be removed to serve the purpose of slide stabilization.

Therefore, it is not justifiable to assume that the entire slide mass needs complete inflow removal, nor necessarily at the same rate as the inflow.

Comment 2:
I strongly support design variation "A". The outdoor route on the existing alignment best serves bicycle traffic. The air is cleaner, the traffic is lighter, and the space inside the tunnel bores would be better utilized.

Comment 3:
As I understand it, the purpose of constructing bridges rather than using tunnel borings to create a fill-based bridge at the north portal is to reduce the impact on endangered species.

Hence, I was surprised to see access roads cutting and filling 40% of the small valley to the west of the proposed bridges. This area clearly acts as a source of runoff which feeds into the existing pond and wetlands, an endangered/threatened species habitat. I suspect that runoff ultimately reaches San Pedro Creek, a known endangered species habitat.

In addition, with the roads being entered from highway 1, we are looking at nine months or so of traffic disruption as trucks enter and exit. The "Slide" has been a source of great disruption to the economy of the coastside. Further significant disruption cannot be a good thing.

Because of the obvious potential for cumulative impact on both the pond and the creek, and the potential for economic disruption, I wish to bring to your attention an alternative for your consideration. It's not a new option; it was indicated as the likely option in the earlier tunnel study.

Entry from the east, crossing Shamrock Ranch, could provide ingress and egress with little or no disruption to highway 1 traffic. With a little bit of paving, trucks can have access to the bridge construction areas. This avoids the 40% cuts and fills on the western valley. It vastly reduces the siltation potential on both the pond and the creek. In addition, and of considerable importance to consideration of this potential solution, the owner of the property has considered the alternatives and has expressed willingness to facilitate access across Shamrock Ranch property.

I strongly urge you to consider access that disrupts the least, both environmentally and economically.

Comment 4:
The south portal is designed for a rather high speed, apparently something like 50 MPH. I have been told by Caltrans representatives that a long, straight road (like a tunnel) invites drivers to increase their speed, and that the portal must be designed to accomodate these drivers, regardless of the fact that the current road clearly is not designed to handle such speeds.

Because of the design criteria relying upon an otherwise undesirable speed limit, the cut to the south of the south portal is simply massive. Not only is it large, it also extends so far that it would eliminate the waterfall just to the south of the portal entrance. I'm pretty sure that avoiding such an impact would be better from the habitat point of view. I'm quite certain that reducing the size of the cut would reduce cost, reduce construction time, and would result in substantially less visible impact.

According to http://www.nhtsa.dot.gov/people/injury/enforce/swpjoint.html, FHWA recognizes that there are a number of techniques, otherwise known as "traffic calming" techniques, that successfully slow down speeders. I do not see any evidence that such techniques were considered as part of the current plan.

I strongly urge that Caltrans carefully consider traffic calming techniques in order to reduce the design speed of the south portal. Habitat, visual impact, and the overall safety of the people using the road are good reasons to do so.

Thank you for the opportunity to comment on this important document.

Sincerely,

Scott Boyd
266 4th Street
PO Box 370553
Montara, CA 94037-0553
(650) 728-0552

CC: California Department of Fish and Game
U.S. Army Corps of Engineers
California Coastal Commission
Regional Water Quality Control Board

Scott Boyd

1. Please see the response to John Hovland.

2. Your comment of strong support for design variation "A" is noted.

3. The highway at the south portal area has been designed to accommodate a 45-mph design speed. The design of the roadway, based on this design speed, not only reduces the cut required and the impact on the existing natural surroundings but it also is consistent with the posted speed limit within the corridor.

   A more exact location for the south portal and adjoining retaining walls will be determined after additional geo-technical testing and will be finalized in the detail design phase of the project. Based on more recently developed engineering plans the seasonal waterfall will be preserved and will not be impacted.

4. Traffic calming is not applicable for this facility. Traffic calming techniques are typically implemented in residential areas to slow traffic and/or to reduce traffic volumes without diverting traffic to local neighborhood streets, thereby improving safety and addressing local residential concerns. The expectation is free flow traffic at the Devil's Slide tunnel area, nevertheless, curve warning signs and advisory speed limits will be posted to inform motorist of the appropriate travel speed.

P.O. Box 81
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VICTOR H. ABADIE III
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12 May 1999

CERTIFIED LETTER NO. Z 270 559 893

Mr. Robert Gross
Caltrans - Office of Environmental Planning
Box 23660
Oakland CA 94623-0660

Re: ***Devil's Slide Second Supplement to the 1986 Final Environmental Impact Statement/Environmental Impact Report, Draft, Federal Highway Administration and Caltrans, March, 1999, and Devil's Slide Dewatering Feasibility Study, Thomas G. Whitman, Caltrans, November, 1998***

Dear Bob:

The main purpose of this letter is to review compelling evidence that removal of groundwater from Devil's Slide near Highway 1 can create permanent, landslide stability. Caltrans presents evidence favorable to dewatering in the two subject documents.

Dewatering is feasible, effective, inexpensive, and fast. Dewatering already works. It prevented landsliding during heavy rains of early 1998. Estimated cost to dewater Devil's Slide is approximately 5% of the cost to build the pair of tunnels Caltrans proposes. There is no wait. Caltrans can immediately continue installing more drainage, as San Mateo County Measure T authorizes.

Caltrans presents no evidence to support its conclusion that dewatering is not feasible. The March, 1999, environmental document relies on Caltrans geologist Tom Whitman's 1998 geological study, which Caltrans itself says is inadequate. It is self-contradictory and contains counterfactual conclusions.

Caltrans has no choice but to drain more groundwater to preserve Highway 1 for at least the next few years. The procedure may work so well as to become a permanent repair.

A second purpose of this letter is to alert Caltrans and the public that the proposed, Devil's Slide tunnels could fail where faults intersect them. The tunnels can be neither safe nor certain, if active faults cut them.

Please include this letter in the next revision of the subject, environmental document.

(more)

CERTIFIED PETROLEUM GEOLOGIST, AAPG, NO. 3936 CALIFORNIA REGISTERED GEOLOGIST, LIC. NO. 4040
SOCIETY OF INDEPENDENT PROFESSIONAL EARTH SCIENTISTS., NO. 2085

I. DEWATERING WORKS.

Rainfall data and water flow data provide strong evidence that dewatering creates landslide stability at Devil's Slide. Caltrans installed horizontal drains in 1980 and 1995 and drilled two test wells in 1997. The wells and drains, along with natural springs, removed enough water from the landslide to prevent failure during winter rains of 1997/1998.

History suggests that the 1997/1998 winter should have caused Devil's Slide to fail. This was the second rainiest winter ever recorded (Hovland, May 1999). Records go back to the 1860's. Rainfall of average or less than average amounts does not cause landslide failure; however, Devil's Slide has failed between January and March of every winter that rainfall was abnormally high, including wet winters that had less rain than in 1997/1998 (Hovland, April 1998). It is especially significant that the landslide failed in January, 1995, when rainfall was only 2/3 the amount in 1997/1998.

Winter of 1997/1998 was the first abnormally rainy winter since Caltrans installed horizontal drains in 1995 and drilled two wells in November, 1997. That winter's rains tested the 1995 and 1997 drainage and showed it to be effective. There is no other way to explain the landslide stability in 1997/1998.

Caltrans certainly offers no explanation of why Devil's Slide remained stable during 1997/1998 heavy rains. In fact, Caltrans ignores the problem of explaining landslide stability that winter. This is a serious flaw in Caltrans's environmental and geological studies. It is impossible to propose a model of Devil's Slide hydrology, as Caltrans does, while ignoring the key question of why the landslide was stable during the second rainiest winter on record. The explanation is that Caltrans drained enough water to prevent landsliding. Occam's razor.

John Hovland, as early as 1996, made quantitative estimates of the amount of water to remove from Devil's Slide to prevent landsliding (Hovland, 1996a, 1996b, 1998). Whitman shows in his 1998 dewatering study that the wells and drains already remove the water volumes Hovland previously estimated would prevent slide movement. This is why Devils Slide remained stable in January-March, 1998.

Look at the numbers, Bob. Hovland's 1998 draft report, Table I-4, contains his estimates. He presents three cases: ten wells, each producing 1 gallon/minute, 2 gpm, and 3 gpm, could remove enough water, though the time needed to achieve stability depends on rainfall. Converting Hovland's estimates from gallons/minute to gallons/day yields a range of estimates of 14,400 gpd to 45,200 gpd.

(1 gpm/well)(10 wells)(60 min/hr)(24 hr/day) = <u>14,400 gpd.</u>

Similarly, 10 wells each producing 2 gpm/well yield 28,800 gpd, and 10 wells at 3 gpm/well yield 45,200 gpd.

Compare Hovland's predictions with actual water flow. Whitman (1998, p.16) reports that five of the many horizontal drains produce continuously at rates up to 10,000 gpd. His Figure 7 shows peak flow of almost 20,000 gpd from the drains in early 1998. Combine that with the flow from the test wells, which reached maximum in March, 1998, of approximately 7 gpm (Whitman, 1998, Figure 7), or 10,080 gpd, and the result is that the existing drains and wells remove some 30,000 gpd during rainy seasons. This is of the same order as Hovland's estimates of flow rates that would prevent landsliding. Caltrans does show that dewatering works.

The active landslide supplies water to horizontal drains and to the November, 1997, test wells. Whitman (1998, p.15) states that "Many of these horizontal drains pierced the fault contact between the granodiorite ["granite"] and sedimentary rock" to remove groundwater that collects behind the fault, on its uphill, northeast side. This is the San Pedro Mountain Fault (Pampeyan, 1994). It directs groundwater into the active slide (see, for example, geologic map, Hovland, 1998, Figure I-2). Caltrans (1999, p.33) says the fault "forms the southern boundary of the active slide" and is "a possible area of subsurface water flow" (emphasis added). Removal of this water via the horizontal drains contributes to landslide stability. As Baldwin and Cotton (1986, p.43) observe of older, horizontal drains, "Judging from the large quantity of water discharged by a number of the drains, they were beneficial." Clearly.

Horizontal drains succeeded in permanently stabilizing the Arizona Inn landslide on the southern Oregon coast (Peterson, *et. al.*, 1997). This landslide is similar to Devil's Slide in size and lithology. It, too, failed during heavy, winter rains. Peterson, *et. al.*, note that "the potential for catastrophic movement appears to have been substantially removed" by installation of horizontal drains (p.231).

Hovland (1996a, 1996b, 1998) cites locations all over the world where dewatering systems have repaired landslides. See, for example, his 1998 Table I-5. Dewatering is a well-established method to repair and stabilize landslides.

II. GEOLOGICAL STUDY IS INADEQUATE.

Caltrans itself says its dewatering study is inadequate. The 1999 environmental report, page 30, says "there [were] insufficient data to fully resolve the adequacy of dewatering as a permanent solution." The dewatering study fails to meet the purpose Whitman sets forth on page 1

of his report.

The study fails to meet San Mateo County Board of Supervisors' request directing Caltrans to "evaluate the 'dewatering' of the existing slide area on Highway 1 as a legitimate project..." (emphasis added) (Nevin, 1997). The 1998 dewatering study is far too inadequate, by Caltrans's own admission, to evaluate dewatering. Caltrans does not consider dewatering to be a legitimate project and never did. The study is merely a perfunctory response to Nevin's letter. Nevin correctly asserts that "dewatering is not remote or speculative." Caltrans should evaluate dewatering and treat it as legitimate project.

The reason data were insufficient is that Caltrans did an incomplete study. It is disingenuous for Caltrans to avoid collecting sufficient data and then use this as an excuse to condemn dewatering. There is no present basis to conclude against dewatering.

A major flaw in the dewatering study is that all water flow data are from the narrow corridor along Highway 1. The landslide extends for hundreds of feet above and below the road. Caltrans has not sampled water flow from the large majority of Devil's Slide. Caltrans cannot possibly evaluate dewatering, much less condemn it, based on such limited data.

Test wells above and below the road could find water-flow evidence of good permeability. Cost to drill more wells is not a reason for Caltrans to oppose them. Their cost would be insignificant, compared to cost of building two tunnels.

III. CALTRANS'S WELL-FIELD PROPOSAL IS ABSURD.

Caltrans makes the ridiculous assumption that it would have to install 89 wells to dewater Devil's Slide (Caltrans, 1999, p.36-37). Caltrans does admit, at the bottom of page 36, that this is an "assumption". Basis of the assumption is to divide the landslide area by the inferred drainage area of test well W-1.

The assumption has serious flaws. One is that well W-1 is unlikely to represent well performance throughout all of the landslide. Another is that the assumption misrepresents Hovland's proposals to dewater Devil's Slide. He never recommended a well field. He recommended drainage tunnels and horizontal drains, along with wells.

