

MONTEREY COUNTY ZONING ADMINISTRATOR

Meeting: March 25, 2010	Time: 1:30 P.M.	Agenda Item No.: 1
Project Description: Item continued from the March 11, 2010, public hearing. Combined Development Permit consisting of: 1) a Coastal Administrative Permit for the construction of a 66 linear foot debris deflection wall (including the construction and installation of drainage improvements consisting of approximately 60 linear feet of concrete lined gutter, approximately 311 linear feet of 18 inch diameter storm drain pipe, and an energy dissipater approved under emergency permit PLN090402); 2) a Coastal Development Permit to allow development within 50 feet of a coastal bluff; 3) a Coastal Development Permit to allow development within 100 feet of environmentally sensitive habitat; 4) a Coastal Development Permit to allow development on slope greater than 30 percent; and 5) a Design Approval.		
Project Location: 53900 Highway 1, Big Sur		APN: 420-231-006-000
Planning File Number: PLN090421 Related to PLN090402 (Emergency Permit)		Owner: DeYoung Trust Agent: Christine Kemp
Planning Area: Big Sur Land Use Plan		Flagged and staked: Yes
Zoning Designation: Watershed and Scenic Conservation, 40 acres per unit, with a Design Control District Overlay (Coastal Zone) [WSC/40-D (CZ)]		
CEQA Action: Categorically Exempt per CEQA Guidelines Section 15303		
Department: RMA - Planning Department		

RECOMMENDATION:

Staff recommends that the Zoning Administrator adopt a resolution (**Exhibit C**) to:

- 1) Categorically exempt PLN090421 per CEQA Guidelines Section 15303; and
- 2) Approve PLN090421, based on the findings and evidence and subject to the conditions of approval (**Exhibit C**).

PROJECT OVERVIEW:

Item continued from the March 11, 2010, public hearing. The applicant proposes to construct a 66 linear foot debris deflection wall to protect a caretaker unit at risk from debris flows. The project also involves development within 50 feet of a coastal bluff, development within 100 feet of environmentally sensitive habitat, and development on slope greater than 30 percent. In addition, this application incorporates the follow-up permitting requirement approved under emergency permit PLN090402 (the construction and installation of drainage improvements consisting of approximately 60 linear feet of concrete lined gutter, approximately 311 linear feet of 18 inch diameter storm drain pipe, and an energy dissipater). See **Exhibit B** for a detailed discussion of the project and related issues.


OTHER AGENCY INVOLVEMENT: The following agencies and departments reviewed this project:

- RMA - Public Works Department
- Environmental Health Division
- Water Resources Agency
- Cal-Fire Coastal (Fire Protection District)
- NOAA – Monterey Bay National Marine Sanctuary
- California Coastal Commission

Agencies that submitted comments are noted with a check mark (“√”). Conditions recommended by the RMA – Planning Department have been incorporated into the Condition Compliance/Mitigation Monitoring and Reporting Plan attached as Exhibit 1 to the draft resolution (**Exhibit C**).

The project was referred to the South Coast Land Use Advisory Committee (LUAC) for review. Based on the LUAC Procedure guidelines adopted by the Monterey County Board of Supervisors per Resolution No. 08-338, this application did warrant referral to the LUAC because it involves a Design Approval subject to review by the Zoning Administrator. The South Coast LUAC voted unanimously to support the project at a public meeting held on January 12, 2010.

Note: The decision on this project is appealable to the Board of Supervisors and the California Coastal Commission.



Joseph Sidor, Associate Planner
(831) 755-5262, SidorJ@co.monterey.ca.us
March 12, 2010

cc: Front Counter Copy; Zoning Administrator; Cal-Fire Coastal (Fire Protection District); RMA - Public Works Department; Environmental Health Division; Water Resources Agency; California Coastal Commission; NOAA – Monterey Bay National Marine Sanctuary; Laura Lawrence, Planning Services Manager; Joseph Sidor, Project Planner; Carol Allen, Senior Secretary; Patrick DeYoung, Owner; Christine Kemp, Agent; Planning File PLN090421

Attachments: Exhibit A Project Data Sheet
Exhibit B Project Discussion
Exhibit C Draft Resolution, including:
1. Conditions of Approval
2. Site Plan and Elevations
Exhibit D Vicinity Map
Exhibit E Advisory Committee Minutes
Exhibit F Technical Reports


This report was reviewed by Laura, Lawrence, Planning Services Manager. 

EXHIBIT A
PROJECT DATA SHEET

PLN090421 – DeYoung (Mullin)

Zoning Administrator
March 25, 2010

EXHIBIT A

Project Information for PLN090421

Project Title: DeYoung	Primary APN: 420-231-006-000
Location: 53900 HIGHWAY 1, BIG SUR	Coastal Zone: YES
Applicable Plan: BIG SUR COAST LAND USE PLAN	Zoning: WSC/40-D (CZ)
Permit Type: COMBINED DEVELOPMENT PERMIT	Plan Designation: WATERSHED & SCENIC CONSERVATION
Environmental Status: EXEMPT	Final Action Deadline: 03/22/2010
Advisory Committee: SOUTH COAST	

Project Site Data:

Lot Size: 6.47 ACRES	Coverage Allowed: 10%
Existing Structures (sf): NA	Coverage Proposed: 66 LINEAR FT
Proposed Structures (sf): 66 LINEAR FT	Height Allowed: 15 (ACCESSORY)
Total Square Feet: NA	Height Proposed: 6
	FAR Allowed: NA
	FAR Proposed: NA

Resource Zones and Reports:

Environmentally Sensitive Habitat: YES	Erosion Hazard Zone: NA
Biological Report #: LIB090502	Soils/Geo. Report #: LIB090504; LIB100004; & LIB100005
Forest Mgt. Report #: NA	Geologic Hazard Zone: UNSTABLE UPLANDS
Archaeological Sensitivity Zone: HIGH	Geologic Report #: NA
Archaeological Report #: LIB090503	Traffic Report #: NA
	Fire Hazard Zone: HIGH

Other Information:

Water Source: WELL	Sewage Disposal (method): SEPTIC
Water District/Company: NA	Sewer District Name: NA
Fire District: CAL-FIRE Coastal	Grading (cubic yds): 120 CY CUT 0 CY FILL
Tree Removal (Count/Type): NA	

EXHIBIT B
PROJECT DISCUSSION

PLN090421 – DeYoung (Mullin)

Zoning Administrator
March 25, 2010

EXHIBIT B PROJECT DISCUSSION

The applicant proposes to construct a 66 linear foot debris deflection wall to protect a caretaker unit at risk from debris flows. The caretaker unit is located at 53810 Highway 1 (Assessor's Parcel Number 420-231-005-000), but all proposed work will occur on the parcel located at 53900 Highway 1 (Assessor's Parcel Number 420-231-006-000). The slope above the existing caretaker unit has been weakened by inadequate drainage improvements at the top of the slope. Storm runoff from Highway 1 and the property area above the slope are focused onto the slope and have caused debris flows. A major debris flow in 2005 caused damage to the caretaker unit and other exterior improvements. The recent rain storm on October 13, 2009, also caused a minor debris flow and damaged temporary drainage pipes. New erosion scars have developed and could contribute to new debris flows.

The project also involves development within 50 feet of a coastal bluff, development within 100 feet of environmentally sensitive habitat, and development on slope greater than 30 percent. In addition, this application incorporates the follow-up permitting requirement approved under emergency permit PLN090402 (the construction and installation of drainage improvements consisting of approximately 60 linear feet of concrete lined gutter, approximately 311 linear feet of 18 inch diameter storm drain pipe, and an energy dissipater).

County records identify the project site is within an area of high sensitivity for prehistoric cultural resources. An archaeological survey prepared for the project site concluded that there is no surface evidence of potentially significant archaeological resources. The potential for inadvertent impacts to cultural resources is limited and will be controlled by the use of the County's standard project condition (Condition No. 3).

Coastal Bluff: Monterey County Zoning Ordinance Section 20.70.120.B.1 requires a Coastal Development Permit for improvements to any structure ... within 50 feet of a coastal bluff edge because they involve risk of environmental impact. In addition, the Big Sur Coast Land Use Plan Policy 3.7.2.3 directs all development to be sited and designed to minimize risk from geologic, flood, or fire hazards.... The area of disturbance required for the drainage improvements and the debris deflection wall is the minimum necessary and will help to reduce the potential for future debris flows. The improvements for drainage and debris deflection will allow for the natural flow of materials into the Monterey Bay National Marine Sanctuary (MBNMS). Due to the anticipated reduced debris flows, potential impacts to the MBNMS will be reduced. The project, as proposed, is consistent with applicable policies regarding hazards and protection of environmental resources.

Slope (Finding No. 7):

The project application includes development on slopes exceeding 30%. Policy 3.7.3.A.1 of the Big Sur Coast Land Use Plan states that "All development shall be sited and designed to conform to site topography and to minimize grading and other site preparation activities." The topography of the parcel significantly limits the available building area for the deflection wall and drainage improvements, and does not allow for an alternative that would avoid development on slopes of less than 30%. The County has reviewed the project plans and visited the site to analyze possible development alternatives. Based on the site limitations and plans provided, there is no feasible alternative which would allow development to occur on slopes of less than 30%.

The slope above the existing caretaker unit has been weakened by inadequate drainage improvements at the top of the slope. Storm runoff from Highway 1 and the property area above the slope are focused onto the slope, and have caused debris flows. A major debris flow in 2005 caused damage to the caretaker unit and other exterior improvements. The recent rain storm on October 13, 2009, also caused a minor debris flow and damaged temporary drainage pipes. New erosion scars have developed and could contribute to new debris flows. The construction of the drainage improvements and the debris deflection wall is the minimum work required to abate the threat that debris flows pose to the caretaker unit. Condition Nos. 4, 5, 8, 11, and 12 have been applied to assure compliance with Section 20.64.230.E.2 of the Monterey County Zoning Ordinance.

Environmentally Sensitive Habitat Areas (Finding No. 8): The project application includes development within 100 feet of environmentally sensitive habitat areas (ESHA). Although the project area itself does not contain any sensitive species or ESHA, the site is within 100 feet of a natural drainage/riparian area. The project site is also located several hundred feet above the waters of the Monterey Bay National Marine Sanctuary (MBNMS). Development within 100 feet of ESHA must minimize impacts in accordance with the applicable goals and policies of the Big Sur Coast Land Use Plan (LUP) and the Monterey County Zoning Ordinance (Title 20).

Policy 3.3.2.1 of the Big Sur Coast Land Use Plan directs that development in ESHA shall not be permitted if it results in potential disruption to habitat value. The County has reviewed the plans for the installation/construction of drainage improvements and a debris deflection wall, and concurs it is the minimum amount of work required and will minimize the potential impacts to natural resources. Policy 3.3.3.A.3 of the Big Sur Coast Land Use Plan directs that development shall be sited to protect riparian habitat values. Due to the location of the caretaker unit, the debris deflection wall is sited in the least disruptive location. In addition, the biological assessment prepared for the project noted that the project will not adversely affect the natural resources in the surrounding area, including the MBNMS. The disruption caused by the proposed development is construction-related and temporary, and will not result in significant or permanent disruption of the natural drainage leading to the MBNMS. The project minimizes impacts to the natural drainage/riparian area in accordance with the applicable goals and policies of the Big Sur Coast LUP and Title 20.

The project site is located on the Big Sur coastline above the waters of the Monterey Bay National Marine Sanctuary. Policy 3.3.3.B.1 of the Big Sur Coast Land Use Plan directs that development on parcels adjacent to inter-tidal habitat areas should be sited and designed to prevent deposition of sediment. No construction work is proposed along the rocky shore area, and the project area is several hundred feet above the mean high tide line. Per the biological assessment prepared for the project, the near-shore waters and sensitive species in the sanctuary waters should not be impacted by project implementation. In addition, the maintenance of vegetation in the surrounding area will aid in filtering soil and debris that could occur during a flow event.

The biological assessment prepared and submitted for the project recommended actions to minimize and prevent potential impacts to the riparian area and the Monterey Bay National Marine Sanctuary waters. The proposed development shall be completed in accordance with these recommendations, and monitored for three years to ensure consistency with applicable policies (see Condition Nos. 8, 9, 11, and 12).

EXHIBIT C
DRAFT RESOLUTION w/
1. Conditions of Approval
2. Site Plan and Elevations

PLN090421 – DeYoung (Mullin)

Zoning Administrator
March 25, 2010

**EXHIBIT C
DRAFT RESOLUTION**

**Before the Zoning Administrator in and for the
County of Monterey, State of California**

In the matter of the application of:

PATRICK DEYOUNG (PLN090421)

RESOLUTION NO. 10-

Resolution by the Monterey County Zoning
Administrator:

- 1) Categorically exempting PLN090421 per CEQA Guidelines Section 15303; and
- 2) Approving a Combined Development Permit consisting of: 1) a Coastal Administrative Permit for the construction of a 66 linear foot debris deflection wall (including the construction and installation of drainage improvements consisting of approximately 60 linear feet of concrete lined gutter, approximately 311 linear feet of 18 inch diameter storm drain pipe, and an energy dissipater approved under emergency permit PLN090402); 2) a Coastal Development Permit to allow development within 50 feet of a coastal bluff; 3) a Coastal Development Permit to allow development within 100 feet of environmentally sensitive habitat; 4) a Coastal Development Permit to allow development on slope greater than 30 percent; and 5) a Design Approval.

(PLN090421, Patrick DeYoung, 53900 Highway, Big Sur, Big Sur Coast Land Use Plan, APN 420-231-006-000)

The DeYoung application (PLN090421) came on for public hearing before the Monterey County Zoning Administrator on March 25, 2010. Having considered all the written and documentary evidence, the administrative record, the staff report, oral testimony, and other evidence presented, the Zoning Administrator finds and decides as follows:

FINDINGS

1. **FINDING:** **CONSISTENCY** – The Project, as conditioned, is consistent with the applicable plans and policies which designate this area as appropriate for development.

- EVIDENCE:** a) During the course of review of this application, the project has been reviewed for consistency with the text, policies, and regulations in:
- the Monterey County General Plan,
 - Big Sur Coast Land Use Plan,
 - Big Sur Coastal Implementation Plan, and
 - Monterey County Zoning Ordinance (Title 20)

No conflicts were found to exist. No communications were received during the course of review of the project indicating any inconsistencies with the text, policies, and regulations in these documents.

- b) The property is located at 53900 Highway 1, Big Sur (Assessor's Parcel Number 420-231-006-000), Big Sur Coast Land Use Plan (LUP). The parcel is zoned Watershed and Scenic Conservation, 40 acres per unit, with a Design Control District Overlay (Coastal Zone) [WSC/40-D (CZ)], which allows the construction of minor accessory structures or facilities such as debris deflection walls and drainage improvements with a Coastal Administrative Permit. The Monterey County Zoning Ordinance (Title 20) and the Big Sur Coast LUP also allow development within 50 feet of a coastal bluff, within 100 feet of environmentally sensitive habitat, and on slope greater than 30 percent provided the applicable Coastal Development Permits are first granted. Therefore, the project is an allowed land use for this site.
- c) The project planner conducted site inspections on October 13, 2009, and March 10, 2010, to verify that the project on the subject parcel conforms to the plans listed above.
- d) County records identify the project site is within an area of high sensitivity for prehistoric cultural resources. An archaeological survey prepared for the project site concluded that there is no surface evidence of potentially significant archaeological resources. The potential for inadvertent impacts to cultural resources is limited and will be controlled by the use of the County's standard project condition (Condition No. 3).
- e) Slope: Development on slopes that exceeds 30% is prohibited unless there is no feasible alternative that would allow development to occur on slopes of less than 30%, or the proposed development better achieves the goals, policies and objectives of the Monterey County General Plan and the Big Sur Coast Land Use Plan than other development alternatives. See Finding No. 7.
- f) Environmentally Sensitive Habitat Areas (ESHA): Development within 100 feet of ESHA must minimize impacts in accordance with the applicable goals and policies of the Big Sur Coast Land Use Plan and the Monterey County Zoning Ordinance (Title 20). See Finding No. 8.
- g) Coastal Bluff: Monterey County Zoning Ordinance Section 20.70.120.B.1 requires a Coastal Development Permit for improvements to any structure ... within 50 feet of a coastal bluff edge because they involve risk of environmental impact. In addition, the Big Sur Coast Land Use Plan Policy 3.7.2.3 directs all development to be sited and designed to minimize risk from geologic, flood, or fire hazards.... The area of disturbance required for the drainage improvements and the debris deflection wall is the minimum necessary and will help to reduce the potential for future debris flows. The project, as proposed, is consistent with applicable policies regarding hazards and protection of environmental resources.
- h) The project was referred to the South Coast Land Use Advisory Committee (LUAC) for review. Based on the LUAC Procedure guidelines adopted by the Monterey County Board of Supervisors per Resolution No. 08-338, this application did warrant referral to the LUAC because it involves a Design Approval subject to review by the

Zoning Administrator. The South Coast LUAC voted unanimously to support the project at a public meeting held on January 12, 2010.

- i) The application, project plans, and related support materials submitted by the project applicant to the Monterey County RMA - Planning Department for the proposed development found in Project Files PLN090421 and PLN090402.

2. **FINDING:** **SITE SUITABILITY** – The site is physically suitable for the use proposed.

EVIDENCE: a) The project has been reviewed for site suitability by the following departments and agencies: RMA - Planning Department, Cal-Fire Coastal (Fire Protection District), RMA - Public Works Department, Environmental Health Division, and Water Resources Agency. There has been no indication from these departments/agencies that the site is not suitable for the proposed development. Conditions recommended have been incorporated.

- b) Staff identified potential impacts to Biological Resources, Archaeological Resources, and Soil/Slope Stability. Technical reports by outside consultants indicated that there are no physical or environmental constraints that would indicate that the site is not suitable for the use proposed. County staff independently reviewed these reports and concurs with their conclusions. The following reports have been prepared:

- Preliminary Archaeological Reconnaissance (LIB090503) prepared by Archaeological Consulting, Salinas, California, November 5, 2009.
- Biological Assessment (LIB090502) prepared by Nicole Nedeff, Carmel Valley, California, November 23, 2009.
- Debris Flow Protection Recommendations (LIB090504) prepared by Haro, Kasunich, and Associates, Inc., Watsonville, California, March 31, 2006.
- Request for Emergency Permit to Construct Storm Drainage Improvements and Debris Flow Protection (LIB100004) prepared by Haro, Kasunich, and Associates, Inc., Watsonville, California, November 9, 2009.
- Supplemental Information Regarding Need for Emergency Permit to Construct Storm Drainage Improvements and Debris Flow Protection (LIB100005) prepared by Haro, Kasunich, and Associates, Inc., Watsonville, California, November 25, 2009.

- c) Staff conducted site inspections on October 13, 2009, and March 10, 2010, to verify that the site is suitable for this use.

- d) The application, project plans, and related support materials submitted by the project applicant to the Monterey County RMA - Planning Department for the proposed development found in Project Files PLN090421 and PLN090402.

3. **FINDING:** **HEALTH AND SAFETY** - The establishment, maintenance, or operation of the project applied for will not under the circumstances of this particular case be detrimental to the health, safety, peace, morals, comfort, and general welfare of persons residing or working in the neighborhood of such proposed use, or be detrimental or injurious to

property and improvements in the neighborhood or to the general welfare of the County.

- EVIDENCE:** a) The project was reviewed by the RMA - Planning Department, Cal-Fire Coastal (Fire Protection District), RMA - Public Works Department, Environmental Health Division, and Water Resources Agency. The respective departments/agencies have recommended conditions, where appropriate, to ensure that the project will not have an adverse effect on the health, safety, and welfare of persons either residing or working in the neighborhood.
- b) See Finding Nos. 1, 2, 4, 5, 6, 7, and 8, and supporting evidence.

4. **FINDING:** **NO VIOLATIONS** - The subject property is in compliance with all rules and regulations pertaining to zoning uses, subdivision, and any other applicable provisions of the County's zoning ordinance. No violations exist on the property.

- EVIDENCE:** a) Staff reviewed Monterey County RMA - Planning Department and Building Services Department records and is not aware of any violations existing on subject property.
- b) Staff conducted site inspections on October 13, 2009, and March 10, 2010, and researched County records to assess if any violation exists on the subject property.
- c) There are no known violations on the subject parcel.
- d) The application, plans and supporting materials submitted by the project applicant to the Monterey County Planning Department for the proposed development are found in Project Files PLN090421 and PLN090402.

5. **FINDING:** **CEQA (Exempt):** - The project is categorically exempt from environmental review and no unusual circumstances were identified to exist for the proposed project.

- EVIDENCE:** a) California Environmental Quality Act (CEQA) Guidelines Section 15303 (Class 3), categorically exempts the construction or location of limited numbers of new, small facilities or structures.
- b) The project consists of the construction of a 66 linear foot debris deflection wall (including the construction and installation of drainage improvements consisting of approximately 60 linear feet of concrete lined gutter, approximately 311 linear feet of 18 inch diameter storm drain pipe, and an energy dissipater approved under emergency permit PLN090402). The project, as proposed, is consistent with the Class 3 categorical exemption per Evidence 5a above.
- c) No adverse environmental effects were identified during staff review of the development application during site visits on October 13, 2009, and March 10, 2010.
- d) Exceptions to exemptions listed in Section 15300.2.a-f are inapplicable. The project does not involve: a designated historical resource, a hazardous waste site, unusual circumstances that would result in a significant effect, development that would result in a cumulatively significant impact, nor development within view of a scenic highway. The project site is located, and involves development, near a particularly sensitive environment; however, the development proposed will not result in a significant impact to natural resources. See Finding

No. 8.

- e) See preceding and following findings and supporting evidence.

6. **FINDING:** **PUBLIC ACCESS** – The project is in conformance with the public access and recreation policies of the Coastal Act (specifically Chapter 3 of the Coastal Act of 1976, commencing with Section 30200 of the Public Resources Code) and Local Coastal Program, and does not interfere with any form of historic public use or trust rights.

- EVIDENCE:**
- a) No access is required as part of the project as no substantial adverse impact on access, either individually or cumulatively, as described in Section 20.145.150 of the Monterey County Coastal Implementation Plan can be demonstrated.
 - b) The subject property is not described as an area where the Local Coastal Program requires public access (Figure 2, Shoreline Access Plan, Central Section, and Figure 3, Trails Plan, Central Section, in the Big Sur Coast Land Use Plan).
 - c) No evidence or documentation has been submitted or found showing the existence of historic public use or trust rights over this property.
 - d) The application, plans and supporting materials submitted by the project applicant to the Monterey County Planning Department for the proposed development are found in Project Files PLN090421 and PLN090402.
 - e) The project planner conducted site inspections on October 13, 2009, and March 10, 2010.

7. **FINDING:** **DEVELOPMENT ON SLOPE** – There is no feasible alternative which would allow development to occur on slopes of less than 30%.

- EVIDENCE:**
- a) In accordance with the applicable policies of the Big Sur Coast Land Use Plan and the Monterey County Zoning Ordinance (Title 20), a Coastal Development Permit is required and the authority to grant said permit has been met.
 - b) The project includes application for development on slopes exceeding 30%. The slope above the existing caretaker unit has been weakened by inadequate drainage improvements at the top of the slope. Storm runoff from Highway 1 and the property area above the slope are focused onto the slope, and have caused debris flows. A major debris flow in 2005 caused damage to the caretaker unit and other exterior improvements. The recent rain storm of October 13, 2009, also caused a minor debris flow and damaged temporary drainage pipes. New erosion scars have developed and could contribute to new debris flows. The construction of the drainage improvements and the debris deflection wall is the minimum work required to abate the threat that debris flows pose to the caretaker unit.
 - c) The project application includes development on slopes exceeding 30%. Policy 3.7.3.A.1 of the Big Sur Coast Land Use Plan states that “All development shall be sited and designed to conform to site topography and to minimize grading and other site preparation activities.” The topography of the parcel significantly limits the available building area for the deflection wall and drainage improvements. The County has reviewed the project plans and visited the site to analyze possible development alternatives. Based on the site limitations and plans

provided, there is no feasible alternative which would allow development to occur on slopes of less than 30%.

- d) The Zoning Administrator shall require such conditions and changes in the development as it may deem necessary to assure compliance with Section 20.64.230.E.2 of the Monterey County Zoning Ordinance (Condition Nos. 4, 5, 8, 11, and 12).
- e) The application, plans and supporting materials submitted by the project applicant to the Monterey County Planning Department for the proposed development are found in Project Files PLN090421 and PLN090402.
- f) The project planner conducted site inspections on October 13, 2009, and March 10, 2010.
- g) The subject project minimizes development on slopes exceeding 30% in accordance with the applicable goals and policies of the applicable area plan and zoning codes.

8. **FINDING:** **ESHA** – The subject project minimizes impact on environmentally sensitive habitat areas in accordance with the applicable goals and policies of the applicable area plan and zoning codes.

- EVIDENCE:**
- a) The project application includes development within 100 feet of environmentally sensitive habitat areas (ESHA). Although the project area itself does not contain any sensitive species or ESHA, the site is within 100 feet of a natural drainage/riparian area. The project site is also located several hundred feet above the waters of the Monterey Bay National Marine Sanctuary (MBNMS). In accordance with the applicable policies of the Big Sur Coast Land Use Plan and the Monterey County Zoning Ordinance (Title 20), a Coastal Development Permit is required and the authority to grant said permit has been met.
 - b) Policy 3.3.2.1 of the Big Sur Coast Land Use Plan directs that development in ESHA shall not be permitted if it results in potential disruption to habitat value. The County has reviewed the plans for the installation/construction of drainage improvements and a debris deflection wall, and concurs it is the minimum amount of work required and will minimize the potential impacts to resources. In addition, the biological assessment prepared for the project noted that the project will not adversely affect the natural resources in the surrounding area, including the Monterey Bay National Marine Sanctuary. Therefore, the disruption caused by the proposed development is construction-related and temporary and will not result in significant or permanent disruption of the habitat.
 - c) The project site is located on the Big Sur coastline above the waters of the Monterey Bay National Marine Sanctuary. Policy 3.3.3.B.1 of the Big Sur Coast Land Use Plan directs that development on parcels adjacent to inter-tidal habitat areas should be sited and designed to prevent deposition of sediment. No construction work is proposed along the rocky shore area, and the project area is several hundred feet above the mean high tide line. Per the biological assessment prepared for the project, the near-shore waters and sensitive species in the sanctuary waters should not be impacted by project implementation. In addition, the maintenance of vegetation in the surrounding area will aid in filtering soil and debris that could occur during a flow event.

- d) The project also involves work above a natural drainage/riparian area. Policy 3.3.3.A.3 of the Big Sur Coast Land Use Plan directs that development shall be sited to protect riparian habitat values. Due to the location of the caretaker unit, the debris deflection wall is sited in the least disruptive location.
- e) The project planner conducted site inspections on October 13, 2009, and March 10, 2010, to verify ESHA locations and potential project impacts to ESHA.
- f) The application, plans and supporting materials submitted by the project applicant to the Monterey County Planning Department for the proposed development are found in Project Files PLN090421 and PLN090402.
- g) The biological assessment prepared and submitted for the project recommended actions to minimize and prevent potential impacts to the riparian area and the Monterey Bay National Marine Sanctuary waters. The proposed development shall be completed in accordance with these recommendations, and monitored for three years to ensure consistency with applicable policies (see Condition Nos. 8, 9, 11, and 12).

9. **FINDING:** **APPEALABILITY** - The decision on this project may be appealed to the Board of Supervisors and the California Coastal Commission.

- EVIDENCE:**
- a) Board of Supervisors: Section 20.86.030 of the Monterey County Zoning Ordinance allows an appeal to be made to the Board of Supervisors by any public agency or person aggrieved by a decision of an Appropriate Authority other than the Board of Supervisors.
 - b) Coastal Commission: Section 20.86.080.A.1 and A.3 of the Monterey County Zoning Ordinance (Title 20). The project is subject to appeal by/to the California Coastal Commission because approved projects between the sea and the first through public road paralleling the sea, and approved projects involving development in the underlying zone as a conditional use, are appealable to the Coastal Commission.

DECISION

NOW, THEREFORE, based on the above findings and evidence, the Zoning Administrator does hereby:

- A. Categorically exempt PLN090421 per CEQA Guidelines Section 15303; and
- B. Approve a Combined Development Permit consisting of: 1) a Coastal Administrative Permit for the construction of a 66 linear foot debris deflection wall (including the construction and installation of drainage improvements consisting of approximately 60 linear feet of concrete lined gutter, approximately 311 linear feet of 18 inch diameter storm drain pipe, and an energy dissipater approved under emergency permit PLN090402); 2) a Coastal Development Permit to allow development within 50 feet of a coastal bluff; 3) a Coastal Development Permit to allow development within 100 feet of environmentally sensitive habitat; 4) a Coastal Development Permit to allow development on slope greater than 30 percent; and 5) a Design Approval; in general conformance with the attached sketch (**Exhibit 2**) and subject to the conditions (**Exhibit 1**), both exhibits being attached hereto and incorporated herein by reference.

PASSED AND ADOPTED this 25th day of March, 2010.

MIKE NOVO, ZONING ADMINISTRATOR

COPY OF THIS DECISION MAILED TO APPLICANT ON _____.

THIS APPLICATION IS APPEALABLE TO THE BOARD OF SUPERVISORS.

IF ANYONE WISHES TO APPEAL THIS DECISION, AN APPEAL FORM MUST BE COMPLETED AND SUBMITTED TO THE CLERK TO THE BOARD ALONG WITH THE APPROPRIATE FILING FEE ON OR BEFORE _____.

THIS PROJECT IS LOCATED IN THE COASTAL ZONE AND IS APPEALABLE TO THE COASTAL COMMISSION. UPON RECEIPT OF NOTIFICATION OF THE FINAL LOCAL ACTION NOTICE (FLAN) STATING THE DECISION BY THE FINAL DECISION MAKING BODY, THE COMMISSION ESTABLISHES A 10 WORKING DAY APPEAL PERIOD. AN APPEAL FORM MUST BE FILED WITH THE COASTAL COMMISSION. FOR FURTHER INFORMATION, CONTACT THE COASTAL COMMISSION AT (831) 427-4863 OR AT 725 FRONT STREET, SUITE 300, SANTA CRUZ, CA.

This decision, if this is the final administrative decision, is subject to judicial review pursuant to California Code of Civil Procedure Sections 1094.5 and 1094.6. Any Petition for Writ of Mandate must be filed with the Court no later than the 90th day following the date on which this decision becomes final.

NOTES

1. You will need a building permit and must comply with the Monterey County Building Ordinance in every respect.

Additionally, the Zoning Ordinance provides that no building permit shall be issued, nor any use conducted, otherwise than in accordance with the conditions and terms of the permit granted or until ten days after the mailing of notice of the granting of the permit by the appropriate authority, or after granting of the permit by the Board of Supervisors in the event of appeal.

Do not start any construction or occupy any building until you have obtained the necessary permits and use clearances from the Monterey County Planning Department and Building Services Department office in Salinas.

2. This permit expires 3 years after the above date of granting thereof unless construction or use is started within this period.

RESOLUTION 10-____ - EXHIBIT 1
Monterey County Resource Management Agency
Planning Department
Condition Compliance and/or Mitigation Monitoring
Reporting Plan

Project Name: DEYOUNG
File No: PLN090421
APN: 420-231-006-000
Approved by: Zoning Administrator **Date: March 25, 2010**

**Monitoring or Reporting refers to projects with an EIR or adopted Mitigated Negative Declaration per Section 21081.6 of the Public Resources Code.*

Permit Cond. Number	Mitig. Number	Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing	Verification of Compliance (name/date)
RMA – Planning Department						
1.		<p>PD001 - SPECIFIC USES ONLY</p> <p>This Combined Development Permit (PLN090421) allows 1) a Coastal Administrative Permit for the construction of a 66 linear foot debris deflection wall (including the construction and installation of drainage improvements consisting of approximately 60 linear feet of concrete lined gutter, approximately 311 linear feet of 18 inch diameter storm drain pipe, and an energy dissipater approved under emergency permit PLN090402); 2) a Coastal Development Permit to allow development within 50 feet of a coastal bluff; 3) a Coastal Development Permit to allow development within 100 feet of environmentally sensitive habitat; 4) a Coastal Development Permit to allow development on slope greater than 30 percent; and 5) a Design Approval. The property is located at 53900 Highway 1, Big Sur (Assessor's Parcel Number 420-231-006-000), Big Sur Coastal Land Use Plan. This permit was approved in accordance with County ordinances and land use regulations subject to the following terms and conditions. Any use or construction not in substantial conformance with the terms and conditions of this permit is a violation</p>	<p>Adhere to conditions and uses specified in the permit.</p> <p>Neither the uses nor the construction allowed by this permit shall commence unless and until all of the conditions of this permit are met to the satisfaction of the Director of the RMA - Planning Department.</p> <p>To the extent that the County has delegated any condition compliance or mitigation monitoring to the Monterey County Water Resources Agency, the Water Resources Agency shall provide all information requested by the County and the County shall bear ultimate responsibility to ensure that conditions and mitigation measures are properly fulfilled.</p>	<p>Owner / Applicant</p> <p>RMA - Planning</p> <p>WRA</p> <p>RMA - Planning</p>	<p>Ongoing unless otherwise stated.</p>	

Permit Cond. Number	Mitig. Number	Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing	Verification of Compliance (name/date)
2.		<p>PD002 - NOTICE-PERMIT APPROVAL</p> <p>The applicant shall record a notice which states: "A permit (Resolution 10-____) was approved by the Zoning Administrator for Assessor's Parcel Number 420-231-006-000 on March 25, 2010. The permit was granted subject to twelve (12) conditions of approval which run with the land. A copy of the permit is on file with the Monterey County RMA - Planning Department." (RMA-Planning Department)</p>	<p>Obtain appropriate form from the RMA-Planning Department.</p> <p>The applicant shall complete the form and furnish proof of recordation of this notice to the RMA - Planning Department.</p>	Owner/ Applicant RMA- Planning	Prior to the issuance of grading and building permits.	
3.		<p>PD003(A) - CULTURAL RESOURCES - NEGATIVE ARCHAEOLOGICAL REPORT</p> <p>If, during the course of construction, cultural, archaeological, historical or paleontological resources are uncovered at the site (surface or subsurface resources) work shall be halted immediately within 50 meters (165 feet) of the find until a qualified professional archaeologist can evaluate it. The Monterey County RMA - Planning Department and a qualified archaeologist (i.e., an archaeologist registered with the Society of Professional Archaeologists) shall be immediately contacted by the responsible individual present on-site. When contacted, the project planner and the archaeologist shall immediately visit the site to determine the extent of the resources and to develop proper mitigation measures required for the discovery. (RMA - Planning Department)</p>	<p>Stop work within 50 meters (165 feet) of uncovered resource and contact the Monterey County RMA - Planning Department and a qualified archaeologist immediately if cultural, archaeological, historical or paleontological resources are uncovered. When contacted, the project planner and the archaeologist shall immediately visit the site to determine the extent of the resources and to develop proper mitigation measures required for the discovery.</p>	Owner / Applicant / Archaeo- logist	Ongoing	

Permit Cond. Number	Mitig. Number	Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing	Verification of Compliance (name/date)
4.		<p>PD009 - GEOTECHNICAL CERTIFICATION Prior to final inspection, the geotechnical consultant shall provide certification that all development has been constructed in accordance with the geotechnical report. (RMA – Planning Department and Building Services Department)</p>	Submit certification by the geotechnical consultant to the RMA – Building Services Department showing project's compliance with the geotechnical report.	Owner / Applicant / Geotechnical Consultant	Prior to final inspection.	
5.		<p>PD010 - EROSION CONTROL PLAN AND SCHEDULE The approved development shall incorporate the recommendations of the Erosion Control Plan as reviewed by the Director of RMA – Planning and Director of Building Services. All cut and/or fill slopes exposed during the course of construction be covered, seeded, or otherwise treated to control erosion during the course of construction, subject to the approval of the Director of RMA - Planning and Director of RMA - Building Services. The improvement and grading plans shall include an implementation schedule of measures for the prevention and control of erosion, siltation and dust during and immediately following construction and until erosion control planting becomes established. This program shall be approved by the Director of RMA - Planning and Director of RMA - Building Services. (RMA - Planning Department and RMA - Building Services Department)</p>	An Erosion Control Plan shall be submitted to the RMA - Planning Department and the RMA - Building Services Department prior to issuance of building and grading permits. Comply with the recommendations of the Erosion Control Plan during the course of construction until project completion as approved by the Director of RMA - Planning and Director of RMA - Building Services. Evidence of compliance with the Implementation Schedule shall be submitted to the RMA - Planning Department and the RMA - Building Services Department.	Owner / Applicant	Prior to the issuance of grading and building permits. Ongoing	
6.		<p>PD016 – NOTICE OF REPORTS Prior to issuance of building or grading permits, a notice shall be recorded with the Monterey County Recorder which states: "A Biological Assessment has been prepared for this parcel by Nicole Nedeff, dated November 23, 2009, and a Debris Flow Protection Recommendations has been prepared by Haro, Kasuntich, and Associates, Inc., dated March 31, 2006. These reports are on record in the Monterey County RMA - Planning Department, Library Nos. 090502 and</p>	Proof of recordation of this notice shall be furnished to the RMA - Planning Department.	Owner / Applicant	Prior to the issuance of grading and building permits.	

Permit Cond. Number	Mitig. Number	Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing	Verification of Compliance (name/date)
		090504, respectively. All development shall be in accordance with these reports." (RMA – Planning Department)				
7.		PD032(A) - PERMIT EXPIRATION The permit shall be granted for a time period of 3 years, to expire on March 25, 2013, unless use of the property or actual construction has begun within this period. (RMA – Planning Department)	The applicant shall obtain a valid grading or building permit and/or commence the authorized use to the satisfaction of the Director of Planning. Any request for extension must be received by the Planning Department at least 30 days prior to the expiration date.	Owner / Applicant	As stated in the conditions of approval.	
8.		PD033 - RESTORATION OF NATURAL MATERIALS (NON-STANDARD) Upon completion of the development, the area disturbed shall be restored to a condition to correspond with the adjoining area and in accordance with the biological report prepared for the project, subject to the approval of the Director of the RMA - Planning Department. Plans for such restoration shall be submitted to and approved by the Director of the RMA - Planning Department prior to issuance of grading and building permits. The approved restoration work shall be completed prior to final inspection. (RMA – Planning Department)	Submit restoration plans to the RMA - Planning Department for review and approval. Complete the restoration of natural materials to correspond with the adjoining area and in accordance with the biological report prepared for the project.	Owner / Applicant Owner / Applicant	Prior to issuance of grading and building permits. Prior to final inspection.	
9.		PDSP001 – BIOLOGICAL CERTIFICATION AND MONITORING (NON-STANDARD) Prior to final inspection, the biological consultant shall provide certification that all development has been constructed in accordance with the biological report (Section IV, General Recommendations and Suggested Conditions). After completion of restoration work, the plantings shall be monitored for a three-year period. Monitoring reports prepared by a qualified biologist shall be submitted to the RMA-Planning Department on an annual basis for three years following project completion.	Submit certification by the biological consultant to the RMA – Planning Department showing project's compliance with the biological report.	Owner / Applicant / Biological Consultant	Prior to final inspection. Monitoring Report – year one after completion	

Permit Cond. Number	Mitig. Number	Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing	Verification of Compliance (name/date)
		(RMA – Planning Department)	Submit monitoring reports to the RMA-Planning Department for a three-year period. The reports shall be submitted on an approximate annual basis after project completion.		Monitoring Report – year two after completion Monitoring Report – year three after completion	
10.		PDSP002 – DEBRIS FLOW SOIL PLACEMENT (NON-STANDARD) Soil from future debris flows may be placed in the corral area on the property located at 53810 Highway 1 (Assessor's Parcel Numbers 420-231-004-000 and 420-231-005-000), Big Sur. In order to reduce erosion potential in the corral area, the applicant shall take the following actions: 1) salvage pine needle duff for use as mulch; 2) remove invasive, undesirable plants from the area prior to the placement of excavated material; 3) outline the fill area with natural fiber rolls and slightly compact new soil cover once in place; and 4) replace pine needle duff and supplement with weed-free straw to act as erosion control mulch. Erosion of debris material from the corral area shall constitute non-compliance with this condition. (RMA – Planning Department)	Adhere to the actions specified.	Owner / Applicant	Ongoing	
11.		PDSP003 – CONSTRUCTION ACCESS (NON-STANDARD) The applicant shall minimize ground and vegetation disturbance during construction activities by identifying a clear and unobstructed corridor for equipment access and delivery of materials to all work areas, and by using specialized equipment (as recommended in the biological report) that will minimize ground disturbance in constrained work areas. (RMA – Planning Department)	Identify and incorporate as notes on the plans and submit to the RMA-Planning Department for review and approval.	Owner / Applicant	Prior to issuance of building permit.	