IV. POSSIBLE CONFLICT OF INTEREST OR LEGAL VIOLATION

Caltrans appears to have a blatant conflict of interest. Caltrans asked

its own, in-house geologist to render opinion on dewatering, when Caltrans has opposed dewatering at the outset. The apparent conflict is between the employee's obligation to be objective as a professional geologist and, on the other hand, possible knowledge that his employer, Caltrans, opposes dewatering. This may violate professional ethics codes. Worse, Caltrans may have violated state law. See California Business and Professions Code, Section 7800 *et. seq.*, The Geologist and Geophysicist Act.

Caltrans's bias against dewatering emerged long before Whitman did his 1998 study. For example, Dennis Bosler, Caltrans Devil's Slide Project Manager, repeatedly said Caltrans does not believe dewatering would work (Bosler, 1997; Minutes, Devil's Slide Coordination Committee meetings, 1997a, 1997b). Whitman's study does not appear to be independent of his employer's early bias.

V. HAZARDOUS FAULTS ENDANGER TUNNELS MORE THAN LANDSLIDE.

I believe the evidence is that a dessicated Devil's Slide will be more stable and more certain than tunnels that intersect active faults. Faults that pass through the tunnel alignment could shear the tunnels but are less likely to destabilize a dewatered Devil's Slide.

The proposed tunnels would pass through faults that, based on large amounts of published field research, may be active. Caltrans fails to recognize this hazard in asserting, incorrectly, that Hovland's proposal to dewater Devil's Slide "is not comparable to the certainty of the tunnel[s]" (Caltrans, 1999, p.30) and that no known, active faults cross the tunnel alignment (Caltrans, 1999, p.56).

A geologic cross-section Caltrans presented at a public meeting in Montara, 27 April 1999, shows faults that cut through the proposed tunnel alignment. These faults may have the potential to rupture and shear the tunnels. They are within the active zone between the San Andreas Fault and one of its major, active branches, the San Gregorio-Seal Cove Fault. The San Gregorio Fault extends for hundreds of miles along the California coast and joins the San Andreas Fault near Bolinas. It passes less than two miles offshore of Devil's Slide, which is much closer than Devil's Slide is to the San Andreas Fault. The tunnel faults may be branches of the Pilarcitos Fault, apparently inactive since Pleistocene time (see Pampeyan, 1994, for discussion and references), but they probably intersect the San Gregorio Fault offshore.

The San Gregorio Fault has moved as recently as 600 years ago and 1200 years ago at Seal Cove, only four miles south of Devil's Slide (Northern California Geological Society, 1997; Schwartz, 1999). Weber (1990) estimates recent slip rates on the San Gregorio Fault that agree with

average slip rates Dickinson, *et. al.* (1979) estimate during Neogene time, 22.5 million years ago to 1.8 million years ago. Baldwin and Cotton (1986, p.41, 55, 64, and 68) discuss recent fault movement and strong evidence that the San Gregorio Fault and its branch-faults are still active. The tunnel faults may have potential to move and rupture the tunnels, if the faults intersect the San Gregorio Fault offshore.

VI. DEWATER DEVIL'S SLIDE TO REDUCE EARTHQUAKE HAZARD.

Hovland shows us how dewatering Devil's Slide could dramatically increase landslide stability, by up to 40%, and provide adequate stability, even during a large earthquake. Please see the analysis in his 1998 draft, p.IV-1 through IV-9. Hovland finds that dewatering would increase landslide stability more than what Caltrans accepted for the abandoned, Marine Disposal Alternative repair of Highway 1. Caltrans should welcome the greater improvement in stability that dewatering would generate.

Analogy with the air-hockey game common in arcades illustrates the idea behind improved, landslide stability during earthquakes. The hockey puck rides on a nearly frictionless cushion of air pumped out through holes in the table surface. Removing the air flow makes the puck stick fast and resist being pushed. Water in Devil's Slide reduces friction and promotes landsliding. Removing enough water can reduce landslide movement, even with the "push" of an earthquake or local faulting.

VII. DEVIL'S SLIDE PERMEABILITY DOES FAVOR DEWATERING.

Caltrans ignores abundant evidence that Devil's Slide conducts groundwater easily enough to support dewatering. Caltrans misconstrues its own data to conclude against dewatering. Whitman concludes that permeability is too low to support dewatering (1998, p.1-2, 9-10, 17), but he himself refutes this with other conclusions that permeability is high.

Page 3 of his report contains a good example. He says, "Flow rates [from horizontal drains] tend to increase <u>quickly</u> in response to heavy rainfall and drop off <u>rapidly</u> once heavy winter rains subside, similar to the pumping rate observed in the wells" (emphasis added). Flow rates respond quickly to groundwater changes, precisely because permeability is good.

The length of time for wells and drains to respond to groundwater change is a measure of permeability. Short response time indicates high permeability. This is the same principle Caltrans employed with the two test wells (Whitman, 1998, p.8). Pump off the wells, and then measure the time for water to flow back into the wells. Whitman (1998, p.14) says test well "W-1 indicates that the water passes through the system relatively

quickly." This is the same as saying W-1 indicates relatively high permeability.

Hovland (1999) computes permeabilities that validate the fast flowback response Whitman recognizes. Using Caltrans's own data, Hovland calculates permeability within the landslide of 2.2 ft/day. This is 100 times the permeabilities Whitman calculates (1998, p.2, 8-12).

Whitman misjudges landslide permeability as low, because he applies an irrelevant standard comparing Devil's Slide test wells to domestic and agricultural wells (1998, Table 1, Table 2). Devil's Slide test wells and future dewatering wells have nothing to do with other wells drilled to produce usable water. A well or drain installed to dewater the landslide does not have to meet any minimum flow rate, except to dewater the landslide. Existing drainage already meets this standard. The absolute permeability values Whitman reports are sufficient to dewater Devil's Slide.

Coarse-grained rock and extensive fracturing account for high permeability within the landslide. Caltrans acknowledges that Devil's Slide contains sandstone and conglomerate (Whitman, 1998, p.5; Caltrans, 1999, p.33), which are coarse-grained and generally permeable. Thick, massive layers of sandstone, pebbly sandstone, and conglomerate are common below the roadway. Other parts of the landslide contain sandstone (see, for example, Nilsen and Yount, 1981). Caltrans 1983 Boring #2a found sandstone and conglomerate in the subsurface, near the top of the active landslide (Caltrans, 1983).

There is a simple, standard, inexpensive way to measure rock matrix permeability in the laboratory from samples. Measurements on sandstone samples from outcrop and borings could help establish permeability values to use in assessing proposals to dewater Devil's Slide.

Fractures pervade the landslide. It would be difficult to argue that the fractures do not conduct groundwater. I suppose this is a reason Caltrans ignores fracture porosity in its reports. Caltrans does observe that the landslide is "extremely folded [and] faulted" (Caltrans, 1999, p.33; Whitman, 1998, p.5). Indeed, Devil's Slide sits within one of the world's major fault zones. Tectonic movement has shattered the rock.

Caltrans 1983 Boring #2a revealed strong evidence of highly permeable fractures in the upper, active landslide. The boring reached total depth of 424' in "highly fractured and broken sandstone, mudstone and conglomerate. ...Loss of drilling fluid was a continuous problem" (Caltrans, 1983, p.24).

Whitman incorrectly says lack of interference among test wells, observation wells, and horizontal drains is evidence of low permeability

(1998, p.1, 16-17). His premise is wrong: test well W-1 did cause the water level to drop quickly and by large amounts in observation well P-1. This is clear from the table and graph on the first two pages of Appendix B of his report. Piezometers P-1a, P-1b, and P-1c registered water level drops of almost ten meters from mid-February to late March, 1998. This indicates high permeability with respect to draining water out of the landslide.

Even small reductions in groundwater levels can produce large increases in landslide stability here. Hovland discusses this in detail. See especially his 1998 draft, Figure III-11 and p.III-6-III-7.

Whitman misconstrues lack of interference among other wells and drains as evidence of low permeability (1998, p.1, 16-17). It is not. He provides an alternate and more reasonable explanation on his page 3, where he says the volume of water removed from the landslide during testing was small. The volume produced in W-1 was too small to draw down flow rates in wells and drains more distant than P-1. This is not a basis to conclude permeability is low.

VIII. RECOMMENDATIONS

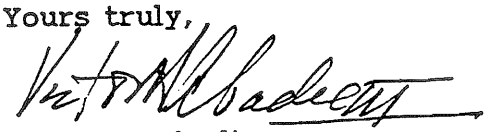
1. Caltrans should immediately commission an independent study of the entire, active landslide at Devil's Slide. Field investigation should include the drilling and testing of wells throughout the active slide. A good place to start drilling might be in the top of the active slide, where Caltrans drilled the 1983 borings. The public deserves an honest evaluation of proposals to dewater Devil's Slide.

2. Caltrans should present the new study for public comment upon completion.

3. Caltrans should collect rock samples from outcrop and borings and submit them for permeability measurement. There are laboratories in Sacramento and elsewhere that specialize in this analysis.

4. Caltrans should continue installing drainage into the landslide. This would further increase landslide stability and, at the same time, provide new water flow measurements for evaluation. Temporary dewatering may turn out to permanently repair the landslide.

Yours truly,



Victor H. Abadie III,

California Licensed Geologist No. 4040,
American Association of Petroleum Geologists No. 3936,
Society of Independent Professional Earth Scientists No.2085

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Victor Abadie

Your letter and all other comment letters, have been included in the Comments and Responses Section of this final environmental document. The following responses correspond to your comments identified by Roman Numeral headings.

1. Please see the detailed responses to John Hovland regarding de-watering.

2. The de-watering study was comprehensive and adequate and also supported our conclusion that de-watering is infeasible as a means of providing reasonable assurance of permanent stability at Devil's slide. Over a million dollars was spent installing and monitoring wells for this de-watering study. The expenditure of additional millions of dollars to further study de-watering would not likely negate the results and conclusions already developed, therefore further studies are not warranted. In addition, de-watering would have no effect on coastal erosion or localized shallow to moderate depth slides and rock-falls. Even with de-watering, these existing conditions would diminish and eventually destroy the existing highway.

3. Making assumptions for feasibility studies is both routine and perfectly reasonable. Well #1 was used because it better represents the hydraulic characteristics of the landslide within the sedimentary rock. The De-watering Feasibility Study results were compared to the 1996 Woodward – Clyde exploratory borings and the results were found to be consistent with the finds of low to very low hydraulic conductivity.

   The study acknowledged that wells and other drainage strategies would have to be used. It also concluded that the groundwater regime within the study area is complex, and de-watering would be extremely difficult. The slide mass has a low to very low hydraulic conductivity and removing groundwater from the slide mass is expected to be difficult and have limited lateral impact on the water table. This limited ability to remove groundwater from Devil's Slide supports the conclusion that de-watering this slide area is not feasible.

4. See Appendix G, letter from the State Board of Registration for Geologists and Geophysicists regarding your allegations of conflict of interest.

5. The tunnel will pass through a number of faults, none of which are considered active by either the California Division of Mines and Geology or the U.S. Geological Survey. One of the boundaries of the Devil's slide mass is an inactive fault that will also be encountered in the tunnel. In the extremely unlikely event that there is displacement along this inactive fault, it would likely cause as much or more damage to the roadway alignment as it would to the tunnel. The argument that the tunnel is within a zone between two major active faults describes the situation for much of coastal California and is not unique to Devil's slide.

6. If it were feasible to de-water Devil's slide, the effect would be to increase earthquake stability.

7. Please see the detailed responses to John Hovland regarding de-watering.

8. Recommendations are acknowledged. However, as noted previously, we believe that the de-watering study was comprehensive and adequate. Additional studies will not be commissioned. Although not part of the permanent solution to the problem, the temporary drains will remain in place and will continue to operate.

faxed May 12, 1999
To: (510) 286-6374

May 12, 1999

Robert Gross
Office of Environmental Planning, South
CalTrans District 4
P.O. BOX 23660
Oakland, CA 94623-0660

Re: COMMENTS ON DEVIL'S SLIDE SECOND SUPPLEMENT
FINAL EIS/EIR

Dear Mr. Gross:

The following comments are submitted in connection with the Devil's Slide Second Supplement to the Final EIS/EIR.

I am a resident of Shamrock Ranch, the site of the proposed North Portal of the tunnel alternative. In fact, I am most likely the nearest resident to any portion of the proposed project, as my residence is a few hundred feet from the north pond containing the Red-Legged Frog and a few hundred yards from the North Portal entrance and bridge itself. As a consequence, I have serious concerns about the impacts of this project both upon my residence and my family, as well as to Shamrock Ranch itself. I also believe that, having lived there for 20 years, I am personally familiar with the environmental setting and have personal knowledge of the impacts that may result to the Ranch without the proper mitigation.

Section 5.13 NOISE

Section 5.13 states that "No noise mitigation measures are proposed for the tunnel alternative" and that "There are no noise receptors that will be affected by the proposed tunnel project."