Permit Cond. Number	Mitig. Number	Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing	Verification of Compliance (name/date)
12.		<p>PDSP004 – PROTECTION OF RESOURCES IN CONSTRUCTION AREA (NON-STANDARD)</p> <p>In order to protect the surrounding natural resources, the applicant shall control the area of construction by taking the following actions: 1) maintain down-slope silt fencing free of slurry sediment to the extent possible during concrete mixing and pouring of deflection wall supports; 2) remove collected slurry sediment and dispose of off-site; 3) replace fiber rolls if contaminated with slurry; 4) leave clean rolls in place after construction to reduce downstream sedimentation in the riparian area; 5) place plastic snow-drift fencing or other appropriate barrier at upstream margin of the willow thicket to prevent potential damage of the riparian area during construction of the debris deflection wall and energy dissipater at the pipeline terminus; and 6) place natural fiber rolls at base of fencing along cross section of rocky channel to prevent runoff of potentially contaminated water or slurry into the natural drainage. The use of creosoted railroad ties is not recommended for the debris deflection wall, as this wood preservative leaches chemicals into the environment as it decomposes. The applicant shall identify and incorporate these recommendations as notes on the plans and submit to the RMA-Planning Department for review and approval. The applicant shall comply with these recommendations during all phases of construction, and shall submit evidence of compliance to the RMA-Planning Department. (RMA – Planning Department)</p>	<p>Identify and incorporate as notes on the plans and submit to the RMA-Planning Department for review and approval.</p> <p>Comply with these recommendations during the course of construction until project completion as approved by the Director of RMA – Planning.</p> <p>Submit evidence of compliance to the RMA - Planning Department for review and approval.</p>	<p>Owner / Applicant</p> <p>Owner / Applicant</p> <p>Owner / Applicant</p>	<p>Prior to issuance of building permit.</p> <p>Ongoing</p> <p>Prior to final inspection.</p>	

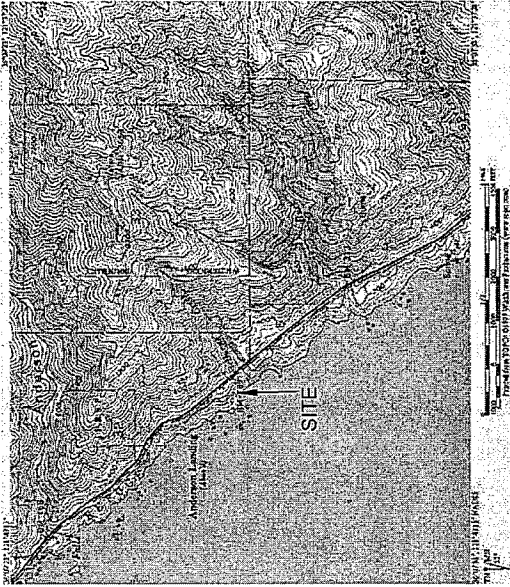
END OF CONDITIONS

REVISIONS BY

**PROPOSED DEBRIS WALL & DRAINAGE IMPROVEMENTS
DE YOUNG PROPERTY, BIG SUR, MONTEREY COUNTY, CALIFORNIA
TITLE SHEET**

HARO, KASUNICH AND ASSOCIATES, INC.
CONSULTING CIVIL, GEOTECHNICAL & COASTAL ENGINEERS
118 EAST LAKE AVE, WATSONVILLE, CA 95076
FAX (831) 722-4175

Date: 9-30-09
Scale: AS SHOWN
Drawn: MF
Job: _____
Sheet: **1**
of 5 Sheets

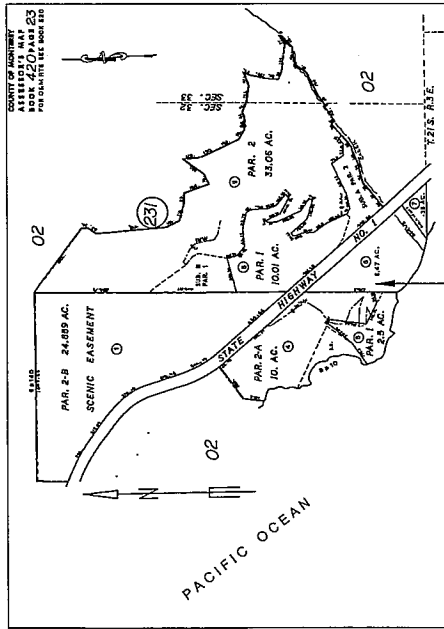


VICINITY MAP
SCALE AS SHOWN

- SHEET INDEX**
- SHEET 1 - TITLE SHEET
 - SHEET 2 - PROPOSED EASEMENT
 - SHEET 3 - SITE PLAN, DEBRIS WALL DETAIL & DRAINAGE IMPROVEMENT
 - SHEET 4 - CROSS SECTIONS
 - SHEET 5 - PLASTIC PIPE DOWNDRAIN AND CABLE ANCHORAGE SYSTEM DETAILS

REQUIRED INSPECTION NOTES:

Debris wall location to be approved by project Geotechnical Engineer.
Earthwork observation, and pier and foundation excavations to be inspected by project Geotechnical Engineer.
Drainage system placement and details to be inspected by project Civil Engineer.



DE YOUNG PROPERTY
A.P.N. 420-231-06
MONTEREY COUNTY, CA

ASSESSORS PARCEL MAP
SCALE: 1" = 400± FT

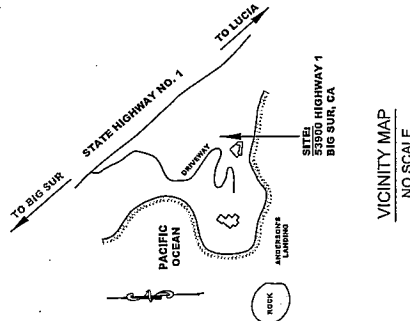
PROPERTY OWNER:
PATRICK DE YOUNG
(A portion of the work area is on a proposed easement to Peter Mullin)

SITE ADDRESS:
53900 Highway 1
Big Sur, CA 93920

PROJECT GEOTECHNICAL & CIVIL ENGINEERS:
John Kasunich, C.E. #55
HARO, KASUNICH & ASSOCIATES, INC.
118 East Lake
Watsonville, CA 95076
(831) 722-4175 Fax (831) 722-3202

PROJECT SURVEYORS:
Ryan Higgins, P.L.S. #229
C.E. #10
1011 Cedar St.
Santa Cruz, CA 95060
(831) 425-7533 Fax (831) 426-8192

EARTHWORK QUANTITIES:
Excavation: 120 cubic yards
Fill: 0 cubic yards
Contractor to verify quantities prior to bidding and construction.



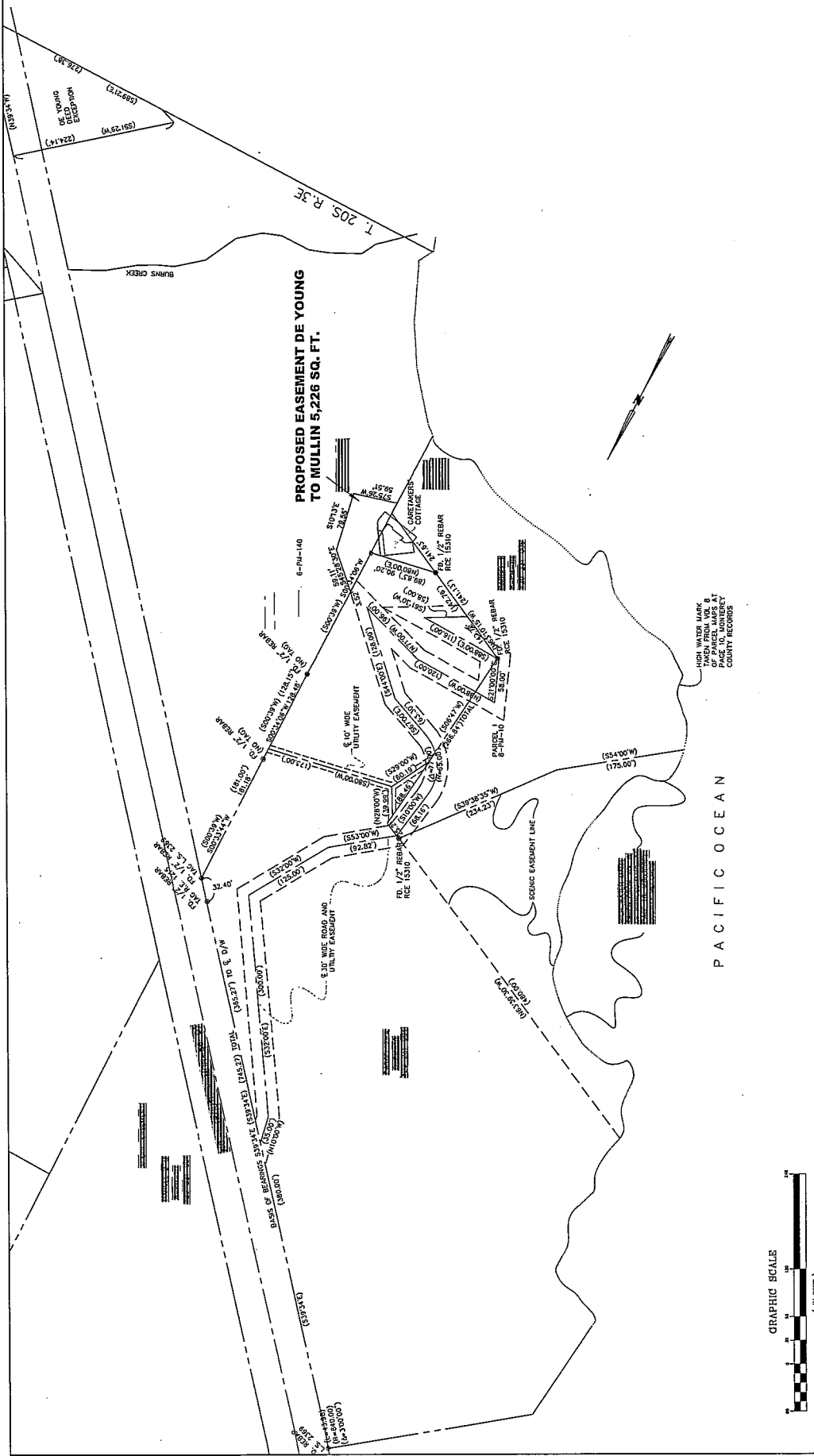
VICINITY MAP
NO SCALE

REVISIONS	BY

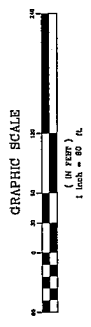
**PROPOSED EASEMENT
DE YOUNG PROPERTY, BIG SUR, MONTEREY COUNTY, CALIFORNIA
MONTEREY COUNTY A.P.N. 420-231-06**

HARO, KASUNICH AND ASSOCIATES, INC.
CONSULTING CIVIL, GEOTECHNICAL & COASTAL ENGINEERS
116 EAST LAKE AVE., WATSONVILLE, CA 95076 FAX (831) 722-1175

Date: 9-30-09
Scale: 1" = 60 FT
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Sheet: **2**
of 5 Sheets



PROPOSED EASEMENT
SCALE: 1" = 60 FT



DUNBAR & CRAIG 1101 GARDEN STREET SAN JOSE, CALIFORNIA 95128 (408) 435-0435	PROPOSED EASEMENT MULLIN/DE YOUNG A PORTION OF LOTS 8 & 7 IN SECTION 36, T12N, R12E, S10E MONTEREY COUNTY, CALIFORNIA
--	---

PROPOSED EASEMENT
SCALE: 1" = 60 FT

DEED REFERENCES:
DOCUMENT # 200308018 MULLIN
DOCUMENT # 200308018 DE YOUNG
LEGEND:
● INDICATES SURVEY MONUMENT, FOUND AS NOTED
() INDICATES RECORD DATA PER REFERENCE TABLE
ALL DISTANCES SHOWN ARE IN FEET AND DECIMALS THEREOF.

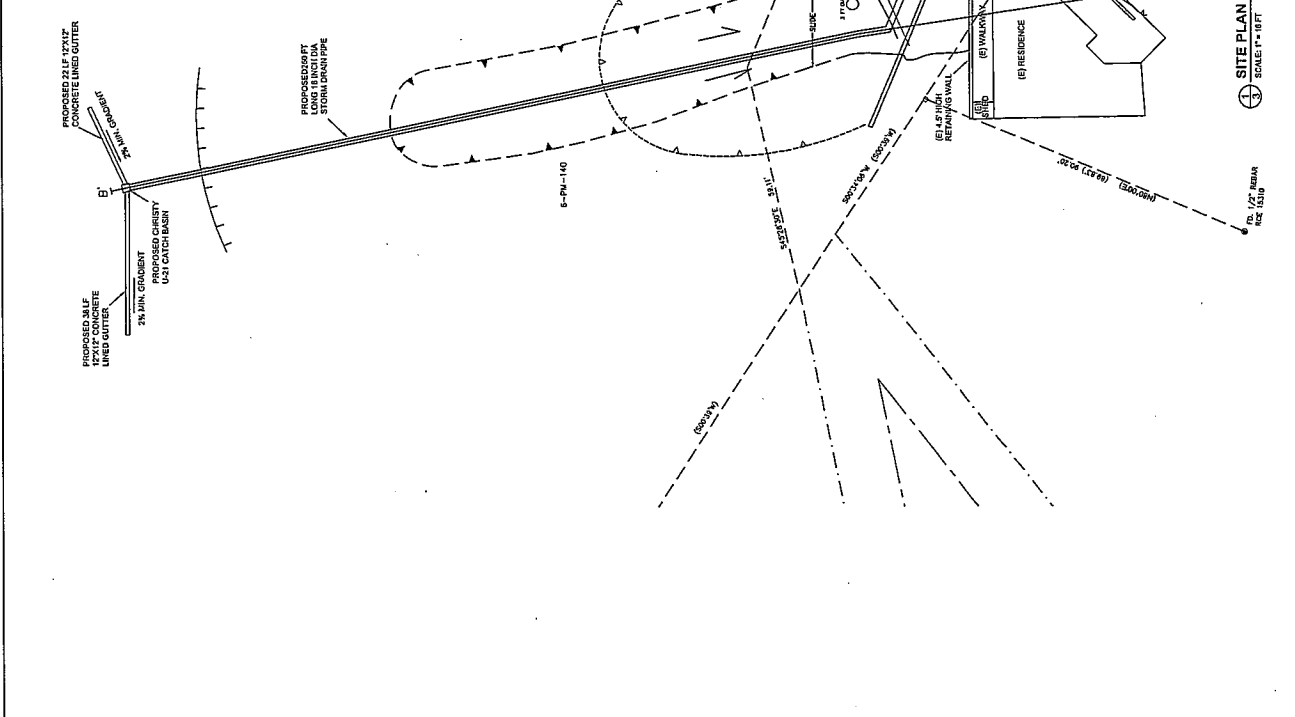
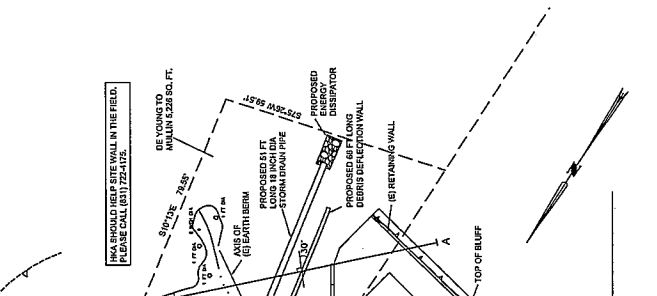
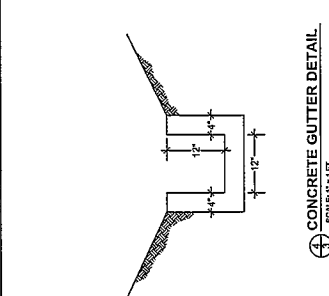
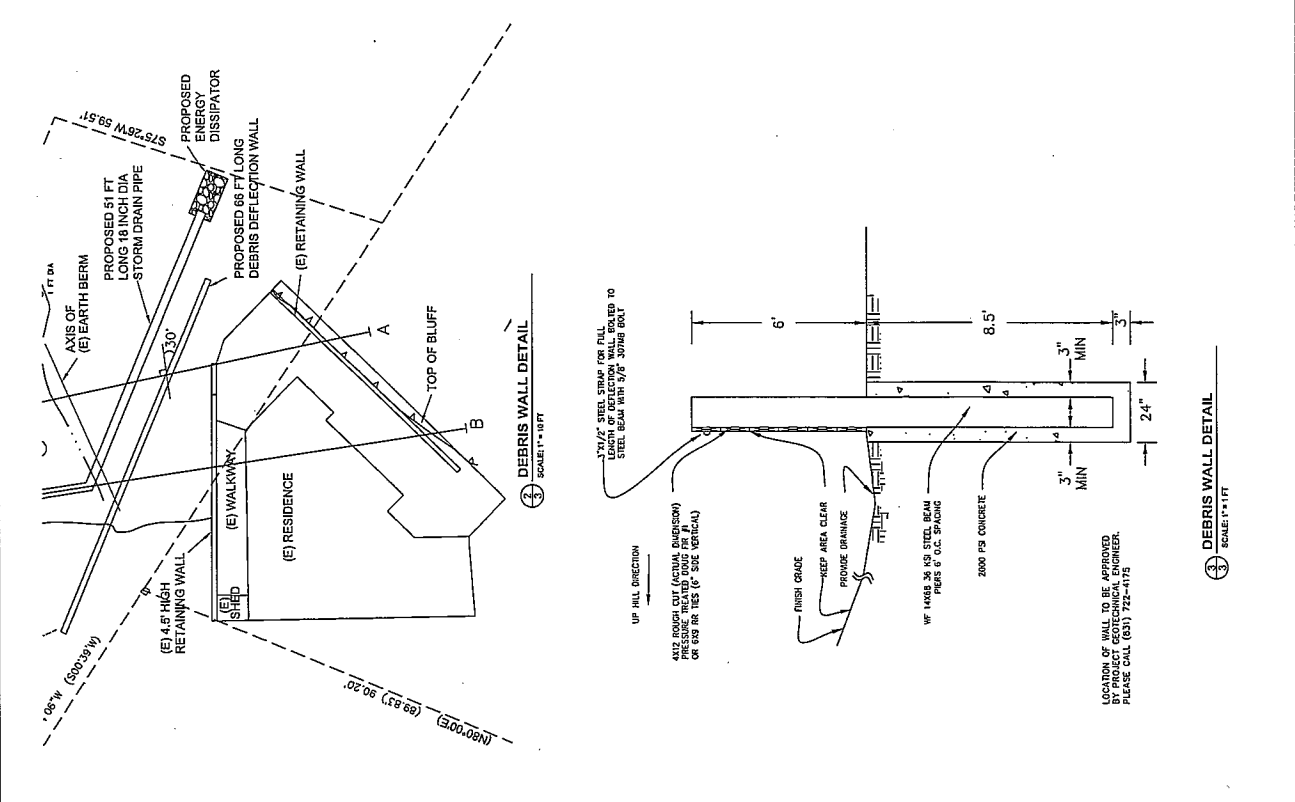
BASIS OF BEARINGS:
BEARINGS ARE BASED UPON THE MONUMENTARY
BEARINGS AS SHOWN ON THAT MAP
FILED IN VOLUME 8 OF PARCEL MAPS AT PAGE 10,
MONTEREY COUNTY RECORDS, AND
AND ESTABLISHED BETWEEN MONUMENTS FOUND
AS SHOWN
= SOUTH 39° 34' EAST