These statements are not correct. Noise impacts from the project need to be properly analyzed and appropriate mitigation addressed. For example, the document acknowledges that the North Portal and highway bridge will be situated in a valley in the northern section of the Ranch. The valley acts like a noise amplifier so that highway and airplane noise can be magnified and amplified. 1

When I was employed by the City of Pacifica as City Attorney, I became familiar with airport noise problems which were addressed regionally by the Airport Roundtable. A recurrent problem arose from overflights in valley areas in which sound was magnified. For example, many complaints originated from the rear of Linda Mar Valley in Pacifica. Noise consultants confirmed that the valley-like shape of the topography contributed to the noise impacts. 1

Similarly, this valley will act as a magnifier. I and my family and the other residents of the Ranch will certainly be receptors of this noise. 1

I am also concerned about noise impacts on the wildlife which is abundant in the area. I would like to be sure that the maximum noise attenuation possible is imposed on the project to protect the residents of the Ranch, to avoid disrupting the Ranch's business operations, and to avoid an adverse impact on wildlife, particularly species who are noise sensitive. 2

I am also concerned that there be careful attention paid to noise mitigation during construction, which, although temporary, will be very lengthy. 3

Section 5.1 AESTHETICS

Similarly, this section lacks any analysis of the impact of the bridge and highway on Ranch residents and business visitors. For example, it is my understanding that there will be highway lighting. If so, there needs to be an analysis of the impacts of light and glare on the human residents, the Ranch's business visitors, and the abundant wildlife, particularly species who are nocturnal or otherwise sensitive to disturbance by light. 4

Every feasible mitigation measure should be imposed in order to insure that lighting is directed toward the highway and shielded so that there is no glare upon the Ranch and its residents and wildlife.

Figure 3-2

The diagram of the project site does not show my residence, nor does it depict other existing Ranch buildings. In order for CalTrans staff to develop appropriate mitigation measures, it is essential that the description of the Environmental Setting in Section 4.0 and the diagram in Figure 3-2 accurately depict the current Ranch setting. I cannot adequately determine the proximity of certain aspects of the project to my residence without a clearer depiction of the current Ranch environment. This project will have a dramatic impact on the Ranch and its business and residential operations. Thus there must be an accurate and up to date description of the Ranch in the document and it should be reflected in this diagram. 5

I thank you for the opportunity to comment on this document and look forward to talking with Cal Trans personnel at one of your upcoming meetings.

Very truly yours,
Susan Schectman

Susan Schectman
Shamrock Ranch
Pacifica, CA 94044

Susan Schectman

1. Since circulation of the DSSEIS, your residence located at Shamrock Ranch has been acknowledged as a receptor. We are not aware of any documented evidence that transportation noise will be amplified into the valley. The valley would absorb noise rather than reflect it.

   The project is not expected to increase traffic volumes and would not result in any significant increased noise impacts to residents or wildlife. Some vehicular noise already exist from the existing Route 1 roadway, however the proposed alternative is not expected to add any new permanent noise sources that are not already present.

2. There are no guidelines regarding traffic noise impacts on wildlife, and no further studies are planned, however, additional enhancement measures will be included as part of the project to compensate for potential indirect short-term construction impacts such as noise, ground vibration and general disturbance at Shamrock Ranch.

3. For nearby receptors there will be temporary noise level increases due to construction. Caltrans project plans will include provisions to minimize construction activities to the extent possible.

4. Appropriate lighting will be implemented to minimize light intrusion onto the Shamrock Ranch.

5. The scales of maps used in the DSSEIS were selected to illustrate primary project features and to be suitable for efficient reproduction and publication. Larger scale mapping more appropriate for your needs was provided to you.

APRIL VARGAS • CUSTOM INTERIORS

May 12, 1999

Dear Mr. Gross,

Thanks to you and your entire department for your intensive work on the draft SEIS for the Devil's Slide tunnel project. I have three comments regarding this document:

First, the San Mateo County Board of Supervisors' resolution to assume responsibility for the abandoned alignment at Devil's Slide and maintain it as a hiking and biking trail makes Variation A the obvious design choice. Design Variation B is more expensive and is extremely unpopular with county residents. Furthermore Measure T specifies that Caltrans provide bicycling and pedestrian facilities outside of the tunnel. As you well know, Measure T was passed overwhelmingly by San Mateo County voters and approved by the Coastal Commission.

P.O. BOX 370265 • MONTARA, CA 94037-0265 • (650) 728-5215

Second, I urge Caltrans to provide for the continuity of the trail system which surrounds the Slide area. The old Colma-Half Moon Bay Road must remain accessible to recreational users and provisions need to made for a link between new facilities on the abandoned alignment and existing trails. This will allow for uninterrupted access from the Slide area to McNee Ranch State Park and beyond.

Finally, I encourage Caltrans to make a final determination which will permanently eliminate the Martini Creek Bypass plan from consideration as a viable alternative for Highway One at Devil's Slide.

Thanks once again and please proceed as quickly as possible so that construction on the tunnel can begin!!

Sincerely,

Phil Rogers

April Vargas

1. Upon completion of the tunnel construction, Caltrans will relinquish the section of existing Highway 1 right-of-way to the County of San Mateo for use as a non-motorized facility. Operations, maintenance, and management of the property and the bicycle/pedestrian trail will then be within the jurisdiction of the County of San Mateo. The County may choose to operate and maintain this facility or arrange for the management or transfer of the facility to an appropriate public recreational agency.

2. The tunnel alternative will affect sections of existing trails on private property within the project area. The placement of fill material at the South Disposal Area will impact that section of the abandoned Half Moon Bay-Colma Road through the disposal area. During construction of the tunnel alternative, trail access will be maintained by means of trail detours. After construction, any trail affected by the project, including the impacted section of the old Half Moon Bay-Colma Road, will be reestablished or realigned and reconnected to maintain trail continuity. Extension of the current trail or major expansion of the trail system is beyond the scope of this project.

3. The tunnel design variation "A is identified as the preferred project alternative. However, for the purposes of NEPA and CEQA, the Martini Creek Alignment alternative has remained a reasonable alternative.

April 15, 1999
1128 Escalero ave.
Pacifica, Ca.

Robert Gross

Dear Sir;

Regarding the Coastside highway at the devils slide area. a lot of people feel that a tunnel would be wise, and others like myself feel that an open highway 2 or 4 lanes is the best I although there may still be problems with either way.

Thanks,
Doris J. Whitt
a San Mateo Co. resident for 56 y

Doris Whitt

Your comment that "an open highway 2 or 4 lanes is the best" is noted.

Dear Mr. Gross, 4.21.99

I n writing to voice my support for the D) ls Slide Tunnel and would like to ask that you support Design Variation A.

While I have your attention, I would also like to ask that Caltrans help reduce the use of harmful chemicals on our roadsides, as well as increase the use of tree and foliage windbreaks versus the current concrete/wood noise barriers. A small berm covered with shrubs and crowned by full trees could be equally effective, help reduce dust/smoke pollution, provide shade and be far more pleasing to the eye.

Thank you very much for your time and, hopefully, cooperation. Peter von Bleiche

Peter von Bleicher

Your support for the Devil's Slide Tunnel is noted.

In 1992, Caltrans adopted an integrated vegetation management (IVM) program and set goals for reduction of chemical use: a 50% reduction by 2000 and an 80% reduction by 2012. Vegetated berms are considered in lieu of standard concrete sound-walls when and if feasible for noise attenuation and where space is available.

Dear Mr. Gross -

As people who drive a car and cycle down Highway 1, we strongly support the tunnel at Devil's Slide. We prefer Design Variation A.

We also urge you to look ahead and consider closing Highway 1 to large vehicles, allowing only bicycles and small cars. SUVs and RVs are not appropriate for this road. Thank you.

Peggy da Silva

Dan Hodapp

Peggy da Silva

Your support for the tunnel at Devil's Slide and preference for Design Variation A are noted. Highway 1 is a major State Highway.

VERBAL COMMENTS AT PUBLIC HEARING

CERTIFIED COPY

TRANSCRIPT OF PROCEEDINGS

MONTARA, CALIFORNIA

APRIL 27, 1999

ATKINSON-BAKER, INC.
CERTIFIED SHORTHAND REPORTERS
5 Third Street, Suite 625
San Francisco, California 94103-3202
(800) 288-3376

REPORTED BY: LYDIA ROSEANNE RADOVICH, CSR #9223

FILE NO.: 9907800

TRANSCRIPT OF PROCEEDINGS, taken at Farallone View School School, La Conte & Kanoff Streets, Montara, California, commencing at 6:00 p.m., Tuesday, April 27, 1999, before Lydia Roseanne Radovich, CSR No. 9223.

MONTARA, CALIFORNIA; TUESDAY, APRIL 27, 1999;

6:00 P.M.

- - -

MS. MAULE: Nancy Maule, Box 126, Montara 94037. (650) 728-3388.

Dr. John Hovland, H-o-v-l-a-n-d, of Berkeley worked almost four years on a study to dewater Devil's Slide. Dewatering has been used around the world with great success and there is no reason to believe that it would not be a success on Devil's Slide as well.

The tunnel would destroy the most beautiful mile of the five miles from Montara to Pacifica. The California Coast Highway Number One is a part of our nation's national treasures and should never be degraded if it is at all possible to preserve it southeast and -west. Along with the Sierra Club and the Committee for Green Foothills, both bayside organizations, and the local Citizens for the Tunnel, some do not seem to understand what our future will be like if we begin to obstruct instead of support the God-given beauties of our privileged area. These people, knowing that Caltrans favors large and expensive road projects and fearing that the bypass would raise its head again resorted to the use of fear and politics, convincing many that they had no choice but the tunnel.

As for Caltrans, on the dewatering I have a question or two for them. Is half a project better than none? Does a small part of a proven theory suffice to prove or disprove that dewatering is not a good solution? Perhaps it is a small part of the best solution that some people are afraid to admit.

Scientists such as Ken La Joie of the USGS are not afraid to approve the worth of dewatering. And he has studied the California coast and written a book about his findings. And our own geologist Vic Abadie of Montara supports it, too. They believe, I believe, others believe that the dewatering of Devil's Slide would solve the problem. Dr. Hovland is busy writing a treatise on the EIR and will send it to Caltrans at the due date.

All of you who love the beautiful coast where we are privileged to live and who share our choice of a project for the future of Devil's Slide, please do likewise.

MS. HIRZEL: Sandra Ann Hirzel, 1174 Terra Nova Boulevard, Pacifica, California 94044-4309. (650) 359-5633.

I'm for the tunnel. And I really hope that it can be built the year 2002, as stated in this little planning report or information that I received in the

mail.

I also would hope that they have a bicycle lane and also, too, they have good consideration and preparation for rescue or fire inside the tunnel, if there's any kind of measures that can be taken how firefighter people can get up there. And that wouldn't be a real big problem. Hopefully we won't have any problem. I heard it's not that big of a tunnel, but they might have to eliminate certain trucks that have fuel, like they do in the Caldecott Tunnel. And I hope they really will get to this the year 2002. And I think it's about coming.

I have a relative, Chuck Mortis, (phonetic) who's a civil engineer. And he had mentioned to me, too, that it's taken a long time, but it's not the fault of Caltrans; it's a lot of the environmental groups, but he has strongly always recommended they need to do something soon.

MR. RODERICK: Rod Roderick, 7 Alviso Court, Pacifica, California 94044-4239. Telephone number unlisted.

I've been working working on aspects of this tunnel issue, the bypass issue, prior the marine disposal alternative, et cetera, for some 25 years. It's not a new subject. I'm very glad it's underway. I

worked on the tunnel lobbying.

I am quite concerned in studying the diagrams and talking with the men this afternoon that there is not provision for expansion required by population increase. By this I mean I believe there should be two traffic lanes, each 12-foot wide, same direction, in the tunnel.

I recognize the approval process will become involved. I recognize the conflict with the bicycle paths. At the same time, within the next 25 years or so I would expect a considerable traffic flow requirement and demand of two traffic lanes in each direction, 12-foot wide minimum, because I know they can go 10 foot, but I'm talking 12-foot minimum. That is the essence of what I'd like to say.

MR. PETTY: William Petty. 5 Alviso Court, Pacifica, California 94044. (650) 359-1916.

Well, truthfully all I would like to comment on is I'd like to have it done as soon as possible. And I prefer the larger bore for safety and the bicycles. I think down the road we'd be sorry if we didn't go with the best because it's not like enlarging a highway; once it's in, it's in and it's major work to redo it. And that's pretty much it.

DAVE SPISELMAN: Dave Spiselman. 408

Farallone Avenue, Montara, California 94037-1137. (650) 728-1714.

I personally endorse the tunnel alternative, both as a member of the Mid Coast Community Council and also as a private citizen. Completion of the tunnel as soon as possible is in the best interests of my constituency, I believe.

MR. MARSH: Jim Marsh. P.O. 154, El Grenada, California 94018. (650) 726-2824.

Well, let's see. As a tunnel supporter, I think it's important that Caltrans has gotten to the point where it does look like this is going to happen. The construction is going to start.

In my own mind, I think there's room for additional dewatering studies, both in terms of the -- oh, I guess the serviceability of the existing road and certainly one of cost effectiveness. Doing a project simply to do a project is not a reason to do this particular project.

And I'd like to support the Citizens for the Tunnel in their fine work they have done, all this public comment period over the years. I guess that's it. Thanks.

MS. BROWN: Andrea Brown. 408 Farallone Avenue, Montara, California 94037-1137. (650) 728-1783.

Basically just say what I said there (indicating.) Briefly, all winter suffering through numerous accidents and numerous delays with the construction that we had from nine a.m. to three p.m. for months straight -- I don't know; it must have been about four or five months' worth -- many times I was delayed because that was the hours I travel from here to San Francisco. So I had many late appointments. So my feeling is stop the endless construction and repairing and build the tunnel now.

MS. HAYNIE: Carla Haynie. P.O. Box 371143, Montara, California 94037. (650) 728-3965.

Well, my comments are: I want them to build Design Measure A without the pedestrians and the bicycle path. I want them to really accelerate whatever they can do to make it faster because they're saying it won't be done until 2005. There's every reason to believe that the current road, existing road, will wash out again. And all hell will break loose if that takes place.

I also want to ask a question. There is a huge, enormous pile of dirt on the highway right across from the nude beach. And it's sitting in the parking lot. Are they planning on leaving it, you know, hauling it away or what sometime before -- whenever? It would

be nice to have that removed. They can do that now.

And hang on one second. One of the reasons I wanted them to choose Design A is because the ventilation which they're talking about is so much -- such a cost savings. Because of the new design is that if they do allow bikes and pedestrians, it makes ventilation nor complicated and it's more expensive. That's another reason I wanted them to pick Design A.

And could they put out to bid -- I mean they're digging the tunnel and they've got all this rock and stuff. Can they put it out to bid to various quarries who might want to come and take the gravel away and use that as a cost savings? I mean instead of -- you know, we've got rock. You're a quarry. Here. Come get it or sell it or whatever. And I think that's it.

MR. WOREN: Leonard Woren. P.O. Box 1375 El Granada, California 94018. (650) 726-9647.

The current right of way needs to be kept open, and not just for pedestrian and bicycle traffic, because not everybody's physically fit enough to make it up there. I went up there once when the road was closed and it was closed part way down, and I barely made it up to the closure point. So going all the way up on foot is really too much for a lot of people. So I think it's really important to maintain the current scenic highway.

And personally I don't think the tunnel's necessary. The tunnel's a waste of money. They should for a lot less money do the serious dewatering that Dr. Hovland suggests and keep the current road open permanently. And it can be done, but the political will to do it isn't there. Maybe that was it. I think that was all I had to say.

MS. OWEN: Mildred Owen. 1669 Higgins Way, Pacifica, California (650) 359-0499.

My concern is that I would like to have the old road left open for bicycles and hiking. I'm very interested in having -- not losing that wonderful view, and that people could walk and leisurely enjoy it. And it would require very little maintenance because it's -- it doesn't get heavy traffic, just foot traffic and bicycles. I think that it would be a much better bicycle trail than trying to put one through the tunnel. I can't envision that very easily. Can you, Marcia, in the tunnel?

And so if a bicycle trail is through the tunnel, then I would also like to see the old road left open for bicycles and walkers. That's my main concern.

MS. DOTY: Marcia Doty. P.O. Box 749 Montara, California 94037. (650) 728-5201.

I would like to express my relief over

finally coming to a logical, smart resolution. And my gratitude to Caltrans and all those that have stood by; stuck with it.

I would like to see the existing road that will be closed off to be maintained for biking and walking, and that the access to it would be across the bluffs rather than in the tunnel.

MS. DENMAN: Dana Denman, Shamrock Ranch, Pacifica, California 94044-4099. (650) 359-1627.

I have a concern about the lighting for the bridge, and I would like it to be done in as low an impact way as possible.

I also have a concern about the removal of the Cypress trees at the north entrance, but specifically where -- let's see -- where the roadway will be leaving the existing Highway One. And I'm wondering if Cypress trees could be planted to the east of that entrance and if that could be gun soon so that those trees could begin to grow even before the road gets built. I would just say I would like as many trees saved as possible. Those are really the only two comments I have right now.

MR. BUTCHER: Scott Butcher. P.O. Box 447, 630 Vue De Mar, Moss Beach, California 94038.

Bike lanes. We want bicycle access through

the tunnel. Preferred option is Design Option B with the segregated bike lane.

In the case of Design Option A with a wide shoulder and a single lane of traffic, that bikes are allowed to drive through, both road and mountain bikes. There's a lot of bike traffic. International visitors travel from San Francisco to points south down Highway One; stay at the hostel in Montara, and so forth. And there's a significant amount of road bike traffic over Devil's Slide on a daily basis, especially heavy on weekends and very heavy in the summer months. That's it. In any case, bike access through the tunnel is asked for.

(Ending time: 9:05 p.m.)

REPORTER'S CERTIFICATION

I, LYDIA ROSEANNE RADOVICH, C.S.R. No. 9223, Certified Shorthand Reporter, certify:

That the foregoing proceedings were taken before me at the time and place therein set forth, at which time the witness was put under oath by me;

That the testimony of the witness and all objections made at the time of the examination were recorded stenographically by me and were thereafter transcribed;

That the foregoing is a true and correct transcript of my shorthand notes so taken.

I further certify that I am not a relative or employee of any attorney or of any of the parties, nor financially interested in the action.

I declare under the penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Dated this 2nd day of May, 1999.

LYDIA ROSEANNE RADOVICH, C.S.R. No. 9223

REPORTER'S CERTIFICATION OF CERTIFIED COPY

I, Christina Younkers, an employee of Atkinson-Baker, Inc., certify that the foregoing pages 1 through 13 constitute a true and correct copy of the original deposition transcript of TRANSCRIPT OF PROCEEDINGS taken on APRIL 27, 1999.

I declare under the penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Dated this 7 day of MAY, 1999.

C. Younkers

Christina Younkers

Nancy Maule

Please see the response to John Hovland regarding dewatering.

Sandra Hirzel

Information on the tunnel systems operations and safety systems is located in the FSSEIS in Section 3.0 Alternatives. Comments noted.

Rod Roderick

Please see the response to your written comments related to the tunnel alternative design variations.

William Petty

Your comment to have this project "done as soon as possible" and your preference for the "larger" bore is noted.

David Spiselman

Your endorsement of the tunnel alternative is noted.

Jim Marsh

Please see the response to John Hovland regarding dewatering.

Andrea Brown

Comment noted

Carla Haynie

Measure T requires that the tunnel be designed consistent with restricting Route 1 to a two-lane scenic highway using minimum state and federal tunnel standards, and that a separate trail for pedestrians and bicycles be provided outside the tunnel, except for the repair of the existing highway. Since this segment of Highway 1 is a conventional highway, bicycles will not be prohibited from using the tunnel. However, to maintain air quality levels compatible with bicycle usage, adequate ventilation capacity must be provided. The cost for such modifications based on recommendations n the Woodward-Clyde study is estimated to be $800,000. Signing will be placed near the tunnel to encourage bicyclists to use the exterior path rather than the tunnel.

Leonard Woren

Upon completion of the tunnel construction, Caltrans will relinquish the section of existing Highway 1 right-of-way to the County of San Mateo for use as a non-motorized facility. Operations, maintenance, and management of the property and the bicycle/pedestrian trail will then be within the jurisdiction of the County of San Mateo. The County may choose to operate and maintain this facility or arrange for the management or transfer of the facility to an appropriate public recreational agency.

Your comment that the tunnel is not necessary is acknowledged. Please see the response to John Hovland regarding dewatering.

Mildred Owen

See above response to Leonard Woren regarding future use of the existing highway.

Marcia Doty

See above response to Leonard Woren regarding future use of the existing highway.

Dana Denman

Your concerns regarding lighting and removal of cypress trees are acknowledged. Specifics regarding vegetation removal and replacement planting will be addressed in the final design.

Scott Butcher

Your comment regarding bicycle access through the tunnel and your preference for Design Variation B with the segregated bike lane is noted. Since this segment of highway 1 is a conventional highway, bicycles will not be prohibited from using the tunnel. Your comments regarding the amount of bicycle traffic including its use by international travelers are also noted.

WRITTEN COMMENTS AT PUBLIC HEARING

Comment Sheet

Route 1 Devil's Slide
EA # 112371
Public Hearing
Farralone View School, Montara
Tuesday, April 27, 1999

EXHIBIT
TAMES
4/27/99

Name: David Spiselman Organization: Midcoast Community Counci

Address: 408 Farallone Avenue, Montara, CA Zip Code 94037-1137

Phone/Fax/E-mail: dave-s@coastside.net (650) 728-1714 (650) 728-17

Please print. Use the back of the sheet if necessary.

I personally endorse the tunnel alternative, both as a member of the Midcoast Community Council and also as a private citizen.

Completion of the tunnel, as soon as possible, is in the best interests of my constituency, I believe.

Dave Spiselman

PLEASE PLACE THIS IN THE COMMENT BOX TONIGHT OR MAIL TO:
Caltrans District 4, Office of Environmental Planning South, Attn: Robert Gross/Ed Pang
P.O. Box 23660, Oakland, CA 94623-0660.
Written comments must be received by May 12, 1999.

Comment Sheet

Route 1 Devil's Slide
EA # 112371
Public Hearing
Farralone View School, Montara
Tuesday, April 27, 1999

Name: MICHAEL HALL Organization: _____

Address: 527 8TH ST MONTARA Zip Code 94037-0308

Phone/Fax/E-mail: BCFMH@IBM.net

Please print. Use the back of the sheet if necessary.

WONDERING WHAT THE THINKING IS BEHIND ONLY ONE LANE IN EACH DIRECTION. I UNDERSTAND THAT THE ROAD LEADING TO THE TUNNELS IS ONLY 1 LANE EITHER WAY, BUT EVENTUALLY BOTH OF THESE WILL BE DUAL. AT PACIFICA IT IS ONLY A MILE OR SO FROM TUNNEL ENTRANCE ALREADY. → I LIKE THE IDEA OF THE BIKE LANE ALTHOUGH THE EXISTING HWY 1 COULD BE USED AS SUCH.

PLEASE PLACE THIS IN THE COMMENT BOX TONIGHT OR MAIL TO:
Caltrans District 4, Office of Environmental Planning South, Attn: Robert Gross/Ed Pang
P.O. Box 23660, Oakland, CA 94623-0660.
Written comments must be received by May 12, 1999.

Comment Sheet

Route 1 Devil's Slide
EA # 112371
Public Hearing
Farralone View School, Montara
Tuesday, April 27, 1999

Name: Marcia Doty Organization: Montara res.- bus.,

Address: 620 Harte St Zip Code 94037

Phone/Fax/E-mail: 650 - 728 - 7462

Please print. Use the back of the sheet if necessary.

I am not sure words to express my gratitude and approval for such a perfect and logical solution to our Devils Slide problem.

Thank You Cal Trans and all of the folks that stayed with it.

PLEASE PLACE THIS IN THE COMMENT BOX TONIGHT OR MAIL TO:
Caltrans District 4, Office of Environmental Planning South, Attn: Robert Gross/Ed Pang
P.O. Box 23660, Oakland, CA 94623-0660.
Written comments must be received by May 12, 1999.

Comment Sheet

Route 1 Devil's Slide
EA # 112371
Public Hearing
Farralone View School, Montara
Tuesday, April 27, 1999

Name: JEFF OLSON Organization:

Address: P.O BOX 370423, MONTARA Zip Code 94037

Phone/Fax/E-mail:

Please print. Use the back of the sheet if necessary.

HISTORICAL QUESTION: WAS THE SOIL THAT WAS REMOVED TO BORE THE CALDECOTT TUNNEL USED TO BUILD TREASURE ISLAND?

PLEASE PLACE THIS IN THE COMMENT BOX TONIGHT OR MAIL TO:
Caltrans District 4, Office of Environmental Planning South, Attn: Robert Gross/Ed Pang
P.O. Box 23660, Oakland, CA 94623-0660.
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Comment Sheet

Route 1 Devil's Slide
EA # 112371
Public Hearing
Farralone View School, Montara
Tuesday, April 27, 1999

Name: Jan McFarland-Brown Organization: Concerned citizen

Address: PO Box 370877 Montara Ca Zip Code 94037

Phone/Fax/E-mail:

Please print. Use the back of the sheet if necessary.

I strongly support option A for the tunnel. The time line seems conservative to me. In light of the slide's history work (construction) should begin as soon as possible —

PLEASE PLACE THIS IN THE COMMENT BOX TONIGHT OR MAIL TO:
Caltrans District 4, Office of Environmental Planning South, Attn: Robert Gross/Ed Pang
P.O. Box 23660, Oakland, CA 94623-0660.
Written comments must be received by May 12, 1999.

Comment Sheet

Route 1 Devil's Slide
EA # 112371
Public Hearing
Farralone View School, Montara
Tuesday, April 27, 1999

Name: Christine Powell Organization:

Address: PO Box 1583, El Granada, CA Zip Code 94018

Phone/Fax/E-mail: (650) 712-0773 (#) email: Bemchrisp@aol.com

Please print. Use the back of the sheet if necessary.