REVISIONS	BY

SITE PLAN, DEBRIS WALL DETAIL & DRAINAGE IMPROVEMENTS
DE YOUNG PROPERTY, BIG SUR, MONTEREY COUNTY, CALIFORNIA
MONTEREY COUNTY A.P.N. 420-231-06

HARO, KASUNICH AND ASSOCIATES, INC.
 CONSULTING CIVIL, GEOTECHNICAL & COASTAL ENGINEERS
 116 EAST LAKE AVE., WATSONVILLE, CA 95076
 FAX (831) 722-4175

DATE: 9-30-09
 SCALE: AS SHOWN
 DRAWN: MF
 JOB: 031
 SHEET: 3
 OF 5 SHEETS

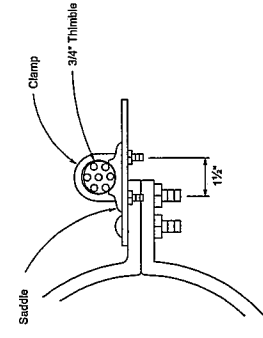


REVISIONS BY

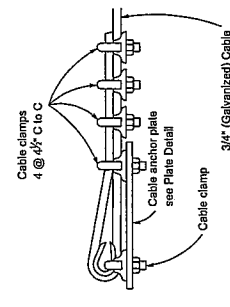
PLASTIC PIPE DOWNDRAIN AND CABLE ANCHORAGE SYSTEM DETAILS
 DE YOUNG PROPERTY, BIG SUR, MONTEREY COUNTY, CALIFORNIA
 MONTEREY COUNTY A.P.N. 420-231-06

HARO, KASINICH AND ASSOCIATES, INC.
 CONSULTING CIVIL, GEOTECHNICAL & COASTAL ENGINEERS
 116 EAST LANE AVE, WATSONVILLE, CA 95076
 FAX: (408) 722-1175

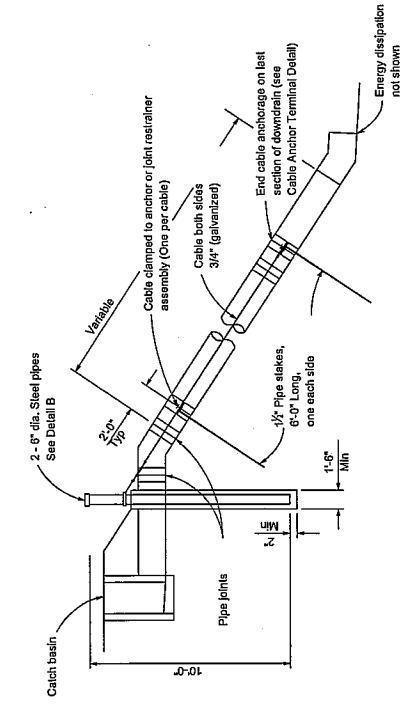
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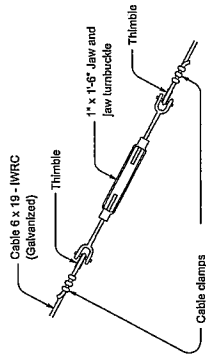
END VIEW



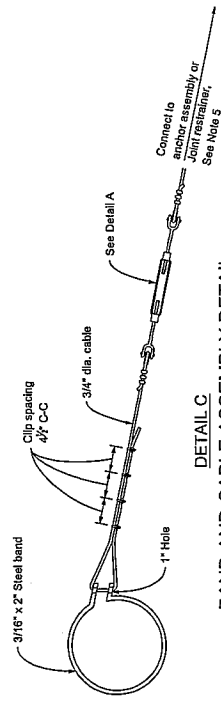
CABLE ANCHOR TERMINAL DETAIL



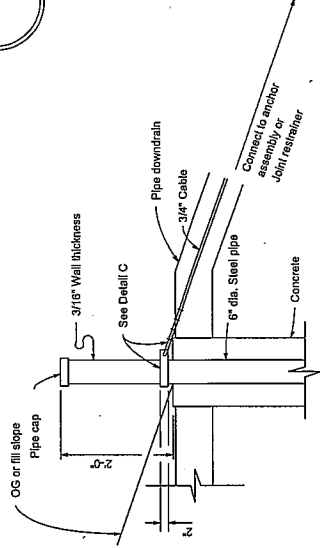
CABLE ANCHORAGE SYSTEM



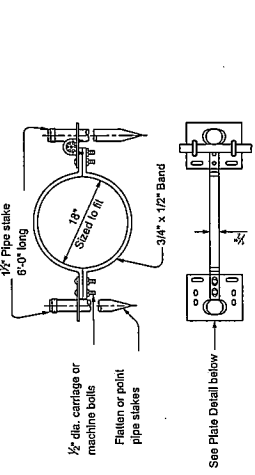
DETAIL A



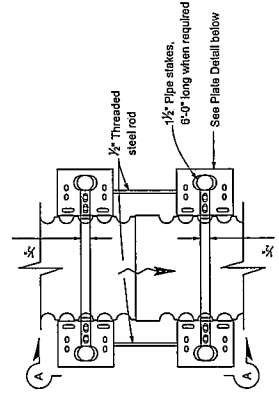
BAND AND CABLE ASSEMBLY DETAIL FOR CABLE ANCHORAGE SYSTEM



DETAIL B STEEL PIPE PILE DETAILS FOR CABLE ANCHORAGE SYSTEM

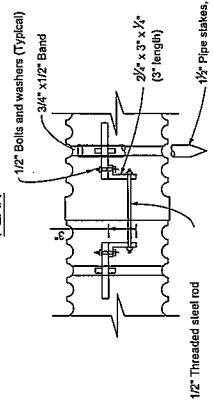


PLASTIC PIPE JOINT RESTRAINER ASSEMBLY Alternative A



Alternative B

PLAN



SECTION A-A PLASTIC PIPE JOINT RESTRAINER ASSEMBLY

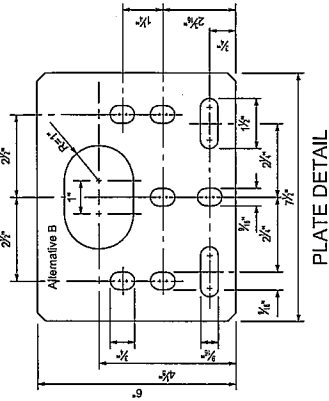


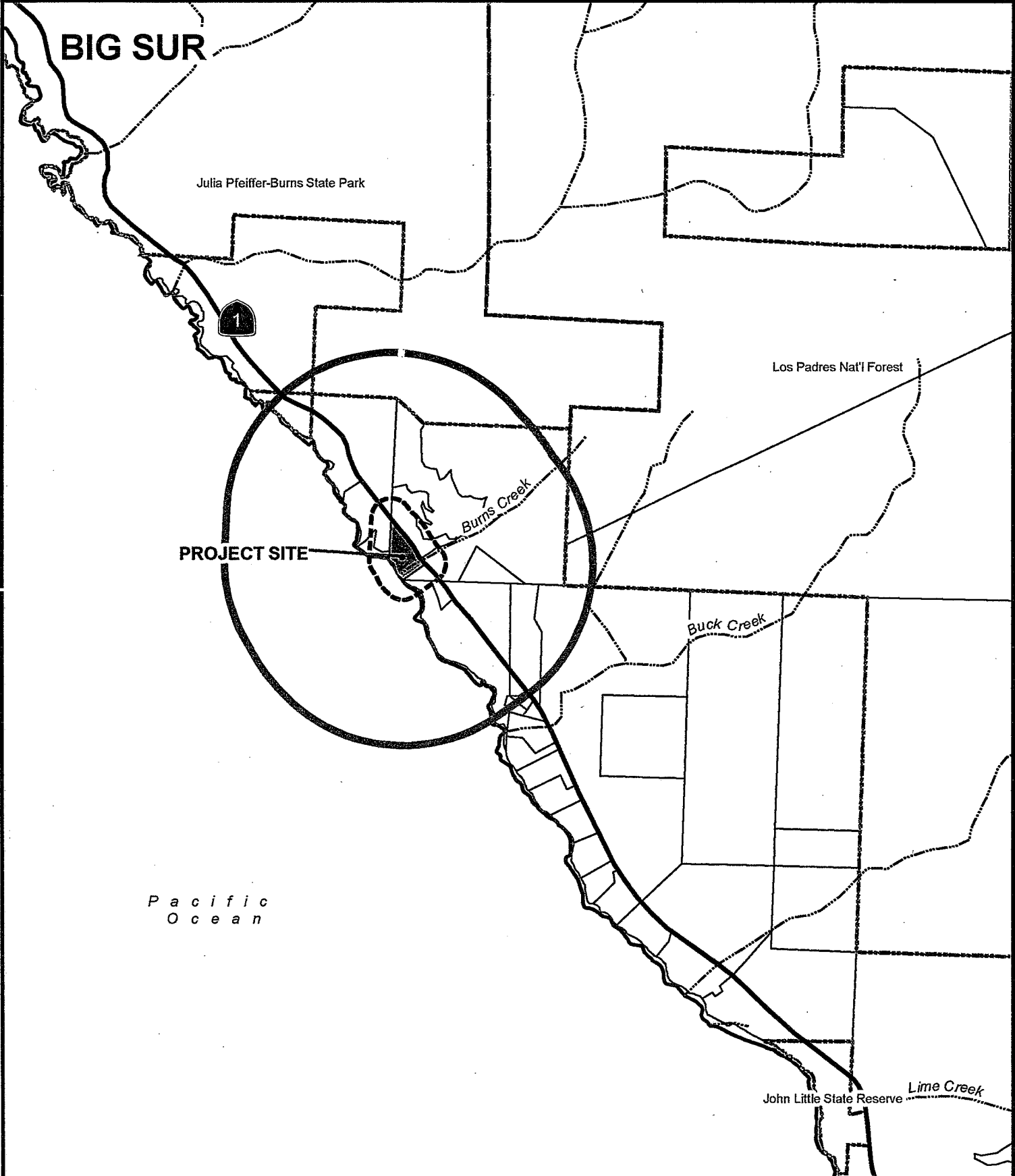
PLATE DETAIL

- NOTES:**
- All hardware to be galvanized after fabrication. All pipe stakes to be either galvanized after fabrication, or be fabricated from pre-galvanized pipe. If pre-galvanized pipe is used, weld areas shall be cleaned, and painted with zinc-rich primer.
 - Pipe stakes to be used with joint restrainer.
 - Plastic pipe and fillings used for overside drains shall be from one manufacturer for each installation.
 - For cable anchors, 3/4" cable is required for a pipe down drain diameter of 18".
 - Cable shall not contact soil in finished position. Either adjust position, or replace affected portion of cable with galvanized

EXHIBIT D
VICINITY MAP

PLN090421 – DeYoung (Mullin)

Zoning Administrator
March 25, 2010



APPLICANT: DE YOUNG

APN: 420-231-006-000

FILE # PLN090421

 300' Limit
 2500' Limit
 City Limits
 Water

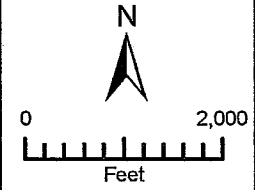


EXHIBIT E
ADVISORY COMMITTEE MINUTES

PLN090421 – DeYoung (Mullin)

Zoning Administrator
March 25, 2010

Action by Land Use Advisory Committee Project Referral Sheet

Monterey County Planning Department
168 W Alisal St 2nd Floor
Salinas CA 93901
(831) 755-5025

Advisory Committee: South Coast

Please submit your recommendations for this application by: **January 12, 2010**

RECEIVED

JAN 14 2010

Project Title: DE YOUNG PATRICK L SR TR
File Number: PLN090421
File Type: PC
Planner: SIDOR
Location: 53900 HWY 1 BIG SUR

**MONTEREY COUNTY
PLANNING & BUILDING
INSPECTION DEPT.**

Project Description:

Combined Development Permit consisting of: 1) a Coastal Administrative Permit for construction of a 66 linear foot debris deflection wall; 2) a Coastal Development Permit to allow development within 50 feet of a coastal bluff; 3) a Coastal Development Permit to allow development within 100 feet of environmentally sensitive habitat; 4) a Coastal Development Permit to allow development on slope greater than 30 percent; and 5) a Design Approval. The property is located at 53900 Highway 1, Big Sur (Assessor's Parcel Number 420-231-006-000), Coastal Zone. Related to PLN090402.

Was the Owner/Applicant/Representative Present at Meeting? Yes _____ No ✓

PUBLIC COMMENT: *NONE*

Name	Site Neighbor?		Issues / Concerns (suggested changes)
	YES	NO	

LUAC AREAS OF CONCERN

Concerns / Issues (e.g. site layout, neighborhood compatibility; visual impact, etc)	Policy/Ordinance Reference (If Known)	Suggested Changes - to address concerns (e.g. relocate; reduce height; move road access, etc)

ADDITIONAL LUAC COMMENTS

RECEIVED

JAN 14 2010

MONTEREY COUNTY
PLANNING & BUILDING
INSPECTION DEPT.

RECOMMENDATION :

Motion by: HARRY HARRIS (LUAC Member's Name)

Second by: LEN MARLAN (LUAC Member's Name)

- Support Project as proposed
- Recommend Changes (as noted above)
- Continue the Item

Reason for Continuance: _____

Continued to what date: _____

AYES: 3

NOES: 0

ABSENT: 0

ABSTAIN: 0

EXHIBIT F
TECHNICAL REPORTS

PLN090421 – DeYoung (Mullin)

Zoning Administrator
March 25, 2010

BIOLOGICAL ASSESSMENT

With Erosion Control and Restoration Recommendations

Landslide Debris Wall and Drainage Improvements

APN 420-231-006, Patrick De Young property
APN 420-231-004 and 005, Peter Mullin property

Burns Creek, Big Sur

Prepared By:

Nicole Nedeff, Consulting Ecologist
11630 McCarthy Road
Carmel Valley, CA 93924
831.659.4252
nikki@ventanaview.net

Prepared For:

Peter Mullin
c/o Christine Kemp
Noland, Hamerly, Etienne and Hoss
P.O. Box 2510
Salinas, CA 90017

November 23, 2009

PROJECT PROFILE

DATE: November 23, 2009

PREPARED BY: Nicole Nedeff

SITE VISIT: October 26, 2009 and October 30, 2009

SITE NAME: De Young and Mullin

APN: 420-231-006, 420-231-005 and 420-231-004

PHYSICAL ADDRESS: 53900 Highway One, Big Sur, CA 93920.

ACREAGE: Less than 0.5 acre in potential project area.

USGS QUAD: Partington Ridge USGS 7.5' quad. T20S, R3E, section 32.

OWNER: Patrick De Young, 425 Lambert Road, Carpinteria, CA 93013.

PROJECT APPLICANT: Peter Mullin, c/o Christine Kemp; Noland, Hamerly, Etienne and Hoss, P.O. Box 2510, Salinas, CA 93901. 831.424.1414, ext. 271.

MONTEREY COUNTY PLANNING AREA: Big Sur Coast Land Use Plan Area. Planner, Joe Sidor.

ZONING/PRESENT LAND USE: Property in the project area is zoned WSC/40 (CZ); Watershed Scenic Conservation, with maximum gross density of 40 acres/unit, Coastal Zone. Both parcels in the project area have residential structures and outbuildings and are similar to other developed parcels in this region along the Big Sur south coast. Access driveways off Highway 1 are paved.

SITE LOCATION: The project area is located on the coastal side of Highway 1 in Big Sur immediately north of Burns Creek and approximately 38 miles south of the Highway One/Rio Rd. intersection in Carmel. The proposed project involves two adjoining parcels on properties owned by Patrick De Young and Peter Mullin.

PROJECT DESCRIPTION: An emergency landslide debris wall, storm drain pipe and gutter system is proposed to be located on property owned by Patrick De Young. The project will benefit improvements on the adjoining down-slope parcel owned by Peter Mullin. Storm water runoff from Highway 1 will be channeled into a new storm drainage system over a steep, unstable slope on the De Young property that failed during the winter of 2006. Storm water runoff will be directed into an erosional feature near the Mullin caretaker unit. Landslide debris will be excavated and placed within horse corrals located on the Mullin parcel and a debris deflection wall will be installed at the base of the former landslide to protect the residence below from future mud flows.

HABITAT IN PROJECT SITE: Northern Coastal Scrub, Arroyo Willow Riparian, stands of Monterey pine and eucalyptus, and lawn with landscaped gardens.

SIGNIFICANT BIOLOGICAL FEATURES IN PROJECT AREA:

- ✓ Arroyo Willow Riparian
- ✓ Marine elements, Monterey Bay National Marine Sanctuary
- ✓ Slopes over 30 percent

All areas on the De Young and Mullin parcels within and near the proposed project site were surveyed for special status plants, animals and natural communities.

No occurrences of special status species protected under federal, state or local regulations were observed in the project footprint.

The proposed project on portions of APN 420-231-004, APN 420-231-005 and APN 420-231-006 will have a Less Than Significant Impact on locally significant biotic features and special status species protected by local, state or federal regulations.

BIOLOGICAL ASSESSMENT

APN 420-231-006 (De Young) and APN 420-231-004, 005 (Mullin)

I. INTRODUCTION

I was contacted in October 2009 by Christine Kemp on behalf of Big Sur property owner Peter Mullin and asked to prepare a Biological Assessment pursuant to the installation of emergency drainage and landslide protection improvements. The goal of the proposed project is to collect storm water drainage off Highway 1 from culverts and pipes on the neighboring Patrick De Young property and transport this runoff downslope in a new pipeline to a natural drainage channel on the De Young property. In addition, construction of a debris deflection wall on the De Young property is proposed to divert potential future landslide material away from a residential structure on the Mullin parcel.

During the winter of 2006, a long, narrow section of the steep hillside below the De Young residence failed and flooded the Mullin caretaker unit with water, mud and debris. The roof and back wall of the caretaker structure were heavily damaged - the caretaker and her family inside the cabin were not injured during the landslide. The steep hillside on the De Young parcel above the Mullin caretaker residence continues to be unstable and threatens improvements on the Mullin property. Recent slope failure above the Mullin caretaker unit occurred again during heavy rains on October 13 and 14, 2009. The proposed project will upgrade the drainage system currently in place on the De Young property and is required in order to protect the Mullin caretaker residence from being damaged again by potential future landslides.