I believe that residents are under the impression that the abandoned Hwy 1 will be a bike & hike trail.

Caltrans should not use the abandoned Hwy 1 as access to properties along Devil's Slide. If private property owners continue in this area, then Caltrans should give them other access.

No public agency will accept this if it needs to be maintained as a road. If it was feasible to maintain it as a road, then we would not need to build the tunnel!

(Thanks for your work to get this to this stage)

PLEASE PLACE THIS IN THE COMMENT BOX TONIGHT OR MAIL TO:
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P.O. Box 23660, Oakland, CA 94623-0660.
Written comments must be received by May 12, 1999.

Comment Sheet

Route 1 Devil's Slide
EA # 112371
Public Hearing
Farralone View School, Montara
Tuesday, April 27, 1999

Name: JOHN HUNT Organization:

Address: P.O BOX 370997 MONTARA CA Zip Code 94037

Phone/Fax/E-mail: 650-728-2565 415-744-2726 (FAX)
john.hunt@FTA.DOT.GOV.

Please print. Use the back of the sheet if necessary.

QUESTIONS FOR CONSIDERATIONS IN PREPARATION OF THE FINAL EIS 1) WILL THE EXISTING STATE ROUTE ONE BE CLOSED DURING CONSTRUCTION 2) HOW LONG WILL CONSTRUCTION LAST 3) HOW WILL THE FLOW OF TRAFFIC BE AFFECTED BY CONSTRUCTION 4) WILL BLASTING AFFECT @ THE EXISTING SR1 ROADWAY @ THE FLOW OF GROUNDWATER ON MONTARA MOUNTAIN 5) HAVE FUNDS BE DESIGNATED FOR MAINTENANCE OF THE EXISTING ROADWAY BY THE COUNTY 6) WHAT WILL BE THE CONSTRUCTION TRAFFIC FLOW EAST MONTARA.

LASTLY DESIGN SHOULD MINIMIZE THE EFFECT ON MONTARA MOUNTAIN SPRINGS AND MEASURES SHOULD BE PROVIDED TO MITIGATE HABITAT PARTICULARLY IN THE SOUTH DISPOSAL AREA.

PLEASE PLACE THIS IN THE COMMENT BOX TONIGHT OR MAIL TO:
Caltrans District 4, Office of Environmental Planning South, Attn: Robert Gross/Ed Pang
P.O. Box 23660, Oakland, CA 94623-0660.
Written comments must be received by May 12, 1999.

Comment Sheet

Route 1 Devil's Slide
EA # 112371
Public Hearing
Farralone View School, Montara
Tuesday, April 27, 1999

Name: DENNIS LEAR Organization: SELF

Address: 467 3RD MONTARA Zip Code 94037

Phone/Fax/E-mail: 728-2921

Please print. Use the back of the sheet if necessary.

PROJECT
WELL THOUGHT OUT
GO FOR IT! WITH THE
BIKE
LANE

PLEASE PLACE THIS IN THE COMMENT BOX TONIGHT OR MAIL TO:
Caltrans District 4, Office of Environmental Planning South, Attn: Robert Gross/Ed Pang
P.O. Box 23660, Oakland, CA 94623-0660.
Written comments must be received by May 12, 1999.

Comment Sheet

Route 1 Devil's Slide
EA # 112371
Public Hearing
Farralone View School, Montara
Tuesday, April 27, 1999

Name: Ric Lohman Organization: MCC

Address: 420 First Ave Hf M Bay CA Zip Code 94019

Phone/Fax/E-mail: 650 726 9607

Please print. Use the back of the sheet if necessary.

Prefer Option A.
Community want 2 lanes not possibly 4 four.
Bike Groups dont want separate lane
(Sorry, Broken thumb)

PLEASE PLACE THIS IN THE COMMENT BOX TONIGHT OR MAIL TO:
Caltrans District 4, Office of Environmental Planning South, Attn: Robert Gross/Ed Pang
P.O. Box 23660, Oakland, CA 94623-0660.
Written comments must be received by May 12, 1999.

Comment Sheet

Route 1 Devil's Slide
EA # 112371
Public Hearing
Farralone View School, Montara
Tuesday, April 27, 1999

Name: Rick Roderick Organization:

Address: Seven Aliso, Pacifica Zip Code 94044-4259

Phone/Fax/E-mail:

Please print. Use the back of the sheet if necessary.

Checking diagrams + talking to Caltrans reps, it appears that in no option is there provision for expansion to two (2) 12'w traffic lanes in a given direction.

Expansion in this area will necessitate two (2) traffic lanes in each direction — more important than bicycle lane.

PLEASE PLACE THIS IN THE COMMENT BOX TONIGHT OR MAIL TO:
Caltrans District 4, Office of Environmental Planning South, Attn: Robert Gross/Ed Pang
P.O. Box 23660, Oakland, CA 94623-0660.
Written comments must be received by May 12, 1999.

Comment Sheet

Route 1 Devil's Slide
EA # 112371
Public Hearing
Farralone View School, Montara
Tuesday, April 27, 1999

Name: GRANT WEISS Organization: _____

Address: PO BOX 370051 MONTARA CA Zip Code 94037

Phone/Fax/E-mail: 6507287028 GRANT_WEISS@hotmail.com

Please print. Use the back of the sheet if necessary.

The supplement appears to be a commendably exhaustive & unbiased look at the tunnel + other alternatives - congratulations! From a safety viewpoint, my choice would be tunnel variation A - I think bicyclists & pedestrians belong outside the tunnel, along the existing alignment.

PLEASE PLACE THIS IN THE COMMENT BOX TONIGHT OR MAIL TO:
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P.O. Box 23660, Oakland, CA 94623-0660.
Written comments must be received by May 12, 1999.

Comment Sheet

Route 1 Devil's Slide
EA # 112371
Public Hearing
Farralone View School, Montara
Tuesday, April 27, 1999

EXHIBIT
2
4/27/99

Name: Andrea Brown Organization:

Address: 408 Farallone Ave Montara Ca Zip Code 94037-1137

Phone/Fax/E-mail: 650 728 1783

Please print. Use the back of the sheet if necessary.

All winter we suffered through delays and numerous accidents on Devil's Slide. The construction done from 9am - 3pm is often when I travel over the slide to go to San Francisco. I had many late appointments. Stop all the repairs endlessly and BUILD THE TUNNEL NOW.

PLEASE PLACE THIS IN THE COMMENT BOX TONIGHT OR MAIL TO:
Caltrans District 4, Office of Environmental Planning South, Attn: Robert Gross/Ed Pang
P.O. Box 23660, Oakland, CA 94623-0660.
Written comments must be received by May 12, 1999.

David Spiselman

Your personal endorsement of tunnel alternative is noted.

Michael Hall

Comments noted.

Marcia Doty

Your gratitude and approval is noted.

Jeff Olson

Based on the timing of the World's Fair in 1939 on Treasure Island, it is possible that Caldecott Tunnel spoils were used for a portion of Treasure Island.

Jan McFarland-Brown

Your strong support for Design Variation A and comment that work should begin as soon as possible is noted.

Christine Powell

Upon completion of the tunnel construction, Caltrans will relinquish the section of existing Highway 1 right-of-way to the County of San Mateo for use as a non-motorized facility. Operations, maintenance, and management of the property and the bicycle/pedestrian trail will then be within the jurisdiction of the County of San Mateo. The County may choose to operate and maintain this facility or arrange for the management or transfer of the facility to an appropriate public recreational agency. Acquisition of access rights or purchase of the land-locked parcels will be considered.

John Hunt

1. Extended closures involving hours or days are not expected. Two-way closures involving shorter durations may be needed to facilitate construction activities such as blasting or access for oversize vehicles or equipment.

2. Construction of the tunnel alternative will require about 3 years.

3. One-way traffic control will be used when work must be performed adjacent to the existing highway. This could include such activities as utility extensions and construction of a haul road separated from the existing highway.

4. If blasting is required near Route 1, traffic will be stopped at a safe distance in both directions. Blasting is not expected to have any effect on Montara Mountain groundwater.

5. There are no state funds designated for the maintenance of the existing roadway by the County of San Mateo.

6. Traffic flowing past Montara should be minimally impacted. It is likely some project workers and material deliveries will use this route, but most construction trips are expected to be to and from north of the project site. Excavated material will be hauled to a disposal site immediately south of the tunnel location along a roadway separated from public traffic.

Dennis Lear

Comment noted.

Ric Lohman

Preference and comment noted.

Rod Roderick

Measure T requires that the tunnel be designed consistent with restricting Route 1 to a two-lane scenic highway using minimum state and federal tunnel standards. Your comment that growth in the area will necessitate two lanes of traffic in each direction and is more important than a bicycle lane is acknowledged.

Grant Weiss

Comments and choice are noted.

Andrea Brown

Comment noted.

The following letters, post cards, and notes expressing support for the tunnel alternative and/or preference for Variation A are noted. No separate responses are necessary.

April 1999

Robert Joss, Chief
OEF, South, Caltrans Dist 4
PO Box 23660
Oakland, CA 94623-0660

Dear Sir:
Thirty years for a solution that the people didn't voted for — rather than whoever has been - or is now in charge of Caltrans. We knows I had high hopes of driving, winding, through the tunnel - but - I am now over 80 and

Anytime is running out —
Please build Design Variation
A as voted for in Measure

Do it now —

Sincerely —
Evelyn C Lundstrom

EVELYN C. LUNDSTROM
1656 EDMONTON AVE.
SUNNYVALE, CA 94087-5201

4-21-99

SOUTHWEST VIRGINIA SCENIC RAILROAD

Operates on Ex-Southern Railway's Track between Hiltons and Mendota, Virginia. A portion of this railroad is adjacent to the homesite of The A.P. Carter Family Of Country Music Fame.

Mary Jayne's Railroad Specialties, Inc.

Post Card

ROBERT GROSS
ENVIRO PLAN SOUTH
CALTRANS DIST 4
PO BOX 23660
OAKLAND CA
94623-0660

Please build the
tunnel for Design
Variation A as
voted by the people
in Measure A.
Thank you and go
ahead, Johnny Horton,
1302 Rosita, Pacific

Susan Shankle
1624 Toyon Ct.
San Mateo, CA 94403

April 21, 1999

Robert Gross, Chief
Office of Environmental Planning, South
CalTrans District 4
P. O. Box 23660
Oakland, CA 94623-0660

Dear Mr. Gross:

I'm happy to hear that CalTrans has, at last, identified the **Tunnel** as the preferred alternative for fixing Devil's Slide on Highway 1 in San Mateo County.

After years of work towards this goal on the part of many concerned citizens and taxpayers, I encourage you to continue your efforts and begin plans for tunnel construction as soon as possible.

In further support of Measure T, please focus your efforts on Design Variation A!

Thank you.

Sincerely,

Susan Shankle

Citizen, Voter and Taxpayer

Support that tunnel! It's obviously THE solution. The peninsula area has been my home for 62 years, during which time the coast highway has been closed several times. Fix it forever!!!

Say hello to my daughter, Mara Melandry.

Ruth O'Shea

Ruth O. O'Shea
816A Fremont St.
Menlo Park, CA 94025

April 21, 199

To whom it may concern;
at Caltrans,

My husband + I strongly urge you to support the Tunnel project for Hwy 1's Devil's Slide Area. We hope you will vote for Design Variation A, the tunn configuration as outlined i. Measure T.

Sincerely,

Ronald D. Emerson

Rt 2 · Box 312 · LaHonda, CA 94

LINDSAY WASSERMAN

4/22/99

Caltrans
P.O. Box 23660
Oakland, Ca 94623-0660
Re: Devil's Slide Tunnel
Robert Grace:

I would like to indicate my support for Design Variation A, the tunnel configuration outlined in Measure T. I have been behind this alignment for the last eight years and its time to move ahead.

Diane Chapman
P.O. Box 450
Pescadero, Ca 94060

Joanne E. Bruggemann
3 Lido Circle
Redwood City, CA 94065

April 22, 1999

Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P. O. Box 23660
Oakland CA 94623-0660

Dear Mr. Gross:

I am writing this letter of support for Design Variation A for Highway 1 at Devil's Slide, as voted on with Measure T in the election of 1996.

I feel that further delays in resolving the Devil's Slide problem will be extremely detrimental to Coast Side residents and all of San Mateo County. Getting the tunnel built should be a priority of maximum importance.

Sincerely,

Joanne E. Bruggemann

Frank N. Leone
30 San Jose Ave.
Pacifica, CA 94044
650-355-4882

April 22, 1999

Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA 94623-0660

To Whom it concerns,

re: tunnel project

I support the tunnel project, specifically design variation A, the tunnel configuration outlined in Measure T, which was supported by 74% of the voters of San Mateo County.

I hope you and your staff make every effort to break ground for the tunnel as soon as possible, as it this project is sorely needed and long overdue.

April 22, 1999

Robert Gross, Chief
Office of Environmental Planning, South
CalTrans District 4
P.O. Box 23660
Oakland, CA 94623-0660

Dear Mr. Gross:

I am writing in support of the draft SEIR for the Devil's Slide Tunnel. I am delighted the tunnel will become a reality, the sooner the better.

Please select Design Variation A as the preferred tunnel configuration. I voted for Measure T in part based on this design.

Sincerely,

Merry Ann Moore
P.O. Box 371179
Montara, CA 94037

4/23/99

Robert Cross, Chief
Office of Environmental Planning, South
Caltrans District 4

Dear Mr. Cross,

I strongly support the Devils Slide Tunnel Project to correct Highway #1's dangerous course.

I prefer Design Variation A, which is clearly the best.

Sincerely,

David E. Dorin

April 23, 1999

To: Robert Gross, Chief
Office of Environmental Planning,
South

In regard to Devil's Slide Tunnel
I support Design Variation A,
the tunnel configuration
outlined in Measure T.

Marion R. Colton
908 Southgate Ave
Daly City, CA 94015

April 23, 1999

Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P O Box 23660
Oakland CA 94623-0660

Dear Mr. Gross,

I am writing regarding the tunnel at Devil's Slide in Montara.

I am delighted the tunnel is going ahead, at long last, and I hope Design Variation A (identified in Measure T) prevails.

Sincerely,

Cynthia Stern

P O Box 371363
Montara CA 94037

The Growing Business

April 24, 1999

Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
PO Box 23660
Oakland, Ca. 94623

Dear Mr Gross,

As a local resident and business owner, I am writing to let you know that I support the building of the tunnel on Highway 1 at Devil's Slide. In particular I support the Design Variation A, the tunnel configuration outlined in Measure T.

Clearly, the existing roadway is not satisfactory. The tunnel is the only environmentally sensitive alternative.

Sincerely,

Robert Brodey

(650) 738-9454

581 Brighton Road
Pacifica, CA 94044
License # 701263

4/24/99

Dear Mr. Gross:

Re: Devil Slide Tunnel

My preference – Design Variation A
as outlined in Measure T

Thank you for your interest & help.
We surely need it

Eleanor Anderson
750 Oddstad #202
Pacifica, CA. 94044

P.O. Box 928
Pacifica, CA. 94044

Genny Smith **Books** 23100 Via Esplendor, V-44 Cupertino, CA 95014 650-964-4071

April 24, 1999

Dear Mr. Gros,

I'm delighted to learn that THE TUNNEL is the preferred alternative for Hwy 1 at Devil's Slide.

Devil's Slide was going to continue to slide, with closures & costly repairs year after year. I strongly support The Tunnel, especially design Variation A.

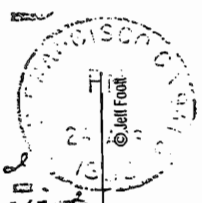
Sincerely,

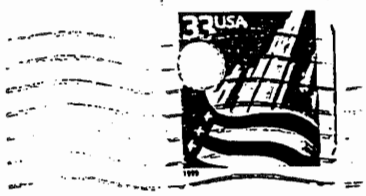
Genny Smith
Ed & Publisher

Summer:
P.O. Box 1060 Mammoth Lakes, CA 93546 760-934-618

B Society

Donald D Blackmarr
184 San Andreas Dr
'o Park, CA 94025-2721





Dear Mr. Gross,

My husband and I support the tunnel project. Our preference is for design Variation 4, the tunnel configuration outlined in Measure J.

Sincerely,

Lois F. Blackmarr
Donald D. Blackmarr

Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA 94623-0660

California sea otter in Monterey Bay

A California sea otter is one of the thousands of fascinating species of wildlife you'll find in Monterey Bay.

To find out how you can help save America's wildlife by becoming a member, call the **National Audubon Society** at 1-800-274-4201.

4/24/99

From the desk of...MARY FOUGHT

To Robert Gross

Just a note to urge your continued support for the tunnel project on Highway 1 at "Devils Slide."

I voted for Measure T, and count on you to stick with Design Variation A as outlined in the Measure.

Thanks,

Sincerely,

Mary C. Fought
Star Route Box 60
Woodside, CA
94062

MRS. DAN THROOP SMITH
501 PORTOLA ROAD BOX 8140, PORTOLA VALLEY, CA 94028

Robert Cross, Chief
Office of Environmental planning, South
Caltrans District 4
P.O Box 23660
Oakland, ca 94623-0660

Dear Mr. Cross.

I have followed with much interest and financial support the Tunnel around Devil's Slide. From my knowledge I think that Design/Variation A, the tunnel configuration outlined in Measure T is certainly the way to go.

Sincerely
Martha V. Smith

Denise Gambucci
P. O. Box 370647
Montara, CA 94037

April 24, 1999

Mr. Robert Gross, Chief
Office of Environmental Planning - South
Caltrans: District 4
P. O. Box 23660
Oakland, CA 94623-0660

Dear Mr. Gross,

Thank you very much for your involvement in the Devil's Slide Tunnel project.

Regarding the tunnel's design, my preference is for Design Variation A, the configuration described in Measure T.

Sincerely,

Denise Gambucci

97 Snowden Ave
Atherton CA 94027
April 24, 1999

Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
PO Box 23660
Oakland, CA 94623-0660

Dear Mr. Gross,

I am writing for myself and my husband, Dr. David A. Goodwin, to voice our support for the tunnel on Highway 1 at Devil's Slide.

We prefer Design Variation A, the tunnel configuration outlined in Measure T.

We feel that protecting our land and the beauty of nature around us is one of the most important challenges facing us. It benefits everyone: young and old, rich and poor, as well as future generations. Thank you,

Sandra Goodwin

4-24-99

El Granada, CA.

Dear Mr. Robert Gross,

My husband and I totally support the tunnel project, and specifically the Design Variation A, the tunnel configuration outlined in Measure T.

Thank you for your attention to this matter.

Sincerely,

Mr & Mrs. Harley Wark

MARY DAVEY
12645 LA CRESTA DRIVE
LOS ALTOS HILLS, CALIFORNIA 94022

April 25, 1999

Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4

I understand That an acceptable Draft SEIS has arrived and tunnel construction may begin in 2001.

Great news! Thank you.

I urge you to follow Design Variation A, The tunnel configuration put forth in Measure T supported by 74% of The 1996 voters on The issue.

Sincerely,

Mary Davey
Director, Ward 2
Midpeninsula Regional Open Space
District

April 25, 1999

Dear Chief Ross,

I am writing to you to say that I am favor of Design Variation A, the tunnel configuration outlined in Measure T.

Thank you for your efforts to fulfill the Design Variation.

Sincerely,

Marylin J Dodd

Billie C. Levy
301 Amador Ave.
San Bruno, CA 94066-2505

I support the Caltrans Tunnel for
H-1 - Design Variation A
outlined on Measure T

747A Loma Verde Ave.
Palo Alto, CA 94303

April 25, 1999

Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA 94623-0660

Ref.: Devil's Slide Tunnel Project

Dear Mr. Gross,

We are writing this letter in support of the Devil's Slide Tunnel Project. We would like to specifically support **Design Variation A**. This is the configuration outlined in Measure T. We feel this is the option that satisfies the widest group of tunnel proponents, and will at long last put the Devil's slide concerns behind us.

Thank you for your concern and attention to this matter.

Sincerely,

Mr. & Mrs. Richard C. Ball

SAVE THE GRAY WHALE NURSERY!

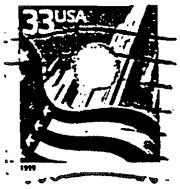
Diana Morgan
275 El Camino Real
Millbrae, CA 94030

an Ignacio
Mexico's
op
building

I AM WRITING IN ..... TO
SUPPORT OF DESIGN
VARIATION A, THE
TUNNEL CONFIGURATION
OUTLINED IN MEASURE
T. FOR DEVIL'S SLIDE
AREA - HWY 1 -
Diana Morgan

Photo: Frank Balthis

NATURAL RESOURCES DEFENSE COUNCIL
40 W. 20th Street, New York, NY 10011
http://www.nrdc.org



ROBERT GROSS, Chief
Office of ENVIRONMENTAL
PLANNING, SOUTH
CALTRANS DISTRICT 4
P.O. BOX 23660
OAKLAND, CA.
94623

Recycled paper

2753 Yosemite Dr.
Belmont, CA 94002-3019
April 25, 1999

Dear Robert Gross,

I cannot tell you how pleased I am that Caltrans has officially identified the tunnel as the preferred alternative for Higway 1 at Delvil's Slide.

After many years it finally looks like this is going to happen.

The tunnel will certainly be a great addition to our coast and should solve a great many problems.

I would like to urge you to select Design Variation A, the tunnel configuration outlined in Measure T.

I will very much aprreciate your help in this matter.

Sincerely,

Shiela Cockshott

Shiela Cockshott

JSM
JOAN STIFF
120 HILLSIDE DRIVE
WOODSIDE, CALIFORNIA 94062-3521

April 26, 1999

Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, Ca. 94623-0660

Dear Sir,

I am writing in regard to Measure T. I wish you to know that I as a resident of San Mateo County prefer the configuration as outlined in Measure T for the design of the Devil's slide tunnel. Yes for Design Variation A.

Thank you for your consideration. I appreciate the long hard work you do and the patience you have shown in developing this solution to a difficult problem.

Sincerely,

Joan Stiff

April 26, 1999

To: Robert Gross

This card is to urge you to start on the tunnels on the Coast side of San Mateo County. It seems the best design is variation A. This was approved by the voters of this County.

Do all you can. Thanks.

Sincerely,

Malcolm G. Mitchell

Malcolm G. Mitchell
164 Corte Madera Rd.
Portola Valley, CA 94028-7815

80 2 71. Delaware
#307
San Mateo, CA 94401
April 27, 1999

Mr. Robert Gross, Chief
Office of Environmental
Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA 94623

Dear Mr. Gross:

We were delighted to learn that Caltrans has recently given official recognition of the tunnel as the preferred alternative for the Devil's Slide problem on Highway 1, and wish to say that Design Variation A should be the design selected to bring an end to the controversy that has stalled this project for so long!!

Our coastal hiway is one of the world's most beautiful drives, and attracts large numbers of tourists to this area. To enhance the use of this hiway with a safe tunnel through this unstable geologic site is a wise decision.

Thank you for your work in behalf of the successful decision reached by Caltrans.

Sincerely yours,

Walter & Gretchen Smiley

275 Allen Road Woodside, California 94062-4401

(650) 851-3173 FAX: (650) 851-5906

e-mail: wurrsimp@msn.com

Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P. O. Box 23660
Oakland, CA 94623-0660

27 April 1999

Dear Mr. Gross,

We are writing to express our pleasure that, through the Draft Supplemental Environmental Impact Statement, Caltrans has officially identified a tunnel as the preferred alternative for Highway 1 at Devil's Slide.

We are very much in favor of Design Variation A which was the tunnel configuration outlined in Measure T.

At last this area will be made both safe and accessible!

Sincerely,

John Wurr

Elizabeth Léonie Simpson

ROBERT GROSS, CHIEF, 4-27-99

I JUST WANT TO LET YOU KNOW THAT WE SUPPORT THE TUNNEL PROJECT + WOULD PREFER THE DESIGN VARIATION A - WHICH IS THE TUNNEL CONFIGURATION OUTLINED IN MEASURE T.

I AND MY NEIGHBORS ARE HAPPY TO KNOW THAT YOU + YOUR STAFF ARE WORKING ON GETTING THE TUNNEL BUILT + THAT THERE IS INDEED A LIGHT AT THE END OF THIS AFTER 30 YEARS IN THE WORKS.

THANK YOU FOR YOUR CONTINUAL EFFORT TO PROVIDE A SAFE ACCESS ON HIGHWAY ONE.

THANK YOU,
Valerie Hoffmann
Jeff Sanding

4/28/99

Dear Sirs -

I am delighted that you have identified the tunnel for Devil's Slide as the preferred alternative — I would like to add my vote to those others who vote for Design Variation A —

Thanking you for taking this into account.

Very Truly Yours

Deanna Morris

4/28/99

We want you to know that we prefer Design Variation A. the tunnel configuration outlined in Measure T.

We were unable to attend the Meeting held April 27th in Montana -

Mr. & Mrs. J. C. Royce
#2 Hayfields Rd.
Portola Valley - Ca - 94028

4-28-59

Chief
Robert Gross -:

Just a note in favor of Municipal aviation "H."
outlined in Measure T - Concerning the
"Tunnel" for the Devils Slide Area.
Very necessary & long overdue —

Sincerely

[signature]

[redacted]
Portola Valley - Ca - 94025

April 29, 1999

Mr. Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P. O. Box 23660
Oakland, CA 94623-0660

Re: Measure "T"/Tunnel Configuration/Design Variation "A" . . . . . .

Dear Mr. Gross:

We are writing to you in support of the tunnel project outlined above.