This Biological Assessment describes environmental conditions and evaluates potential impacts to biotic elements that may result from the construction of a concrete gutter, storm water drain and landslide deflection wall on the steep slope below the De Young residence. The Biological Assessment also offers recommendations for the work in the Coastal Zone where the emergency landslide protection project is located. Suggestions include recommended actions to eliminate or reduce potential soil erosion during and after construction. Erosion control recommendations are complimentary to habitat protection measures and to site restoration strategies presented in the report.

The proposed landslide debris wall and drainage project includes:

- Removal of slide debris deposited in 2006. Debris will be placed either over the existing Mullin horse corrals or trucked off-site for appropriate disposal. Engineering site plans note that 120 cubic yards of excavation is expected.
- Construction of a gutter and catch basin on the De Young property at the edge of a landscaped area above the landslide.
- Replacement of the bottom section of the corrugated plastic drain system on the De Young parcel with a 260-foot, 18-inch diameter storm drain pipe that extends downslope over the former landslide area and then angles for an additional 51 feet to an energy dissipater at the head of a small natural drainage channel.

- Installation of a 66-foot long and 6-foot high debris deflection wall on the De Young property above the Mullin caretaker unit.
- Construction staging and materials storage on the Mullin property along the paved driveway, on the large flat terrace below the entry gate, and near the caretaker residence.

All areas on the De Young and Mullin parcels within and near the proposed project site were surveyed for special status plants, animals and natural communities.

No occurrences of special status species protected under federal, state or local regulations were observed in the project footprint.

The storm drain pipe will extend down a 35 degree slope (approximately 70 percent grade) and will end at an energy dissipater upstream of a small area of Arroyo Willow Riparian habitat situated at the head of a rocky, ephemeral drainage channel. Riparian areas are considered Environmentally Sensitive Habitat in the Big Sur Coast Land Use Plan (1986) and regarded as rare and biologically valuable. If the recommendations outlined in this report are followed, there will be biological impact to the Arroyo Willow Riparian habitat.

The project area is located above Pacific near shore waters where the federally threatened southern sea otter and other marine elements protected in the Monterey Bay National Marine Sanctuary may be present. If the recommendations outlined in this report are followed, there will be biological impact to the southern sea otter or the Monterey Bay National Marine Sanctuary.

Several individual monarchs were seen flying on site during both field survey visits. Monarch butterflies are not federal or state-listed species, however the Big Sur Land Use Plan (LUP) identifies mass over-wintering sites where the butterflies congregate in clusters as Environmentally Sensitive Habitat (Section 3.3) to be protected with 100-foot setbacks. The Department of Fish and Game's California Natural Diversity Database and the Ventana Wilderness Society map and track winter roosting locations because the species has experienced dramatic declines in population size. Groves of Monterey pine and eucalyptus on the Mullin and De Young properties have not been identified as mass over-wintering roosts of Monarch butterflies. No mass roosting of butterflies was observed on either the De Young or the Mullin parcels.

Recommendations are suggested in the following text to protect biological resources, both during and after construction of the drainage system and debris deflection wall. All work will occur on the De Young parcel. Construction staging and access to the debris wall area will occur on the Mullin parcel. Placement of excavated landslide debris may occur in the Mullin horse corrals.

If suggestions noted in the following report are employed, the installation of a new drainage system and debris deflection wall will not affect natural resources or special status plants, wildlife and natural communities in any portion of the Big Sur Planning Area or the Monterey Bay National Marine Sanctuary.

II. SURVEY METHODS

Local maps, written references and consultations with knowledgeable individuals were used during the preparation of this Biological Assessment. Botanical and wildlife surveys were conducted in the project area on October 26 and October 30, 2009.

The California Department of Fish and Game Natural Diversity Database (CNDDDB) maps and computerized data for the vicinity of Burns Creek (Partington Ridge and Lopez Point quadrangles) were consulted prior to the October 26, 2009 site visit. The project area and immediate surroundings on both the Mullin and De Young parcels were surveyed on foot for the sensitive habitats and potential occurrences of special status species listed in Table 1, which details the locally significant plants and animals known from the project locale. Most of species included in Table 1 are documented by the CNDDDB as occurring in the general vicinity of the Mullin and De Young parcels.

Appropriate habitats for Hutchinson's larkspur, Cone Peak bedstraw, California red-legged frog, steelhead and most of the reptiles and amphibians noted on Table 1 were not found in the project area. No Monarch butterfly winter roost sites were observed in Monterey pine or eucalyptus groves around the work areas. Black swift, double-crested cormorant and peregrine falcon were not observed on offshore rocks, in near shore waters, or in flight around the project area. Nesting sites for these birds may occur on portions of the rocky bluffs below and adjacent to the work area, but were not documented on or near the steep hill slope where the new drainage system and debris wall are proposed.

A plant list of species observed in the project area is attached as Table 2.

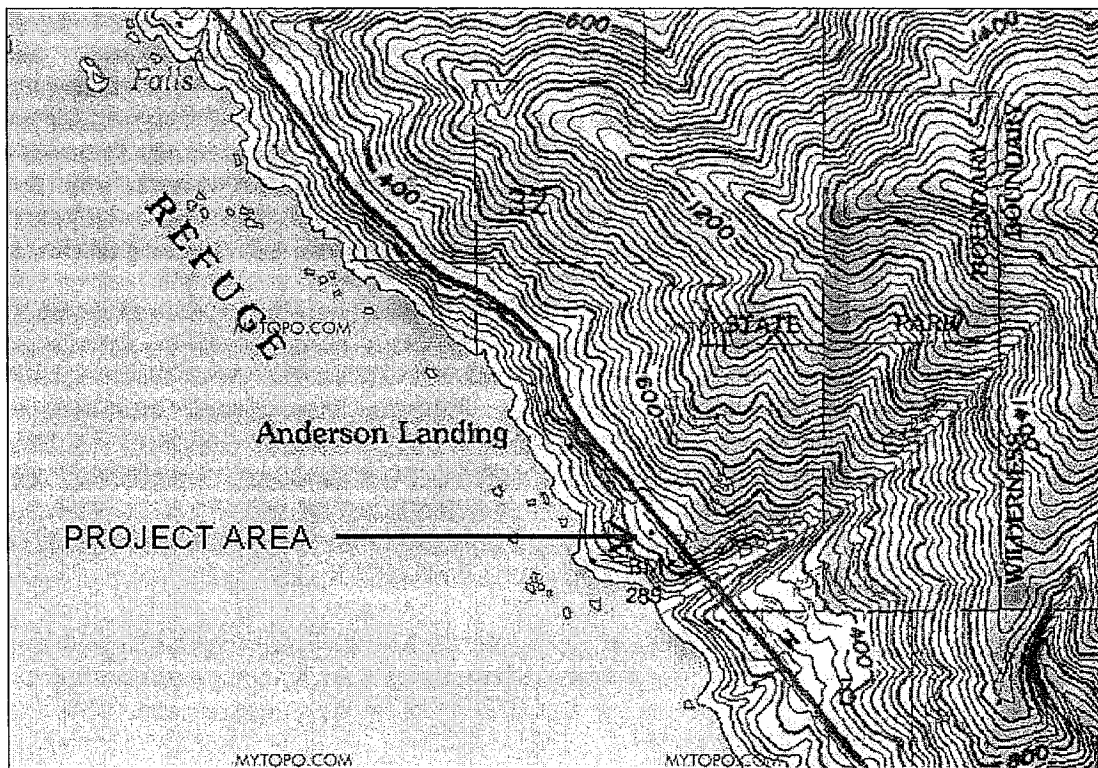


FIGURE 1 - Project Area.

TABLE 1

STATE, FEDERAL and CALIFORNIA NATIVE PLANT SOCIETY STATUS FOR
SIGNIFICANT PLANTS and WILDLIFE IN THE VICINITY OF APN 420-231-004 and 006

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>Federal</u>	<u>STATUS</u> <u>State</u>	<u>CNPS</u>	<u>PREFERRED</u> <u>HABITAT</u>	<u>FOUND or</u> <u>NOT FOUND</u>
PLANTS						
<i>Delphinium hutchinsoniae</i>	Hutchinson's larkspur	SC		1B	C,CP,CS MEF,	NOT FOUND
<i>Galium californicum</i> ssp. <i>luciesne</i>	Cone Peak bedstraw	SC		1B	MEF,MCF above 3000'	NOT FOUND
<i>Sidalcea malachroides</i>	Maple-leaved checkerbloom			1B	RF,MEF	NOT FOUND
ANIMALS						
Invertebrates						
<i>Danus plexippus</i> (roosts)	Monarch butterfly mass winter roosts				euc., pine, RW groves	NOT FOUND
<i>Euphilotes enoptes smithi</i>	Smith's blue butterfly	E			NCS, CS	NOT FOUND
Reptiles and Amphibians						
<i>Anniella pulchra pulchra</i>	California legless lizard		SC		sandy soil	NOT FOUND
<i>Clemmys marmorata</i>	Western pond turtle		CP, SC		creeks, ponds	NOT FOUND
<i>Phrynosoma coronatum frontale</i>	California horned lizard		CP,SC		G,C,MEF	NOT FOUND
<i>Rana aurora draytonii</i>	California red-legged frog	T	FP,SC		ponds, creeks with pools	NOT FOUND
<i>Rana boylei</i>	Foothill yellow-legged frog	SC,FSS	CP,SC		creeks with pools	NOT FOUND
<i>Taricha torosa torosa</i>	Coast Range newt		SC		creeks with pools, ponds	NOT FOUND
<i>Thamnophis hammondi</i>	Two-striped garter snake	FSS	SC		riparian habitat	NOT FOUND

TABLE 1 - CONTINUED

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>Federal</u>	<u>STATUS</u> State	<u>CNPS</u>	<u>PREFERRED HABITAT</u>	<u>FOUND or NOT FOUND</u>
Mammals						
<i>Neotoma fuscipes luciana</i>	Monterey dusky-footed woodrat	SC	SC		NCS, OW, riparian	NOT FOUND
<i>Enhydra lutris nereis</i>	southern sea otter	T			nearshore waters	NOT FOUND POTENTIAL
Birds						
<i>Cypseloides niger</i>	Black swift		SC		cliffs	NOT FOUND
<i>Falco peregrinus anatum</i>	Peregrine falcon		E		cliffs, bridges	NOT FOUND
<i>Phalacrocerax auritus</i>	Double-crested cormorant		SC		cliffs, off-shore rocks	NOT FOUND

Abbreviations for Status Codes

- E = Endangered
- T = Threatened
- SC = Species of Special Concern
- CP = Protected under California Code of Regulations
- FP = Protected under California Fish and Game Codes
- FSS = Forest Service Sensitive Species
- 1B = CNPS List 1B, Plants rare, threatened or endangered in California and elsewhere

Habitat Abbreviations

- C = Chaparral
- G = Grassland
- CP = Coastal Prairie
- CS = Coastal Scrub
- NCS = Northern Coastal Scrub
- RW = Redwood Forest
- OW = Oak woodland
- MEF = Mixed Evergreen Forest
- MCF = Mixed Coniferous Forest

III. SITE DESCRIPTION

The De Young and Mullin properties are located on the rugged Big Sur coastline immediately north of Burns Creek and south of the historic Anderson's Landing. The properties are in the Monterey County Big Sur Coastal Planning Area and subject to provisions of the Big Sur Coast Land Use Plan (Certified 1986). Land use and development activities in the Big Sur Coast Land Use Planning Area are regulated by the Monterey County Coastal Implementation Plan, Part 3 (1988).

The project area is identified on Figure 1, a portion of the United States Geological Survey Partington Ridge 7.5' quadrangle. The De Young residential area is perched on a west-facing bench below Highway One. The primary structures and garden areas are situated at the top edge of a steep hill slope which angles approximately 200 linear feet and 140 vertical feet down to the back of the residence used by the Mullin caretaker.

East of the work area and beyond neighboring rural properties aligned along Highway 1, the rugged Santa Lucia Range extends to elevations peaking over 5000 feet in the adjacent Ventana Wilderness of the Los Padres National Forest. This region of the young, tectonically active Big Sur Coast is characterized by diverse geologic types, unstable soils and vegetation mosaics reflecting substrates and microclimates that change dramatically over short distances.

The proposed work is situated across an approximately 145-foot elevational range, from gutters at the top to the energy dissipater at the end of the drainage pipe. Slopes vary from nearly flat at the De Young gardens to 70 percent grade along the proposed route of the drainage pipe. Engineering site plans and detail drawings (September 30, 2009) for the "Proposed Debris Wall and Drainage Improvements" were provided by John Kasunich of Haro, Kasunich and Associates, Watsonville, CA. The general project area can be seen on aerial oblique photographs available on the website of the Coastal Records Project, courtesy of Ken Adelman (<http://www.californiacoastline.org>). On the website, photograph 1756 is from September 2002, photograph 200508841 is from October 2005, and photograph 200806311 is from September 2008.

A. VEGETATION:

- The proposed concrete lined gutter and catch basin are situated at the lowest elevation edge of the De Young residential area on a narrow, flat terrace in a managed landscape with lawns and gardens.
- The alignment of the new proposed drainage pipe follows the natural angle of the steep slope downhill from the catch basin through native Northern Coastal Scrub habitat to the location of the debris deflection wall above the Mullin caretaker unit.
- The end of the drainage pipe and the lowest elevation of the deflection wall are positioned at the upstream margin of a small Arroyo Willow Riparian thicket, which hugs the profile of a bedrock erosional feature for a short distance along the steep slope before plunging across open rocky bluffs to the ocean below.
- Access to the debris wall construction site and the landslide debris proposed for removal will occur by traversing across a slope vegetated with weedy, invasive species under a canopy of planted Monterey pine and eucalyptus.

- Landslide debris may be placed over the sparsely vegetated surface of the Mullin horse corrals.
- Construction staging is proposed for unvegetated driveway edges and the flat, grassy terrace below the Mullin entry gate.

1. NATURAL COMMUNITIES:

Northern Coastal Scrub: The entire steep hillslope in the project area below the De Young gardens supports Northern Coastal Scrub habitat, which is characterized by low, dense shrub cover dominated by coast sagebrush (*Artemisia californica*), poison oak (*Toxicodendron diversilobum*), lizard-tail (*Eriophyllum staechadifolium*), coyote brush (*Baccharis pilularis*), deerweed (*Lotus scoparius*), sticky monkey-flower (*Mimulus aurantiacus*), coffeeberry (*Rhamnus californica*) and occasional black sage (*Salvia mellifera*). Seacliff buckwheat (*Eriogonum parvifolium*) often occurs in the mosaic of Coastal Scrub shrubs on the Big Sur coast, however this buckwheat species (the host plant for the federally endangered Smith's blue butterfly, *Euphilotes enoptes smithi*) was not observed in the project work area or the immediate vicinity.

Much of the shrub canopy in the project work area is loosely blanketed by morning glory vines (*Calystegia macrostegia* ssp. *cyclostegia*) and blackberry brambles (*Rubus ursinus*). Clumps of invasive, non-native pampas grass (*Cortaderia jubata*) and scattered French broom (*Genista monspessulana*) also occur in the matrix of native shrubs found on the unstable slope. Blue gum eucalyptus seedlings (*Eucalyptus globulus*) and a few larger isolated eucalyptus trees have colonized on the steep slope above the caretaker unit.

Eucalyptus, pampas grass and genista recruit easily on disturbed soils in otherwise natural habitat areas and the 2006 landslide scar on the Mullin property now supports these undesirable species. The 2005 Coastal Records Project aerial oblique photo clearly depicts two large patches of pampas grass immediately southeast of the project area - these large weedy areas do not occur on the earlier 2002 photograph. The two patches of pampas grass appear to have colonized shallow slope failures that occurred during the intervening years between 2002 and 2005 and speak to the unstable nature of the slopes in the project vicinity.

The highly invasive, non-native and toxic sticky eupatorium (*Ageratina adenophora*) was also noted on landslide debris in the project area. Like many other weedy species in the Big Sur region, this pernicious plant aggressively moves into disturbed soils to the detriment of the native plant cover.

Arroyo Willow Riparian: The small thicket of riparian vegetation at the terminus of the proposed debris deflection wall and drainage pipe is dominated by shrubby arroyo willow trees (*Salix lasiolepis*). At least one California bay (*Umbellularia californica*) also occurs in the canopy over rocky terrain where discontinuous patches of wood mints (*Stachys bullata*), poison oak (*Toxicodendron diversilobum*) and wood ferns (*Dryopteris arguta*) occur. The very narrow, steep, rocky channel bottom of the natural drainage where the riparian thicket grows is now clogged with mud and landslide debris which moved downslope and into the drainage channel during recent slope failure on October 13 or October 14, 2009. The Arroyo Willow Riparian area is confined to the short upper section of the steep, rocky natural drainage below the landslide-prone slope south of the Mullin caretaker unit. The natural erosional feature supports seasonal flow in response to rainfall events. The channel was dry when surveyed in late October 2009, however localized soil conditions at the head of the "gully" are moist enough to maintain the willow thicket.

2. PLANTED AREAS:

Stands of Monterey Pine and Eucalyptus: Both the Mullin and De Young properties support small stands of planted Monterey pine and eucalyptus. These trees were possibly planted to serve as visual and/or wind screening. Pines and eucalyptus in the project vicinity have expanded their distribution beyond their original planting areas by recruiting into appropriate nearby Coastal Scrub habitat, particularly where soils have been destabilized. Although Monterey pine is native to the Central Coastal area of California, it is not a native species in the Big Sur region.

Along the Big Sur coast, groves of eucalyptus, redwood (*Sequoia sempervirens*), Monterey cypress (*Cupressus macrocarpa*) and Monterey pine (*Pinus radiata*) that are protected from prevailing westerly winds and have nearby water and nectar sources, are known to support over-wintering roosts for the brilliantly colored Monarch butterfly (*Danus plexippus*). Monarch butterfly mass over-wintering sites are not listed by any federal or state agency as protected, however these roosts are recognized as Environmentally Sensitive Habitat in the Big Sur Land Use Plan. Documented winter roost sites of Monarchs have been noted at Esalen and at Big Creek Reserve south of the proposed project site. The project vicinity is not identified on biological element maps produced by the California Natural Diversity Database (CNDDDB) as a Monarch over-wintering area despite the presence of potentially appropriate habitat. Monarchs are generally present in winter roosting areas between mid-October and March.

The solitary eucalyptus trees present in the project work area do not provide appropriate over-wintering habitat for Monarch butterflies, as these single trees do not enjoy the protection a grove of trees might offer fragile butterflies from prevailing westerly winds. The small grove of pines in the vicinity of the Mullin horse corrals and the scattered pines and eucalyptus in the zone where access to the work area will occur do not provide Monarch butterfly over-wintering habitat at the present time likely because these areas are also too exposed to strong westerly winds blowing off the Pacific.

Landscaped Zone: The proposed concrete lined gutter and catch basin at the top of the project work area will be situated at the edge of a small lawn on the De Young property. The nearly flat kikuyu grass lawn stops abruptly at the edge of the steep slope and the margin of Northern Coastal Scrub habitat. Gardens and horticultural plantings occur behind the lawn. Some horticultural species have managed to recruit into Coastal Scrub habitat at the upper edge of the steep slope, including vinca, myoporum and red hot poker aloe.

Other: The flat terrace below the Mullin entry gate will be used for staging vehicles, equipment and materials. This open area is composed of non-native annual grasses and kikuyu grass.