We have lived in Montara, CA for 21 years, and for all of those years and many more for the residents of the coast, we have struggled with the unreliable road across Devil's Slide on Hwy One. The NIGHTMARE closure of Hwy One at Devil's Slide for a period of approximately six months several years ago was really a wake-up call as to how critical this situation is. This was especially true for those of us who live in Montara. Imagine having your half hour commute to work every morning turn in to a struggling three to four hour commute EACH WAY every day. With access to the coast so severly restricted, many business's that support our communities and many families that depend on these business's for their livelihood were seriously and adversely affected. Many business's, to this current day, are still trying to recover from the effects of this long closure, and many weren't so lucky . . . They had to close their doors.

In view of how critical this situation is, we implore you to act as quickly as possible to remedy this problem by starting construction on the Tunnel Configuration/Design Variation A, which was approved by voters by an overwhelming majority. We have been waiting for a solution to this problem for thirty to fifty years . . . . Isn't that long enough????? Please think of the safety and well-being of the residents of the coast and their families, and handle the start-up of construction on the tunnel in an expeditious manner.

Sincerely,

Bruce & Janice Knechtel

Bruce and Janice Knechtel
P. O. Box 370719
Montara, CA 94037-0719
650/728-3403/Fax

APRIL 30, 1999

DEAR MR. GROSS,

I JUST WANTED TO WRITE THIS NOTE TO YOU TO LET YOU KNOW THAT I AM IN FAVOR OF DESIGN VARIATION A FOR THE TUNNEL OUTLINED IN MEASURE "T".

I AM VERY PLEASED THAT THIS DREAM IS NOW GOING TO BECOME A REALITY!

AS A RESIDENT OF PACIFICA FOR 14 YEARS, I AM VERY CONCERNED ABOUT PRESERVING THE BEAUTY OF OUR COAST.

THANK YOU VERY MUCH,

Barbara Rose

Robert Gross, Chief
Caltrans District 4

San Mateo, CA
May 01, 1999

Design Variation "A", the Tunnel configuration cut lined in Measure "T".

I am in favor of the Tunnel. A road will cut right thru the "Montara Mountains Nature Preserve and causes a great disturbance to a quiet area. The fog and wind will cause problems, whereas a tunnel does not interfere with the landscape and is much safer as out of the weather.

Sincerely,

Werner C. Rodiger

Mr. Werner Rodiger
1501 Dale Ave.
San Mateo, CA 94401

May 1st 9

MRS. JAMES GERSTLEY
111 ALMENDRAL AVENUE, ATHERTON, CALIFORNIA 94027

Robert Gross, Chief,
Office of Environmental Planning Sou
Caltrans - District 4
P.O. Box 23660, Oakland, Calif 9462

Dear Mr. Gross

I am writing about the Hill
Slide Tunnel. I am in favor of
Design Variation A, as outlined i
Measure T.

Sincerely -
E. J. Gerstley

26 Judson Place
Pacifica, CA 94044
May 2, 1999

Robert Gross,
Chief Office of Environmental Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA 94623-0660

Dear Mr. Gross:

I am writing to you as a concerned member of the public who will be affected by whatever solution is ever finally determined for Devil's Slide. It will be near where I live. Having kept reasonably informed since the Prop T campaign, I want to ask that you encourage Caltrans to adopt the tunnel design we fought for in 1996—I think it has been designated "variation A".

We appreciate your efforts to bring the solution to this problem into reality.

Yours truly,

Tim Beatty

Allen L. Brown
P.O. Box 370271
Montara, CA 94037

May 2, 1999

Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA 94623-0660

Dear Mr. Gross:

I am writing in regards to the Draft Supplemental EIS for the Devil's Slide Tunnel. As a resident of Montara, a frequent commuter on Highway 1, an avid bicyclist, and a veteran hiker, I wish to express my strong support for Design Variation A that's outlined in this report.

Due to health and safety concerns, I believe that biking and pedestrian usage should not be encouraged within the proposed tunnel. I understand that discussions are currently underway with San Mateo County regarding future management of the existing Highway 1 right-of-way. With less danger of accidents, and less exposure to carbon monoxide and other pollutants, I support maintaining bicycling and hiking paths along this right-of-way following construction of the tunnel.

Thank you for the opportunity to submit my comments in this regard.

Sincerely,

Allen L. Brown

May 3, 1991

To: Mr Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4

Re: Devil's Slide Tunnel Project
Design Variation A, the Tunnel
Configuration outlined in Measure T

Please carry forward to a positive implementation the above-referenced.

It will be a great enhancement for this beautiful shoreline area & for its inhabitants & its many visitors to have this useful tunnel built. We have waited so long for it.

Thank you.

Ellen Drunk & Joseph Mayer
San Francisco, CA

Maeva Maria Neale
10796 Cabrillo Hwy., Box 727
Pescadero, California 94060

May 3, 1999

Dear Mr. Gross

My husband & I have long been supporters of (& contributors to) the tunnel alternative at Devil's Slide. I am writing at this time to request your support for design variation A.

Thank you!

Maeva Neale

Jack R. Neale M.D.

2060 Sharon Road, Menlo Park, CA 94025
3 May 1999

Mr. Robert Gross
Office of Environmental Planning
CALTRANS - District 4
P.O. Box 23660
Oskland, California 94623-0660

Dear Mr. Gross:

We were out of the country for several months early this year, and were pleased, on our return, to read the great news about CALTRANS' Environmental Impact Report favoring the Devils Slide Tunnel alternative connecting the San Mateo County coast with San Francisco.

As regular hikers up in the Montara Mountain area, and as frequent visitors to the County beaches, we believe the tunnel affords the best approach to improving access to that area while disrupting the natural environment as little as possible as we enter the 21st century.

The plan set forth in Proposition T which we supported (Design Variable A) should now be the way we hope the tunnel route will proceed toward reality.

Thank you for your leadership at CALTRANS in helping to move this project toward a completion that will be satisfying to <u>all</u>.

Yours truly,

Gil and Nancy Workman

May 4, 1999

Dear Mr. Gross -

We are writing to express our strong support for the Devil's Slide tunnel on Highway 1 and also to let you know that we prefer Design Variation A, the tunnel configuration outlined in Measure T.

Thank you very much.

Sincerely,

Dr. and Mrs. Irving Witt
889 Parrott Drive
San Mateo, Ca. 94402

Dear Mr Gross,

The passage of Measure T has finally brought the Devil's Slide project closer to a conclusion.

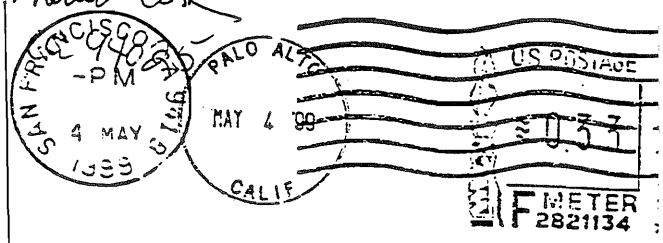
I hope that the final decision will be in favor of Design Variation A.

Thank you,

Barbara Jean Richards
53 Atherton Ave
Atherton CA 94027

HELP SAVE MONO LAKE! 330 Central Ave Menlo Park

Limestone tufa towers grace the shores of Mono Lake, an ancient inland sea east of Yosemite National Park. Tomorrow will there only be alkali dust? Stream diversions are needlessly destroying America's most extraordinary lake and imperiling millions of birds. For free information on how we can save Mono Lake, please contact: The Mono Lake Committee, P.O. Box 29, Lee Vining, CA 93541; [619] 647-6595



Dear Mr. Gross.

Please give careful consideration to the bicycle path for the Devil's slide Tunnel. Design Variation A is a superior design and are favored by every bicyclist I know. Thank You for allowing this design

Robert Gross
Environmental Planning
Caltrans District 4
PO Box 23660
Oakland CA 94623-

Proceeds from the sale of this card benefit the Save Mono Lake campaign.
Photographer: Craig Aurness, West Light

Brielle Johnck

KIMBALL CONCEPTS LTD

Pacifica
May 5, 1999

Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P.O.Box 23660
Oakland, CA 94623-0660

Dear Sir,

We would like to express our **support for the Devil's Slide tunnel project. Our preference is Design Variation A, the tunnel configuration outlined in Measure T.**

It is time this project should start.

Sincerely,

Ritva LeMieux
Steve LeMieux
Marc LeMieux

107 Esplanade,#87
Pacifica, CA 94044

Christina A. Holloway
730 Santa Maria Avenue
Stanford, California 94305

Robert Gross, Chief
Office of Environmental Planning, South
Cal Trans District 4
P.O. Box 23660
Oakland, CA 94623-0660

Dear Mr. Gross,

I am writing in support of the Devil's Slide Tunnel project. I specifically favor Design Variation A for the tunnel configuration as outlined in Measure T.

Thank you for your consideration and attention to this matter.

Sincerely,
Christina Holloway

I'm writing in support of the Highway 1 tunnel project, and in particular for Design Variation A.

(ltr) K. Christie Vogel

K. CHRISTIE VOGEL
P. O. BOX 67
EL GRANADA, CA 94018

MR. & MRS. PUTNEY WESTERFIELD · 10 GREEN VIEW LANE · HILLSBOROUGH, CA 94010

We are thoroughly in support of the Tunnel as a solution to the Highway #1, Devil's Slide problem. Design variation A, as outlined in Measure T is the best plan.

Thank you. Anne & Putney Westerfield

LAURENCE DAWSON

13875 MIR MIROU DRIVE
LOS ALTOS HILLS, CALIFORNIA 94022-2403

(650) 948-3157

10 May 1999 —

Dear Mr. Gross —

May I express a preference for Design Variation A as you work toward the Highway 1 Tunnel around Devils Slide.

Sincerely

L Dawson

Maureen Brooks
1422 Bellevue Avenue, #302 **Burlingame, CA 94010**

May 11, 1999

Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA 94623-0660

Subject: **Draft Supplement to the Environmental Impact Statement for the Devil's Slide Tunnel Project**

Dear Mr. Gross,

I would like to comment on the Draft Supplement to the Environmental Impact Statement for the Devil's Slide Tunnel Project. I am a San Mateo County resident, an avid cyclist, a public member of the C/CAG Bicycle and Pedestrian Advisory Committee and a member of Peninsula Velo Cycling Team. I believe that of the two design variations for the tunnel bores, Design Variation A, with a 30 foot wide bore in each direction with facilities for bicyclists and pedestrians outside of the tunnel is the better alternative.

This design is more appropriate in size, is less expensive, and allows bicyclists the option of a route along the existing road right-of-way which will be closed to cars after the tunnel is constructed, or allow access in the traffic lane within the tunnel itself.

It is also important that the proposed bike facility on the existing road right-of-way be maintained so that it continues to be a safe alternative route for bicyclists. I understand that San Mateo County has agreed to maintain this bike trail.

I believe that Variation A will best serve both car and bicycle traffic along this stretch of the coast. Thank you for the opportunity to comment on this important project.

Sincerely,

Maureen Brooks

Maureen Brooks

160 alta mesa Rd., Woodside, CA., 94062

May 11, 1999

Robert Gross, Chief
Environmental Planning South
Caltrans District 4

re: Adoption of Design Variation A, the tunnel configuration outlined in Measure T

Dear Chief Gross,

It is very exciting to learn that after 30 years Caltrans has delivered an acceptable Draft SEIS and funding for the tunnel looks more secure than ever!

We support you in your effort to utilize Design Variation A as the final decision.

Thank you,
Helen Sweyer

Please be notified that our Preference for the Devil's Slide Tunnel configuration is Design Variation A. as outlined in Measure T which was strongly favored by the San Mateo County voters.

Sincerely,
Marian C. Fraser
Rodney C. Fraser

PETA
Mr. Rodney Fraser
Mrs. Marian Fraser
117 Pablo Ct.
Half Moon Bay CA 94019

5/12/99

Dear Mr. Gross,

I would like to express my gratitude for the excellent public meeting Cal Trans presented in Montara. I was really impressed ~~by~~ the extra effort in informing us on the status of the Tunnel. Cal Trans personnel were gracious, friendly, and informative.

Design variation A would be my choice — my preference would be to have the bicycle lanes outside the tunnels. The best place for pedestrians and bicyclists would be on the old alignment.

Thanks again for the great work youve done.

Sincerely,

Jeff Olson

P.O. Box 370483
MONTARA, CA 94037

John Langbein
152 Oakfield
Redwood City, CA 94061
May 12, 1999

Robert Gross, Chief
Office of Environmental Planning, South
Caltrans District 4
P.O. Box 23660
Oakland, CA 94623-0660

RE: Devils Slide Tunnel

I am expressing my support for Alternative A for the Devils Slide tunnel. As I understand, it will consist of two, 30 foot bores with adequate shoulder width to accommodate bicycle travel should a cyclist chose to ride through the tunnel. In addition, Alternative A provides additional bicycle facilities outside the tunnel for those cyclists who either don't want to ride through the tunnel and/or want a scenic alternative. However, it is important that cyclists be given the opportunity to use the tunnel since a variety of factors could make the scenic alternative unavailable. These factors include damage due to landslides and/or the poor maintenance that are provided for Class I bikeways.