The equipment access route between the Mullin driveway and the debris wall area is very sparsely vegetated with weedy species and occasional native shrubs under a canopy of pine and eucalyptus.

The Mullin horse corrals are also situated under a canopy of pine and eucalyptus, however the only vegetation present is composed of weedy, invasive plants.

B. MARINE ELEMENTS and the MONTEREY BAY NATIONAL MARINE SANCTUARY:

The De Young and Mullin drainage and debris wall project area is perched above the active Pacific shore zone in the Monterey Bay National Marine Sanctuary. The Big Sur LUP (Policy 3.3.3.B, page 21) identifies shore zone marine habitats as Environmentally Sensitive Habitat areas. As

outlined in the LUP, shoreline developments should not impact marine resources along the Big Sur coastline.

It is possible that CNDDDB-listed bird species nest on the coastal bluffs of the Mullin parcel (see Table 1), however it is unlikely that Double-crested cormorant (*Phalacrocerax auritus*), Peregrine falcon (*Falco peregrinus anatum*), or Black swift (*Cypseloides niger*) utilize the steep Northern Coastal Scrub slopes in the project area for nesting sites - these species prefer open, rocky ledges. The upper project area is too well-vegetated with Coastal Scrub and the lower slope below the project area and Caretaker residence is so sheer that ledges and cavities that could not be surveyed. The October 2009 survey dates were not appropriate to observe nesting birds. Brandt's cormorant (*Phalacrocerax penicillatus*) was observed roosting on offshore islets near north of the project area in August 2003.

The Southern sea otter (*Enhydra lutris nereis*), a Federally Threatened species, may occur in the near shore waters below the project area. Sea otters feed on a variety of sessile invertebrates, including abalone and sea urchin, as well as mobile creatures like crabs and sea stars that probably inhabit marine niches along the rocky shore.

No construction work is proposed along the rocky shore zone. The proposed project area is several hundred feet above mean high tide, and although the steep slopes drop dramatically in elevation from the work site to the water's edge, near shore waters and sensitive species in the National Marine Sanctuary will be not be impacted by project implementation.

It is possible that debris may enter the National Marine Sanctuary during future landslide episodes and as the natural drainage below the project area flushes its current load of sediment. In the event of a repeat failure on the slope above the Mullin caretaker unit, the proposed deflection wall should direct landslide material towards the natural drainage channel and riparian area, rather than into the caretaker residence. The installation of appropriate storm water runoff catchment and drainage on the De Young parcel above should reduce the potential for future slope failure. The maintenance of vegetation in the Arroyo Willow Riparian area, as well as on the steep slopes and around the Mullin caretaker residence above the rocky bluffs will aid in filtering soil, mud and debris that could fall into Sanctuary waters during a landslide event.

C. SLOPES OVER 30 PERCENT:

Monterey County Planning and Building Department codes regulate developments proposed for steep slopes in excess of 30 percent. Portions of the proposed project will occur on steep slopes that are in excess of 30 percent. No slope measurements were taken during surveys for the Biological Assessment, however engineering site plans were used to calculate a slope of 35 degrees and 70 percent grade on the steep hill below the De Young lawn and gardens.

The concrete lined gutter and catch basin at the upper end of the project are proposed for the edge of a flat garden area at the top of the very steep, landslide-prone slope. The drainage pipeline will extend from the flat lawn area down the steep slope to the debris deflection wall, which is situated on a slightly sloped area behind the retaining wall supporting the back of the Mullin caretaker structure. Erosion, downslope sedimentation and the undermining of improvements are of paramount concern on slopes that are developed under these steep conditions.

Engineering specifications, site restoration and the careful monitoring of construction activities, as well as as-built conditions will insure that steep slopes in all portions of the proposed project area remain stable.

IV. GENERAL RECOMMENDATIONS AND SUGGESTED CONDITIONS

General Resource Management policies in the Big Sur Coast Land Use Plan note that,

Development, including vegetation removal, excavation, grading, filling, and the construction of roads and structures, shall not be permitted in the environmentally sensitive habitat areas if it results in any potential disruption of habitat value. To approve development within any of these habitats the County must find that disruption of a habitat caused by the development is not significant (3.3.2.1).

The proposed project on portions of APN 420-231-004 and APN 420-231-005 and 006 will have a Less Than Significant Impact on locally significant biotic features and special status species protected by local, state or federal regulations.

A. GENERAL:

1. Include Project Biologist in pre-construction meetings to communicate biotic concerns and share information regarding sensitive resources at the De Young and Mullin work site.
2. Conform to any conditions outlined in the Geological and/or Geotechnical Report that are required to maintain slope stability and eliminate erosion hazards in the project area. Evaluate geological and/or geotechnical conditions for potential impacts to sensitive biotic resources and prepare mitigation as necessary.
3. No loose material or vegetation shall be side-cast off the edge of the improved residential areas, from the Mullin driveway, or from any portion of the project work area.
4. Maintain an active and rigorous weed eradication program on both the De Young and Mullin properties to eliminate, or at least control invasive, non-native plant species. Attention should be focused on the project area after construction to remove eucalyptus seedlings, genista, pampas grass, sticky eupatorium and other undesirable invasive plants in the project area.
5. Provide irrigation as needed to seeded areas and restoration plantings during plant establishment period, up to three years after installation.
6. Monitor all restoration plantings twice a year for a three-year period after project completion. Maintain restoration sites in a weed-free condition and revegetate as needed if plantings fail. Restoration should promote naturally-sustained native Coastal Scrub vegetation that is not dependent on irrigation after plants are established.
7. Keep the gutter system, catch basin, base of the debris deflection wall and energy dissipater free of debris.
8. Maintain a dust-free environment, to the extent possible, by sprinkling disturbed soil during site preparation and construction activities.
9. Erosion prevention Best Management Practices should be utilized during all phases of construction.

B. SPECIFIC:

Potential biotic impacts associated with project implementation include:

- Temporary removal of Northern Coastal Scrub habitat.
- Damage to Arroyo Willow Riparian habitat.
- Habitat damage resulting from downslope movement of excavated soil, vegetative debris, water and slurry during construction.
- Erosion, weed recruitment and downslope sedimentation if erosion control and revegetation are not successful.

1 - Concrete lined gutter and catch basin.

RECOMMENDATION 1.1 - *Prepare Work Site.* Clearly identify margin of work area and remove overlying vegetation biomass and roots for appropriate reuse or disposal off-site. Salvage native plants to the extent possible and maintain in horticultural pots until site is ready to be restored. Encircle area where excavated soil and debris is stockpiled with fiber rolls that will be disposed of when soil and debris are removed. Control potential downslope movement of soil, vegetation, concrete slurry and water by securing biodegradable natural fiber rolls at upslope margin of Coastal Scrub habitat. Install removable silt-stop fencing above fiber rolls where bare soil is exposed. Remove former drain pipe.

RECOMMENDATION 1.2 - *Control Conditions During Construction.* Maintain down-slope silt fencing free of slurry sediment to the extent possible during concrete mixing and pouring. Remove collected slurry sediment and dispose of appropriately off-site and remove fencing when construction is complete. Replace fiber rolls if contaminated during construction - clean fiber rolls should be left in place to decompose after construction.

RECOMMENDATION 1.3 - *Revegetate and Restore.* After project completion, revegetate original area of lawn with similar grass (sod can be salvaged and reused). To the extent possible, remove invasive species and garden escapes from upper margin of native plant community (e.g. myoporum, genista, aloe) in the project area. Restore all exposed soil at margin of Coastal Scrub habitat with typical native plant species that were either salvaged during site preparation or propagated from local seeds or cuttings. Temporary soil cover of weed-free straw, jute netting and native grass seed is recommended over all exposed soil areas and should be installed concurrently with native plants. No vegetation is likely to grow or recruit on the backfilled trench where concrete grout is specified on the engineering site plans, so restoration plantings should be located in such a way that vegetation will grow over and mask the pipe alignment.

2 - New drain pipe.

RECOMMENDATION 2.1 - *Minimize vegetation removal and soil disturbance.* Cut minimal amount of vegetation required along pipe alignment and remove vegetative material for disposal. To the extent possible, maintain plant root systems intact so that soil is not loosened and plants can resprout after placement and anchoring of drain pipe to slope.

RECOMMENDATION 2.2 - *Revegetate.* Seed any exposed soils along the pipe alignment with a cover crop of native grasses and mulch with weed-free straw. If the pipeline alignment is grubbed to bare soil before placement of the pipe, cover the exposed area with anchored jute netting, install fiber rolls perpendicular to pipeline every eight to ten feet, seed and mulch before pipe is installed.

RECOMMENDATION 2.3 - *Address potential slope instability.* Although not part of the project description, consider cutting down and removing wood of the large isolated eucalyptus trees growing near the pipe alignment if it is determined that this provides a benefit to the overall project. Removing above-grade tree biomass and leaving roots and stumps in-place could reduce the potential for future slope failure in the event of treefall or landsliding. These isolated trees do not provide potential winter roosting habitat for Monarch butterflies and there would be no detrimental impact if these non-native trees are cut.

3 - Debris deflection wall and pipeline terminus.

RECOMMENDATION 3.1 - *Prepare work site.* Follow most of the recommended steps noted above in Mitigation 1.1. Clearly identify margin of work area and remove overlying vegetation biomass and roots for appropriate reuse or disposal off-site. Salvage native shrub plants to the extent possible and maintain in horticultural pots until site is ready to be restored. Remove excess soil and slide debris and do not undercut hill steeper than slide plane, as noted on engineering site plans. Control potential downslope movement of soil, vegetation, concrete slurry and water by securing natural fiber rolls at downslope margin of the work zone near the edge of the caretaker structure retaining wall and upstream of the Arroyo Willow Riparian thicket. Install removable silt-stop fencing above fiber rolls and remove when construction is complete.

RECOMMENDATION 3.2 - *Control Conditions During Construction.* Maintain down-slope silt fencing free of slurry sediment to the extent possible during concrete mixing and pouring of deflection wall supports. Remove collected slurry sediment and dispose of appropriately. Replace fiber rolls if contaminated with slurry. Plan to leave clean rolls in place after construction to reduce downstream sedimentation in riparian area. The use of creosoted railroad ties is not recommended for the debris deflection wall, as this wood preservative leaches chemicals into the environment as it decomposes.

RECOMMENDATION 3.3 - *Protect Arroyo Willow Riparian habitat.* With assistance from Project Biologist, place plastic snow-drift fencing or other appropriate barrier at upstream margin of willow thicket to prevent potential damage of riparian area during construction of the debris deflection wall and energy dissipater at the pipeline terminus. Place natural fiber rolls at base of fencing along cross section of rocky channel to prevent runoff of potentially contaminated water or slurry into the natural drainage. Fiber rolls and protective fencing can correspond with similar protective measures around work zone suggested above. Trimming of willow canopy branches is permissible, as this species readily resprouts.

4 - Construction access.

RECOMMENDATION 4.1 - *Minimize ground disturbance.* Identify clear and unobstructed corridors for equipment access and delivery of materials to all work areas so that disturbance of vegetation and soil is minimized. The likely corridor for access to the base of the landslide slope is sparsely vegetated with weedy shrubs and few native species. According to Project Engineer John Kasunich (personal communication), the work area at the base of the steep slope above the caretaker unit can be reached from the Mullin driveway by a "Minzie Muck" excavator-backhoe.

This specialized backhoe has four legs like an insect (rather than tracks or wheels) that minimize ground disturbance in constrained work areas. The minzie muck may be used for the removal of landslide debris, pipeline placement, trenching, steel beam installation and construction of concrete supports, as well as other construction activities.

RECOMMENDATION 4.2 - *Mulch and enhance.* When equipment is no longer needed, mulch exposed soil along access routes with weed-free straw or salvaged pine needle litter. To the extent possible, remove invasive, undesirable plants from the access corridor in the project area.

5 - Soil placement on corrals.

RECOMMENDATION 5.1 - *Reduce erosion potential and enhance.* Consider economics of trucking landslide debris and excess soil off-site. Although corrals on the Mullin parcel are not currently being used for livestock, this area has been previously cleared of vegetation and compacted by horses. If corrals are used for placement of excess soil, salvage pine needle duff for use as mulch. Outline the fill area with natural fiber rolls and slightly compact new soil cover once it is in place. Replace pine needle duff and supplement with weed-free straw to act as erosion control mulch. Mulch will have the secondary benefit of reducing potential for future weed infestation. To the extent possible, remove invasive, undesirable plants from the corral area prior to the placement of excavated material.

TABLE 2

PLANT TAXA OBSERVED IN PROJECT AREA

APN 420-231-004 and 006

October 26, 2009 and October 30, 2009

Trees:

Eucalyptus globulus, blue gum *

Pinus radiata, Monterey pine

Salix lasiolepis, arroyo willow

Umbellularia californica, California bay

Shrubs:

Artemisia californica, coast sagebrush

Baccharis pilularis, coyote brush

Eriophyllum staechadifolium, lizardtail

Genista monspessulana, French broom *

Myoporum *

Rhamnus californica, coffeeberry

Solanum species, nightshade (no flowers for positive identification)

Toxicodendron diversilobum, poison oak

Forbs, Grasses Vines and Ferns:

Ageratina adenophora, sticky eupatorium *

Calystegia macrostegia ssp. *cyclostegia*, coast morning-glory

Cortadaria jubata, pampas grass *

Dryopteris arguta, wood fern

Rubus ursinus, California blackberry

Stachys bullata, wood mint

Vinca major, periwinkle *

* designates a non-native, invasive plant

V. REFERENCES

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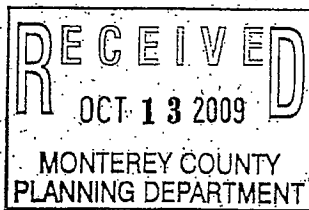
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Project No. M6365
31 March 2006

PETER MULLIN
c/o Cheri Gladstone
Highway 1
Burns Creek
Big Sur, California 93920

Subject: Debris Flow Protection Recommendations

Reference: Mullin and DeYoung Property
Burns Creek
Big Sur, California

Dear Mr. Mullin:

This report summarizes our recommendations for protection of future debris flows emanating from upslope of the headscarp of the December 2005 flow that could affect the Mullin caretaker unit. Previous letters from this office regarding the December 2005 debris flow at the referenced property include a letter dated 30 December 2005 and a letter, dated 24 January 2006. The latter letter included important upslope property drainage and deflection system recommendations regarding protection of the caretaker unit. It is of critical importance that the drainage and a deflection system be implemented this summer for proper protection of the caretaker unit and its residents. Without protection the structure and residents are at risk during heavy inclement rain weather.

Fieldwork was performed on 13 February 2006 to gain slope and area geometry to use in determining a proper debris flow protection system.

Extensive analysis of the resulting slope geometry gained from the fieldwork was performed. We analyzed numerous earthen berm and cantilever wall configurations for future debris deflection. Four site constraints had to be satisfied to select a viable deflection option:

1. Volume capacity – amount of area behind wall that could accommodate estimated debris volume.
2. Deflection of debris flow – the berm or wall had to be positioned at a steep enough angle so that deflection of the debris flow would occur.
3. Minimize surcharge loading – situating the earth berm far enough away from the existing concrete wall (behind the caretakers' unit) was

Peter Mullin
Project No. M6365
Burns Creek
31 March 2006
Page 2

- necessary to minimize additional lateral surcharge loading to the existing wall.
4. Minimize undercutting – the deflection system had to be situated so as to allow a minimum amount of undercutting of the toe of the bluff slope.

One option studied was a 6-foot high earthen berm with a vertically supported face and a 1½ to 1 (horizontal to vertical) back slope. This option could not satisfy all four constraints at the same time. However, we determined that a 6-foot high cantilever deflection wall could satisfy all constraints. The proposed wall provides no surcharge loading, a good deflection angle, minimum grading and provides good capacity behind it.

We then designed the deflection wall choosing a steel I-beam soldier pile wall with wood lagging. As an alternative, a structural engineer could design a concrete wall. Our soldier pile wall was designed using data from the Mullin property (obtained from previous work at the main house) and other jobs we have done in that vicinity of Big Sur. The data and assumptions used in our design are as follows:

1. Potential debris volume:
3 feet thick by 50 feet long = 150 s.f. above head scarp of landslide.
Multiplied by 30 degrees deflection angle = 130 s.f.
2. Active earth pressure Debris flow soil parameters
Unit weight = 132 pcf
lateral pressure on wall (rectangular distribution) = 1022 psf
(see calculations attached).
3. Passive earth pressure parameters.
Existing back fill and debris flow unit weight = 120 pcf,
internal angle of friction = 32 degrees,
passive lateral pressure acting on 2 pier diameters starting 2 feet below the ground level = 390 pcf. (triangular distribution)
(see calculations attached).
4. Velocity of debris as it strikes the wall $V_1 = 24$ feet/sec.
Velocity of debris after it strikes the wall at 30 degree deflection
 $V_2 = 12$ feet/sec.

The velocities are based on values qualitatively described in "The Geologic Hazards" Table 9.1 and 9.2 Geotechnical Engineering Investigation Manual, October 1983 Roy Hunt. The tables characterize our landslide as a "debris flow" – having mixed soil and rock moving as a viscous fluid or slurry, resulting from excessive pore pressure. Rate of movement for debris flows range from about 0.3 meters/min to 100 meters/second. A human can

Peter Mullin
Project No. M6365
Burns Creek
31 March 2006
Page 3

run about 30 feet/sec. Based on observations and literature review, we estimated the above design values for V_1 and V_2 .

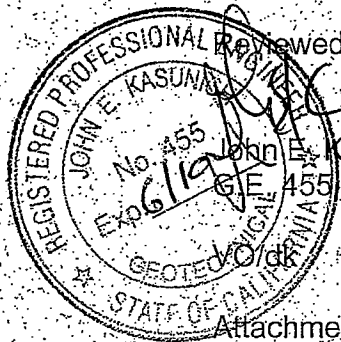
Refer to attached design of the debris flow deflection wall.

The design includes critical specifications and setbacks. HKA should be scheduled to help site the wall in the field to ensure proper deflection and volume capacity. A pre-construction meeting with HKA and the contractor would be advantages to ensure proper understanding of the design.

If you have any questions, please contact our office

Very truly yours,

HARO, KASUNICH AND ASSOCIATES, INC.



Reviewed By:

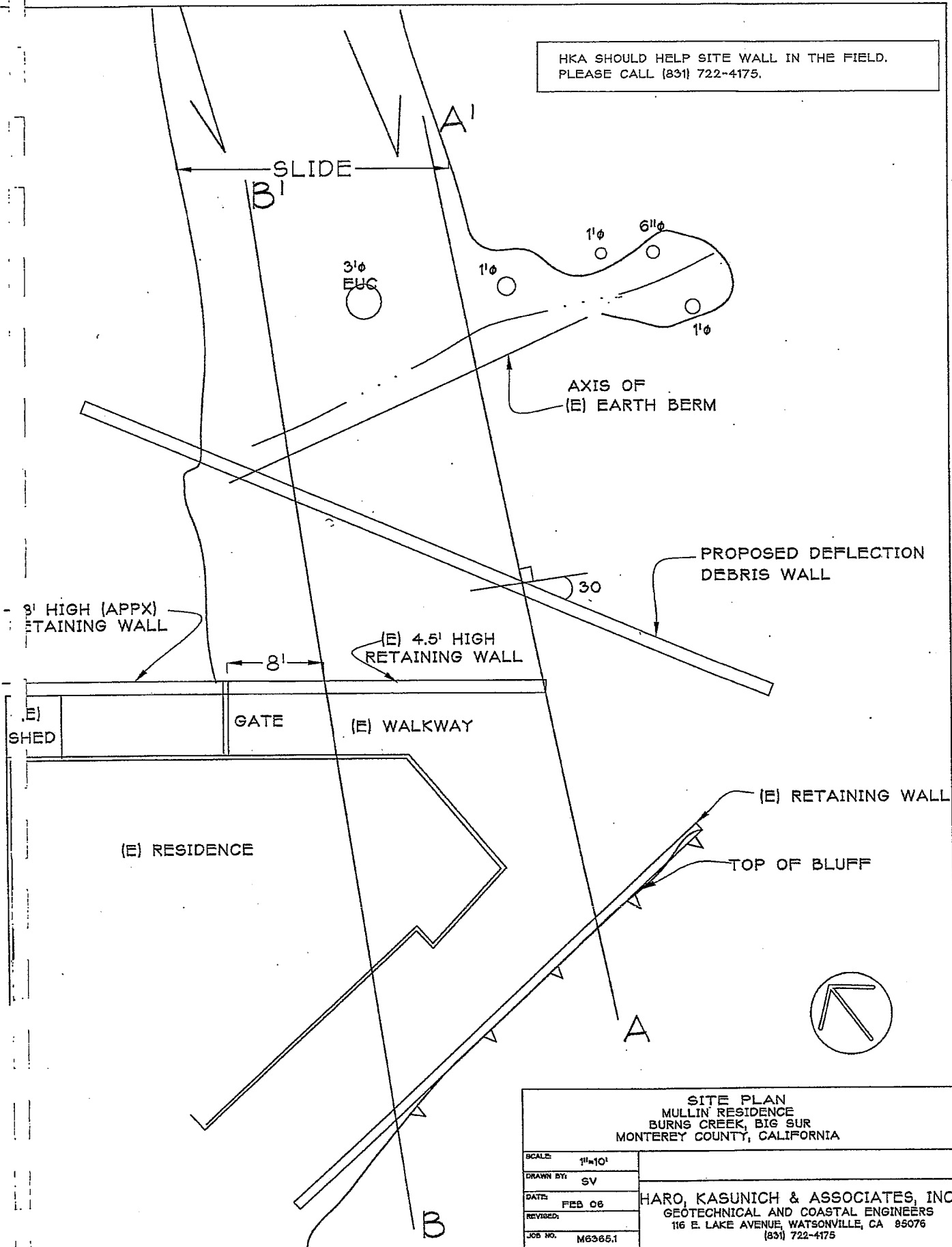
John E. Kasunich

Vicki Odello
C.E. 52651

Attachments

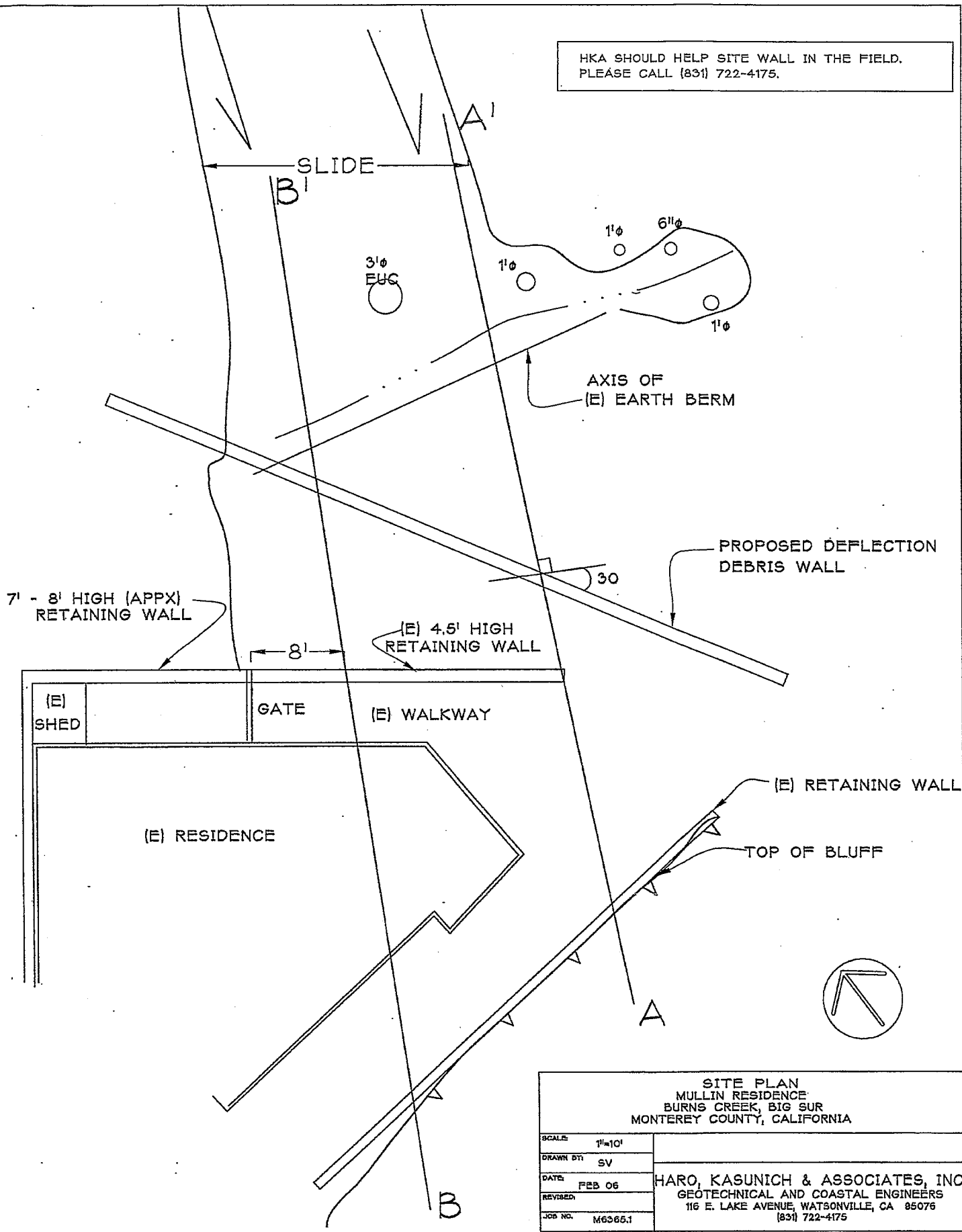
Copies:
2 to Addressee
1 to Blaze Engineering
1 to Patrick DeYoung
2 to Peter Mullin

HKA SHOULD HELP SITE WALL IN THE FIELD.
PLEASE CALL (831) 722-4175.



SITE PLAN MULLIN RESIDENCE BURNS CREEK, BIG SUR MONTEREY COUNTY, CALIFORNIA	
SCALE:	1"=10'
DRAWN BY:	SV
DATE:	FEB 06
REVISED:	
JOB NO.:	M6365.1
HARO, KASUNICH & ASSOCIATES, INC GEOTECHNICAL AND COASTAL ENGINEERS 116 E. LAKE AVENUE, WATSONVILLE, CA 95076 (831) 722-4175	
FIGURE NO.	SHEET NO. OF 1

HKA SHOULD HELP SITE WALL IN THE FIELD.
PLEASE CALL (831) 722-4175.



SITE PLAN MULLIN RESIDENCE BURNS CREEK, BIG SUR MONTEREY COUNTY, CALIFORNIA	
SCALE:	1"=10'
DRAWN BY:	SV
DATE:	FEB 06
REVISOR:	
JOB NO.	M6365.1
HARO, KASUNICH & ASSOCIATES, INC GEOTECHNICAL AND COASTAL ENGINEERS 116 E. LAKE AVENUE, WATSONVILLE, CA 95076 (831) 722-4175	
FIGURE NO.	SHEET NO. OF 1

UP HILL DIRECTION
←

3"X1/2" STEEL STRAP FOR FULL LENGTH OF DEFLECTION WALL, BOLTED TO STEEL BEAM WITH 5/8" 307MB BOLT

4X12 ROUGH CUT (ACTUAL DIMENSION) PRESSURE TREATED DOUG FIR #1 OR 6X9 RR TIES (6" SIDE VERTICAL)

MAX CUT (SEE PROFILE)

KEEP AREA CLEAR

PROVIDE DRAINAGE

WF 14X68 36KSI STEEL PIERS 6' O.C. SPACING

2000 PSI CONCRETE

3" MIN

3" MIN

8.5'

3"

24"

6'

SITING OF WALL TO BE APPROVED BY SOIL ENGINEER. PLEASE CALL

DEFLECTION WALL SCHEMATIC
MULLIN RESIDENCE
BURNS CREEK, BIG SUR
MONTEREY COUNTY, CALIFORNIA

SCALE: 1"=10'

DRAWN BY: SV

DATE: FEB 06

REVISED:

JOB NO. M6365.1

HARO, KASUNICH & ASSOCIATES, INC
GEOTECHNICAL AND COASTAL ENGINEERS
116 E. LAKE AVENUE, WATSONVILLE, CA 95076
(831) 722-4176

FIGURE NO.

SHEET NO.

OF 1

HARO, KASUNICH
& ASSOCIATES, INC.
116 East Lake Avenue
WATSONVILLE, CALIFORNIA 95076
(831) 722-4175 FAX 722-3202

JOB Mullin Deflection Wall
SHEET NO. 1 OF
CALCULATED BY VO DATE 1/29/06
CHECKED BY DATE
SCALE:

Debris Flow Deflection Wall

Given: Wall deflection from \perp to flow path = 30°

H = height of wall = 6'

V_1 = Initial Velocity of moving mass of debris
= 24 feet/sec. assumed

V_2 = Velocity after hitting deflection wall
= 12 feet/sec assumed

γ_s = unit weight of saturated debris mass
= 132 pcf assumed

γ = unit weight of existing debris flow
 ≈ 120 pcf $\phi = 32^\circ$

$$k_p = \tan^2(45 + \frac{\phi}{2}) = 3.25$$

$$\Delta FV_{\text{passive}} = 120(3.25) = 390 \text{ pcf}$$

$$\text{gravity} = 32.2 \text{ ft/s}^2$$

A = 1 s.f. of wall surface

$$B = \text{hole diameter} \times \text{bridging factor} \\ 2' \times 2 = 4$$

Potential debris volume 3' thick \times 50' = 150 s.f.
per foot

assume some deflection which reduces storage capacity
 $150(\cos 30) \approx 130 \text{ s.f./ft}$

1) Mass of debris flow = M

from conservation of momentum

$$M_i = A \cdot V_i \cdot \Delta t \cdot \rho, \quad \rho = \frac{W}{g}, \quad A = 1 \text{ ft}^2 \text{ of wall surface}$$

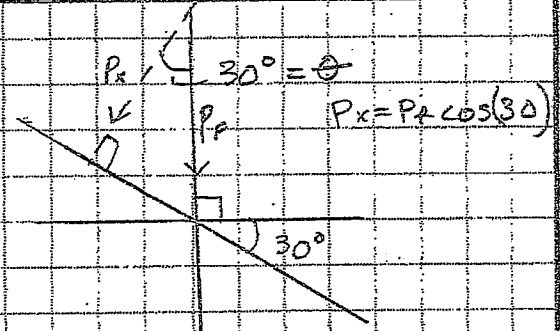
$$= 1 \cdot 24 \cdot \Delta t \left(\frac{1323}{32.2} \right)$$

$$= \boxed{98.4 \Delta t} \text{ slugs as it strikes the wall}$$

2) Force of Debris Flow as it strikes deflection 30° wall

ΣP_x = sum of forces in x direction

P_x = force of wall against debris over time



$$\Sigma P_x \Delta t = \Delta t M (V_2 - V_1) \cos \theta$$

$$= 98.4 (24 - 12) \cos \theta$$

$$P_x = \boxed{1022 \text{ psf}}$$

3) Depth of embedment d + 2' (neglect 2')

Sum moment about Pivot Point

$$R_1 (n + H/2) = R_2 \left(\frac{d}{2} \right) + R_3 \left(\frac{3}{4} d \right)$$

$$R_1 = P_x \cdot 6 = 1022 \cdot 6 = 36,792$$

$$R_2 = 390n \cdot d \cdot 8 = 390(2) \cdot 4d = 3120d$$

$$R_3 = \frac{1}{2} 390d \cdot d \cdot 8 = \frac{1}{2} (390) d^2 \cdot 4 = 780d^2$$

$\Sigma M = 0$

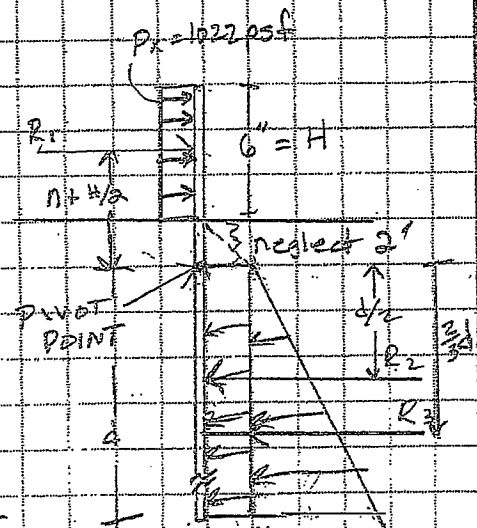
$$36,792 \left(2 + \frac{6}{2} \right) = 3120d \left(\frac{d}{2} \right) + 780d^2 \left(\frac{3}{4} d \right)$$

$$183,960 = 1560d^2 + 520d^3$$

TRY $d = 6.5$ get 5.14

$$d = \sqrt[3]{\frac{183,960 - 520d^3}{1560}}$$

USE $6.5 + 2 = 8.5$ depth below grade

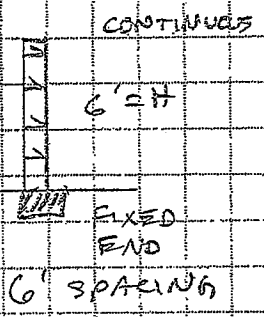


Spacing = 6' = 5
B = 4' (2x2')

4) Cantilever Beam - Wide Flange Steel

$$M_{max} = \frac{w l^2}{2} = 1022 \cdot 6^2 \cdot 6 \left(\frac{6}{2} + 6\right)$$

$$= 183960 = 184 \text{ KIP. FT.}$$



USE Sx table for 36 ksi steel

36ksi W 12 x 72

$M_{max} = 193 > 184$ OK

$V_{max} = 76 \text{ kips}$

dimensions $2.25^2 + 12.04^2 = C^2$

diagonal $C = 17.18" < 18" \text{ FITS}$ OK

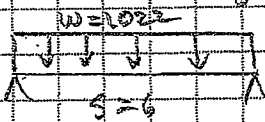
need $24" - 2(3" \text{ cover each side}) = 18"$

5) Shear in Steel

$V = P_x \cdot h \cdot s = 1022 \cdot 6 \cdot 6 = 36792 = 36 \text{ kips} < 76 \text{ kips}$ OK

6) Timber lagging

$M_{max} = \frac{w s^2}{8} = 1022 \cdot 6^2 / 8 = 4599 \text{ ft-lbs}$



$S_y = M_{max} / A_b$

P.T.D.F. No 1

$A_b = 1500 \text{ psi} \times 1.3 \text{ (temp load)}$
 $= 1950 \text{ psi}$

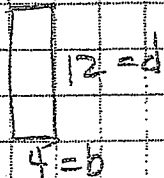
$S_y = 4599 \cdot 12" / 1950 \text{ psi} = 28.30 \text{ in}^3$

P.T.D.F. No. 1 RG 4 x 12"

TRN Rough Cut (actual dimension)

$S = \frac{b^3}{6} = 42.12 / 6 =$

$s = 3.21 > 28.30$ OK

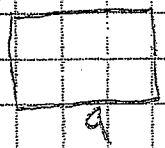


OR 6 x 9 R.R. tie

$S = 9^3 / 6 = 81 \text{ in}^3 > 56.6$ OK

use $P_{all} = 750 \times 1.3 = 975 \text{ psi}$

$S_{y \text{ or}} = 4599 \cdot 12" / 975 = 56.6$



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116 East Lake Avenue
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(831) 722-4175 FAX 722-3202

JOB _____
SHEET NO. 4 OF _____
CALCULATED BY _____ DATE _____
CHECKED BY _____ DATE _____
SCALE _____

⑦ Shear in Lagging

f_b allowable P.T.D.F. Mod = 95 psi $\times 1.3$ (temp)
= 123 psi

$f_v = \frac{3}{2} \frac{V}{A}$, $V = \frac{wL}{2}$, $L = S = 6$

$A = 4 \times 12 = 48 \text{ in}^2$

$f_v = 1.5 \frac{1022.6/2}{48} = 95.8 \text{ psi} < 123 \text{ ok}$

assume RR $f_b = 65 \times 1.3 = 84.50 \text{ psi} < 123 \text{ ok}$

HARO, KASUNICH
& ASSOCIATES, INC.
116 East Lake Avenue
WATSONVILLE, CALIFORNIA 95076
(831) 722-4175 FAX 722-3202

JOB Mullen's Deflection Wall
SHEET NO. _____ OF _____
CALCULATED BY VD DATE 1/22/06
CHECKED BY _____ DATE _____
SCALE _____

Summary

Wall Height = 6'
Pier Spacing = 6' Center to Center
Pier Depth = 8.5' below grade
Pier Diameter = 24" 2000 psi concrete filled
Soldier Pile = W 12 x 72 wide Flange
36 ksi steel

Lagging = 4" x 12" Rough Cut
Actual dimensions 4 x 12
Pressure Treated Doug. Fir
No. 1
= OR 2x2 6" x 4" placed short dimension vertical

Deflection angle from
⊥ (perpendicular) to flow path = 30°

Excavation required behind wall
to accommodate required storage
capacity of \approx 130 cubic feet

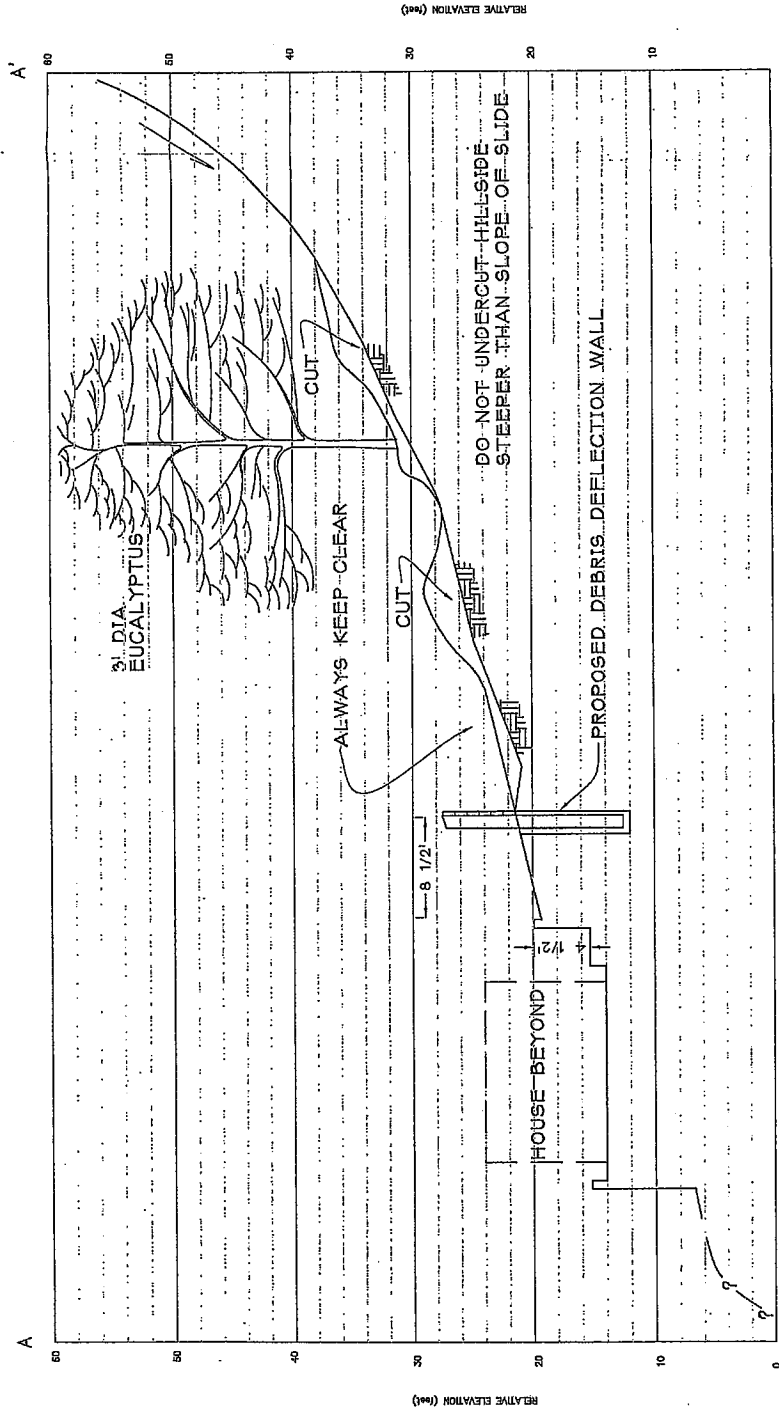
Do not undercut slope

Provide drainage near base of wall

Area behind wall must always remain clear.