In addition, because of the grades (2% and 7%), adequate ventilation to accommodate bicyclist in the tunnel is required.

Although I am writing this on my own behalf, I am currently the President of the Western Wheelers Bicycle club with a 750 person membership in both San Mateo and Santa Clara Counties. I'm sure that many of the members of Westerner Wheelers would chose Alternative A.

Thank you,

John Langbein

Robert Gross

Please keep to the approved Plan – the narrower tunnel & maintained bike/hike paths outside the tunnel. Since the Co has agreed to maintain the outside the tunnel, the integrity of the Caldecott can & will be retained.

I prefer design variation "A"

Sincerely,

Joan Fernandez

Box 37099, Montara, CA 94037

Dear Mr. Gross,

Completion of the tunnel at Devil's Slide is essential for the entire Bay Area. I support Design Variation A to provide hiking and biking outside of the tunnel.

Thank you,

Les Silva
225 Downey St #1
SF CA 94117

Dear Friends:

Design Variation
#A is far superior
to #B.

Cynthia Koept

Cynthia Koept
P.O. Box 236
El Granada, CA
94018

I think ~~B~~ Variation A
is better and safer comparted
to b. I would vote for a if I
was of age

Oliver Hi & Allen Lillie

Robert—

We on the coast are strongly in favor of variation A. Being a resident this is critical.

Thanks.

Allison Li

8 yrs in HMB

Dear Mr. Sears,

I support the idea of walking or riding my bike on the existing road and have cars use the tunnel.

Thank you

Dorothy Baughman

Please use design A as it is the best possible solution.

Sally Gordon
664 Myrtle St
Half Moon Bay
CA 94019

To whom it may concern,

We have looked at the two design variations. As a cyclist we would not ride through a tunnel! We would however continue to enjoy the California coastline on ~~bike~~ bicycle if we had an open road.

Ben and Nadia Rodriguez
San Jose, CA

5/2/99

Robert Gross, Chief

I believe that the Proposed Tunnel Design Variation A is the best plan. Allowing people to hike & bike on the existing trails outside the tunnel T.4.

SUSAN CRESTA Box 1796, EL GRANADA 94018

Please go with Design Variation A TO allow Dikes ~~on~~ outside the Tunnel

I am a registered voter ~~for~~ in San Mateo County.

Mary Oldham
POB 370864
Montara Ca
94037

Dear Cal Trans,

I support the Tunnel Project and prefer design Variation A. As a hiker, I would prefer hiking outside of the tunnel.

Sincerely,

Jackie Brookman
P.O. Box 3164
Moss Beach, CA 94038

Cal Trans –

I am writing in support of design variant A over B. Please move forward on this project ASAP. It has been too long & too dangerous as it is

A. Etheridge
P.O. 370392
Montara, CA 94037

Re: Tunnel Project
Highway 1
Montara, CA.

Please don't delay
advancing this project!
We live in Montara, and
need safe transportation

Mark Hedrick
PO 370848
Montara CA 94037

To Caltrans,

I recommend the
Design (A) for the
more narrow tunnel.
The tunnel will be
a wonderful access to
the coastside. The old
right of way on the cliffs
is great for walking
or biking.

Neal Wehtje
515 Spindrift
HMB Ca 94019

I Support design A for the Avila Slide tunnel

Joseph Mona
Morro Beach

Sp
Tr

We as residents who commute Hwy One every day Support Variation A

Kristann & Zachary Mann

I am writing to express my support for Design Variation A on the Proposed Tunnel for Devils Slide. Please understand this was what we the people of the Coastside wanted when Measure T was passed. Please do not further delay this process. People are being hurt by your inaction

Respectfully

PO Box 370036
Montara CA 94037 Eve J. Emery

Dear Sir —

I am in favor of Design Variation A for the Devils Slide, San Mateo, Tunnel —

Please consider this variation carefully — It is less expensive and easier to maintain —

Thank you for your help in this matter —

Walter McCoggenhall
Montara, CA

Dear Mr. Gross -

There is no compelling reason for a wide tunnel - we want a 2-lane road maintained for the future with bicycle lanes & pedestrians outside the tunnel.

I strongly support Design Variation A which will provide an adequate roadway for our community

Thank you

Suzanne Stephanik
PO Box 371018
Montara, CA 94037

IT'S OUR TUNNEL

WE Support

DESIGN VARIATION

A OF THE TUNNEL

PROJECT.

JIM REED
NANCY CAPLAN
P.O. BOX 370230
MONTARA CA 94037

Dear Ms Cross -

I wish to express my support for completion of the tunnel in Variation A. This version will provide a superior design for cyclists and help control growth on the coastside.

Scott Dan.
Moss Beach resident

RE: EIR - DEVILS SLIDE
Public Comment -

There are only 2 choices
Dewatering or
design Variation A.

All others are growth inducing.

Kathryn Slater-Carter
PO 370321
Montara, CA
94037

Dear Mr. Gross,

We are definitely in favor of Design Variation A for the obvious reason of accomodating Pedestrians and Bicyclists. Please do everything you can to impliment the "Better" plan.

Thank you for your time.

Sincerely,

Richard Schuppek &
Angelique Schuppek
927 Fassler Ave.
Pacifica, CA 94044

(650) 359 9597

I favor Design Variation A.

Thanks

Ben Nichols

P.O Box 370761
Montara Ca
94037

Mr Gross —

The EIS supplement does not mention that the south portal of the proposed tunnel will destroy the little seasonal waterfall adjacent to Highway 1. Most of the Coastsiders I have spoken to are not aware that this would happen. Is there any chance that the alignment could be shifted a couple of degrees north, to avoid damage to this little bit of grace on our morning commute?

Theresa M Keyes
Theresa M Keyes
PO Box 370997
Montara CA 94037

Dear Chief Gross,

As a bicyclist,

Please support Proposed Tunnel Variation A for Devil's Slide Area -- a separate safe Route for bicyclists + Pedestrians.

It is important for bicyclists to have safe passage separate for cars.

Sincerely, David Levington

DAVID LEVINGSTON, SF COUNTY

DEAR CALTRANS

As a resident of the coastside, I have a preference for Design Variation A and would like for variation B to be officially deleted from the EIS/EIR document. Since the county has already taken responsibility for the existing alignment as a bike/pedestrian pathway - there is no need for Design Var B.

Thank you for your consideration,

Beverly Gauntt

POB 527 Montara Calif 94037

Having heard of the 2 design variations, I support Variation A. Bicycles & pedestrians should stay outside in the fresh air!

Nita Gauntt

401 6th St.

Montara, CA 94037

5-2-99

To Caltrans District 4

I support Design Variation [A] for the Tunnel to be built from Pacifica to Montara.

Marilyn Ann Townsend
175 Fourth Street
P.O Box 370886
Montara CA 94037

Please use Design Variation A for the Devil's Slide Tunnel

Thank you!

Julie & Christie Fitzgerald
267 Arroyo Dr
Pacifica, CA 94044

Design Variation A

We want Design
Variation ~~#~~ A

Thankyou
Debby + Rick Briscoe
P.O. Box 370699
Montara, Ca.
94037

To Office of Environmental planning

As a Montara resident & hiker
I would prefer design A. I
do want to lose the opportunity
to enjoy the scenic trail, would
prefer not to walk ~~bike~~ or
bike in a tunnel. As a tax-payer
a narrow tunnel sounds ~~less~~
expensive

Sincerely
Elizabeth McLaughlin
PO Box 370302
Montara Ca
94037

Build Design
Variation - A

Al Collins
2455 Eaton San Carlos CA
94070

Mr Ghosts)

We support
Design Variation A!
pedestrians + bikes
outside of tunnel!
Lets get going!!

Phil Vandervort
&
Heather Smith

Dear Mr Gross,

Variation A would be far better both economically + safty wise. Variation A keeps pedestrians + bicyclists in a seperate area from vehicle traffice. Variation A also suits the needs OF the area without costing a huge fortune!

Thank you

Were Alle in FAVOR of

Building The Tunnel. (DESIGN A).

Dear Mr. Gross.

I am writing to you regarding the proposed tunnel at Devil's Slide on Highway 1.

I support Design Variation A because it is safer & more practical to keep bicyclists on the outside of the tunnel and also because the bike lanes will be maintained by the County of San Mateo.

Please support Design Variation A!

Sincerely, Jacquelyn Galloway
P.O. Box 45
Moss Beach, CA 94038

To whom it may concern:

I ~~stan~~ strongly support Design Variation A for the tunnel because measure T specifies hiking and pedestrian facilities outside the tunnel.

Sincerely
Leah Champion
Montara, Ca

Please support tunnel
Hwy 1, design A —
I don't really want
to hike through
Carbon monoxide.

Go Tunnel —
we're all waiting
we're all watching
for progress

Laura Lucero
~~PO Box~~ 584
Moss Beach CA
94038

Please go with
design variation A

Thanks!

M. De May
P.O. Box 281
Montara, CA 94037

I support the Tunnel
and design Variation A.

Bob Frediani
P.O. BOX 523
MONTARA Calif. 94037

Dear Mr. Gross,

I am strongly in favor of Design Variation A due to the lower cost and the fact that there are other viable alternatives for a bike path over Montara Mountain. Please support Design Variation A and push forward with the tunnel design. We need to get the tunnel built without further delay!

Sincerely,
John J. Schwanke
351 Cypress Point Rd.
Half Moon Bay, CA
94019

Build I-1!

SOON!

ALAN HARRIS
15 ARBOR
MOSS BEACH
CA 94038

Dear Gov. Gross,
plas support
Design A

From
Katrina

Dear Mr. Gross –

I'm writing to you to express my preference for Design Variation "A".

I feel that it is more appropriate for hikers and bikers to be OUTSIDE the tunnel. And I appreciate the fact that San Mateo County is willing to maintain a pedestrian and bike trail. Thank you for your time.

Sandy Usher
P.O. Box 958
Montara
94037

Dear Mr. Gross,

When you consider tunnel designs for the Devil's Slide area of Highway One in San Mateo County, please know that Design Variation A is a more environmentally compatable design for our Montara Mountain. Please support our community. Thanks!

Dina Pursicker

Dear Friend:

Re/ Devils Slide Tunnel Design
please favor Variation A, the
Narrower bore.

Thank you.

Eli Hall

ELI HALL
480 FILBERT
HMB, CA, 94019

Dear Mr Goss,

I encourage you to
build Design Variation A
of the Tunnel

Liz McBride

Liz McBride
1221 ODDSTAD
PACIFICA CA 94044

Beth James

1221 Oddstad
Pacifica, CA 94044

I prefer design
Variation A —
It should work
best for Cars, bikes
and Pedestrians

P.O. Box 2487
El Granada CA
94018-2487

Dear Mr. Gross

Please, please, please we need the completion of the Devil's Slide tunnel.

Design Variation A is my preference which would provide hiking biking outside of the the tunnel.

Thank You. Thank you.

David Alarie
123 A States St
S.F. CA. 94114

Dear Mr Gross,

completion of the tunnel at Devil's Slide is essential for the entire Bay Area.

I support Design Variation A to provide for hiking and Biking outside of the tunnel.

Thank you

Steve Naughton
543 28th St
SF CA 94131

Dear Mr. Gress,
As a long time resident of Central San Mateo county & supporter of tunnel alternative I am writing to let you know of our preference for the tunnel design variation (A), the smaller one, which takes into consideration the use of the existing highway for pedestrian & bicycle use.

This is a key factor and concern for many of us who live & work here.

Sincerely,
Robert B. Ogle

Caltrans — I'm delighted you adopted the tunnel alternative was adopted. I put my vote for Design variation A, including a bike lane + trail for ~~pedestrians~~ bikers.

Thanks — hope the tunnel will be started soon

Christine Georgeades
P.O. Box 370933

To Office of Enviro:

The tunnel that is practical is VARIATION A. Get it done!

Keep the coast freeway free!

Get on with it!

Lillian A Hrbacek
1208 Date
PO Box 370067
Montara
Calif 94037

Dear Mr. Gross

In consideration of the environmental document regarding the Devil's Slide tunnel, I urge to Select the sooner, safer, cheaper alternative - Alternative A!

Select A!

Thank you.
JASON HATCH
1535 Derby St

New Design
Variation A — it's
what we voted for
and what the people
want -

Jay Rudie
Marin

5/7/99

Dear Mr. Gross,

Please, Please support
the completion of Devil's Slide tunnel.
I will be super sad if it
doesn't come to fruition!

I support design variation
"A" so I can hike and Bike
Outside the tunnel.

From one BoB to another -
Thanks for your support!

BoB Wheeler
1160 Clayton St. #2
San Francisco, CA 94117

C
175 Red Rock
S.F. ,CA. 94131

Support tunnel design A.
Preserve old rt. 1 for
bike & people traffic!
No highway!!

– Cory

Dear Mr. Gross,
I have lived in Montara
since 1977. I am in support
of tunnel Design variation
"A". Keep the existing
road for the bicycles
and hikers!

Thank you

Kathy White

KATHY WHITE
340 12th St.
Montara Ca 94037