See plan, profiles & schematic profile.

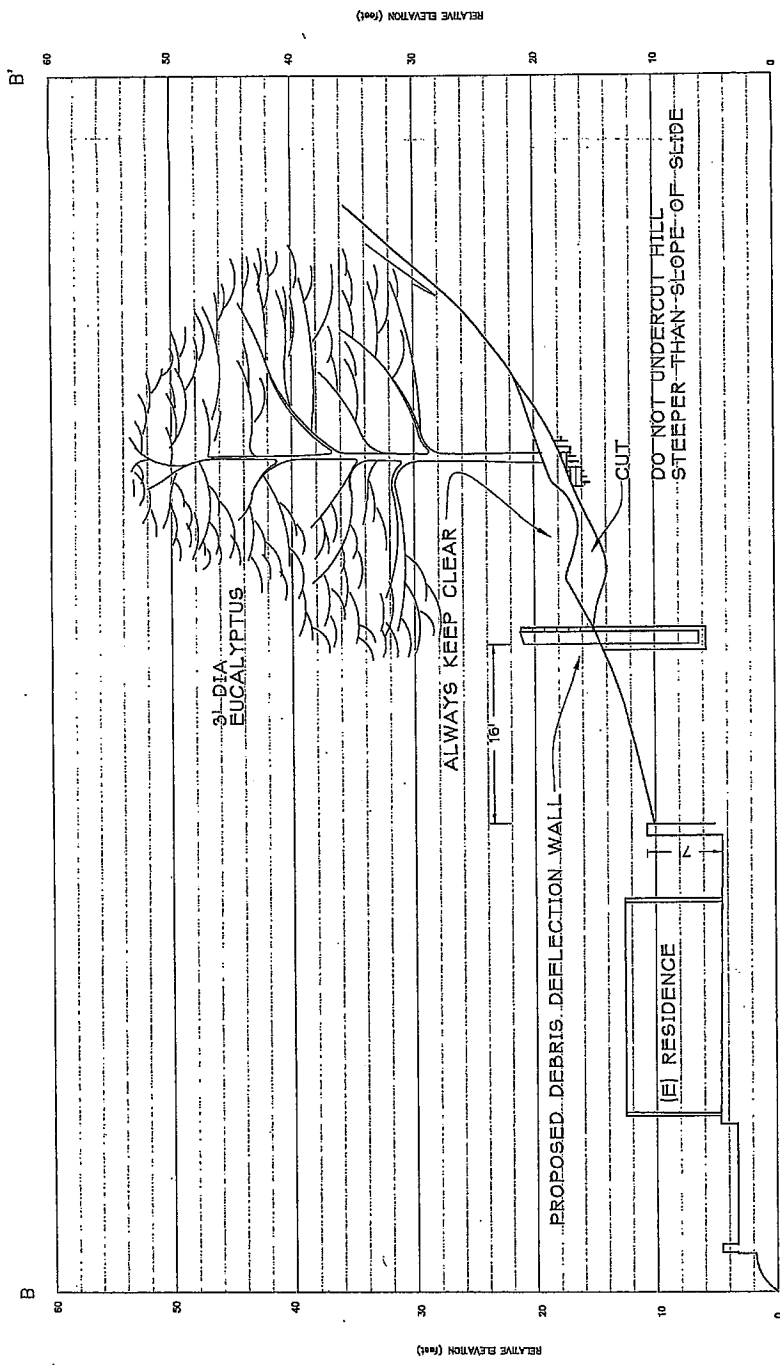
Wall should extend at least 10' beyond slide on north side
and extend to edge of bluff on south side
w/ 5' of



PROFILE A-A'

CROSS SECTION A-A'	
MULLEN RESIDENCE	
MONTEREY COUNTY, CALIFORNIA	
SCALE	1"=10'
DATE	5/1
BY	RES. 06
PROJECT	
JOB NO.	MS0551
HARO, KASUNICH & ASSOCIATES, INC.	
GEOTECHNICAL AND COASTAL ENGINEERS	
110 E. LAKE AVENUE, SUITE 100, SAN JOSE, CA 95076	
TEL: (415) 723-1779	
FAX: (415) 723-1779	
FIGURE NO.	OF 1

CROSS SECTIONS PREPARED USING FIELD TAPE AND CLINOMETER SURVEY METHOD.



PROFILE B-B'

CROSS SECTION B-B'	
GAILAN RESIDENCE	
BURNS CREEK, BIG SUR	
MONTEREY COUNTY, CALIFORNIA	
SCALE	1"=10'
DATE	FEB 06
BY	BY
HARO, KASUNICH & ASSOCIATES, INC.	
CIVIL ENGINEERS	
110 E. LAKE AVENUE, WATSONVILLE, CA 94070	
TEL: (831) 722-1176	
FAX: (831) 722-1179	
PROJECT NO. M63565J	
FIGURE NO.	
SHEET NO. OF 1	

CROSS SECTIONS PREPARED USING FIELD TAPE AND CLINOMETER SURVEY METHOD.

Project No. M6365.1
9 November 2009

MR. PETER MULLIN
c/o Noland, Hamerly, Etienne and Hoss
P. O. Box 2510
Salinas, California 93902-2510

Attention: Christine Kemp

Subject: Request For Emergency Permit to Construction Storm Drainage
Improvements and Debris Flow Protection

Reference: DeYoung Property APN 420-231-006
53900 Highway 1
Burns Creek
Big Sur, Monterey County, California

Mullin Caretaker Cottage
53810 Highway 1
Burns Creek
Big Sur, Monterey County, California

Dear Mr. Mullin:

As project geotechnical engineers involved with your property in Big Sur, we have evaluated the debris flow that inundated your caretaker's cottage in December 2005. The debris flow occurred due to poor drainage improvements at the top of the slope on the DeYoung property directly behind the caretaker unit. Storm runoff from Highway One and the DeYoung property above the caretaker unit is focused onto the slope where the debris flow occurred. The debris flow inundated a bedroom and damaged the residential structure as well as exterior improvements. Our firm evaluated the debris flow and the drainage patterns above the caretaker house and, in March 2006, prepared a geotechnical report recommending a debris flow deflection wall be constructed to protect the caretaker unit. That report included the following statement..." it is of critical importance that the drainage and a deflection system be implemented this summer for proper protection of the caretaker unit and its residents. Without protection the structure and residents are at risk during heavy, inclement rain weather". Since the prior landslide, the reference property owners have been attempting to resolve issues between them related to the hillside and drainage, and can now move forward with the work that needs to be done. It is fortunate that the rainfall since the 2005/2006 has not been as heavy as is expected for

Mr. Peter Mullin
Project No. M6365.1
53810 Highway 1
9 November 2009
Page 2

this year. This year is forecast for very heavy rains creating an even more urgent need to construct the wall and drainage pipe before the end of November.

The debris flow wall will be built to deflect future debris flow away from the caretaker unit. The storm drainage system will more effectively collect storm runoff from Highway One and the DeYoung property into a drain inlet box and culvert that extends to the bottom of the slope where it is discharged in a controlled manner in the natural drainage course. Our firm has prepared formal plans for construction of the debris flow wall and the storm drain culvert system. These plans are dated 30 September 2009 and consist of five sheets.

It is the strong opinion of Haro, Kasunich and Associates that the caretaker cottage is in imminent danger during fall, winter and spring rain storms. If the proposed storm drain improvements and debris flow wall are not constructed, we have recommended that the occupants of the caretaker cottage not occupy the house during high intensity, short term or long duration rain storms that frequently occur on the Big Sur Coast during fall, winter and spring seasons. The recent rain storm of 13 October 2009 caused significant drainage problems to the slope above the caretaker cottage (See attached photographs). Temporary drainage pipes were inundated with storm runoff and failed. New erosion scars developed on the slope just south of the 2005 debris flow scarp. In our opinion, without immediate implementation of the storm drain system and the debris flow wall, the residential structure could be impacted during any rainstorm with a second debris flow causing significant structural damage. The proposed drainage improvements and debris flow wall is the minimum amount of mitigation needed to abate the existing danger to the caretaker unit and residents because the deflection wall can be built above grade without excavating into the slope, minimizing impact to the environment. The proposed storm drain will be secured to the slope surface and also not require excavation of the slope.

Mr. Mullin has worked with our firm and the engineering contracting firm of Blaze Construction to purchase and stockpile the materials necessary to construct the debris flow wall. Blaze Construction has copies of the geotechnical report and recent plans prepared by our office. They have indicated that they are ready to construct both the storm drain improvements and the debris flow wall between October 22 and November 22, 2009.

It is the opinion of Haro, Kasunich and Associates that:

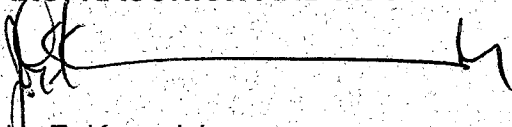
1. An emergency situation exists at and above the Mullin caretaker cottage on the DeYoung property that requires expedient action before additional significant winter rain storms occur.

Mr. Peter Mullin
Project No. M6365.1
53810 Highway 1
9 November 2009
Page 3

2. That implementing the proposed drainage improvements and debris flow wall will protect the caretaker cottage from further damage. The storm drain improvements will also help stabilize the steep slope directly above the cottage on the DeYoung property.
3. The proposed debris flow wall and drainage improvements are the most efficient mitigation to potential future debris flows above the cottage and represent the minimum amount of work required to mitigate the emergency situation because they do not require grading and excavation of the coastal bluff behind the caretaker unit.
4. The proposed debris flow wall and storm drain improvements are consistent with the Monterey County local coastal plan. A geotechnical report and set of engineering plans have been prepared for the proposed debris flow wall and drainage improvements including drainage calculations to support the improved culvert system. Nicole Nedeff, biologist has prepared a biotic report to respond to environmental concerns that may arise during review and implementation of the proposed improvements. Archeological Consulting has prepared an archeological report for the work. Haro, Kasunich and Associates is on standby to work with the contractor, Blaze Construction, to implement the proposed improvements as soon as possible. We will then assist Mr. Mullin in filing for a full Coastal Development Permit. If you have any questions, please call our office.

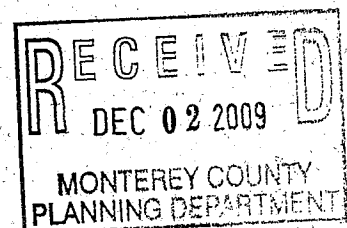
Very truly yours,

HARO, KASUNICH AND ASSOCIATES, INC.

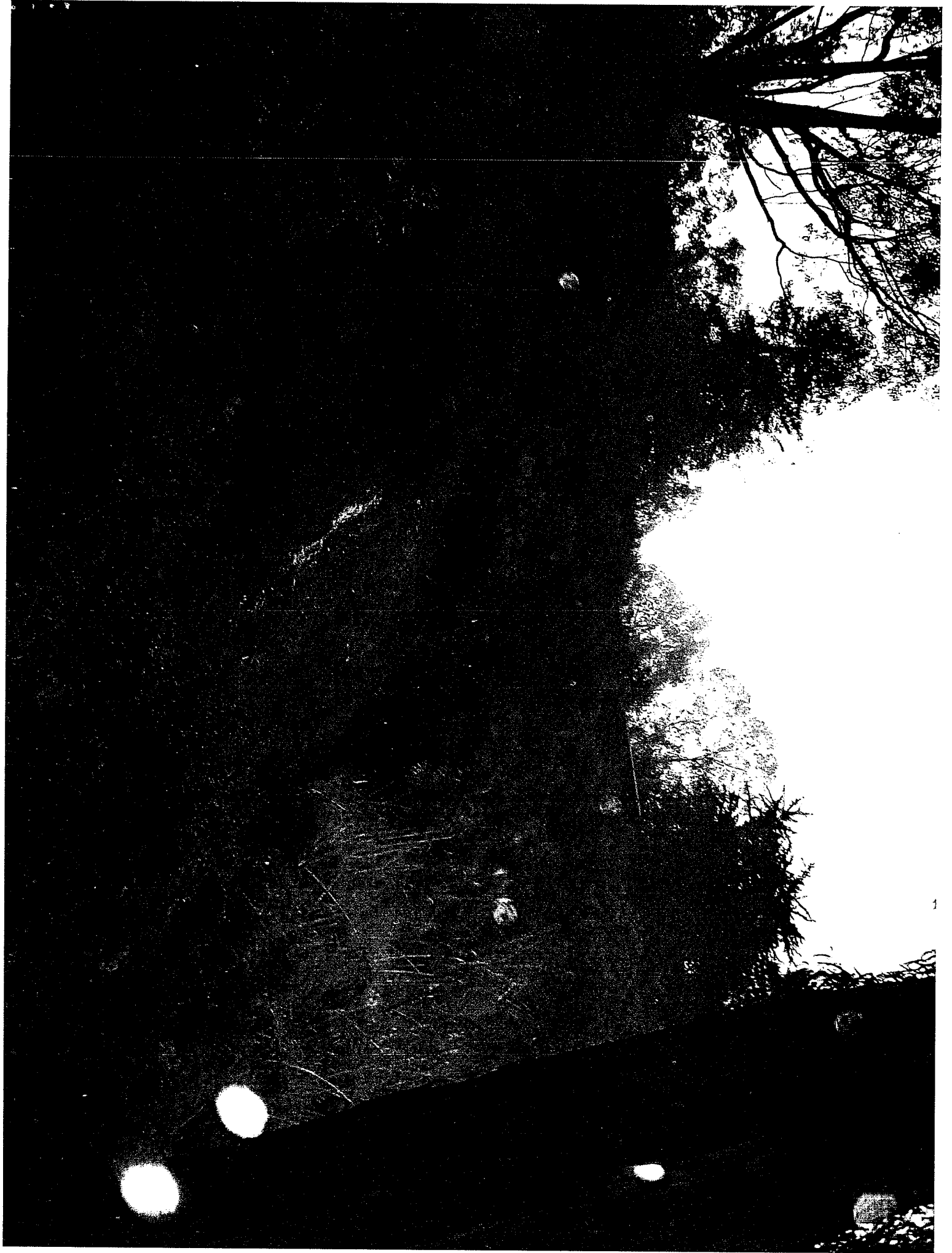

John E. Kasunich
G.E. 455

JEK/dk

Copies: 1 to Addressee
3 to Christine Kemp
1 to Cheri Gladstone
1 to Patrick DeYoung
1 to Blaze Engineering







Project No. M6365.1
25 November 2009

MR. PETER MULLIN
c/o Noland, Hamerly, Etienne and Hoss
P. O. Box 2510
Salinas, California 93902-2510

Attention: Christine Kemp

Subject: Supplemental Information Regarding Need For
Emergency Permit to Construct Storm Drainage
Improvements and Debris Flow Protection

Reference: DeYoung Property APN 420-231-006
53900 Highway 1
Burns Creek
Big Sur, Monterey County, California

Mullin Caretaker Cottage
53810 Highway 1
Burns Creek
Big Sur, Monterey County, California

Dear Mr. Mullin:

Monterey County Planning has reviewed my 9 November 2009 letter explaining the need for an emergency permit to construct storm drainage improvements and debris flow protection behind the reference caretaker cottage on the DeYoung property. The County asked if temporary measures such as K-rails or other improvements could be used as an interim solution before the actual project is constructed. As stated in my 9 November 2009 request for an emergency permit: "the proposed drainage improvements and debris flow wall is the minimum amount of mitigation needed to abate the existing danger to the caretaker unit and residence". It is important to realize that we have made efforts to control drainage in a temporary manner since the original debris flow slide occurred in December 2005. These temporary drainage improvements have had serious problems during significant rainstorms including the most recent rainstorm of 13 October 2009. There is no interim or temporary drainage system that can be implemented that will provide the necessary drainage control needed across the DeYoung property and down the slope behind the caretaker unit. What is proposed on our 30 September 2009 plans is the minimum necessary drainage improvements required. K-rails are extremely difficult to transport and place behind the Mullen caretaker cottage due to the steep terrain and the

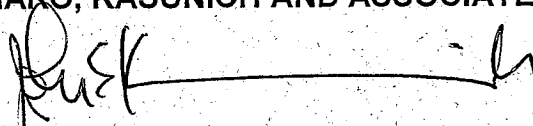
Mr. Peter Mullin
Project No. M6365.1
DeYoung/Mullin Caretaker Cottage
25 November 2009
Page 2

presence of the caretaker unit. The effort needed to transport, layout and place K-rails would be near the same effort, using the same equipment, as constructing the debris deflection wall. Furthermore, K-rails are not sufficiently high to protect the caretaker unit should an equivalent debris flow occur as did in December 2005. Building a temporary earth berm with sufficient height and mass would be much more detrimental to the environment than the proposed debris deflection wall (a slender, linear structure) and would require the same or more equipment than is necessary for the proposed debris flow wall.

In summary, I believe the proposed drainage improvements and debris flow wall are efficient and effective mitigation improvements to protect the caretaker unit.

Very truly yours,

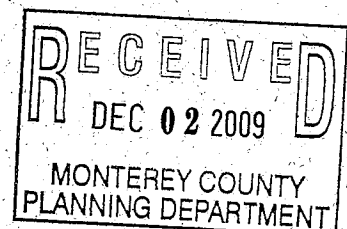
HARO, KASUNICH AND ASSOCIATES, INC.



John E. Kasunich
G.E. 455

JEK/sq

Copies: 1 to Addressee
3 to Christine Kemp



Project No. M6365.2
21 January 2010

MR. PETER MULLIN
c/o Christine Kemp
Noland, Hammerly, Etienne and Hoss
P. O. Box 2510
Salinas, California 93902-2510

Subject: Removal of Debris Flow Materials

Reference: Mullin Caretaker Cottage Proposed Debris Flow Wall
APN 420-231-06
Highway One
Monterey County, California

Dear Mr. Mullin:

As project geotechnical engineers, we have designed and prepared a plan to construct a debris flow deflection wall behind your caretaker cottage. The debris flow wall will be constructed on the DeYoung property. The deflection wall will protect the caretaker cottage from debris flow earth materials that disengage from the coastal bluff on the DeYoung property directly above the caretaker cottage. As part of this protection, a drainage system is also being constructed to better control surface runoff water that flows over the coastal bluff.

If a debris flow slide occurs and the deflection wall is impacted, the materials deflected by the wall will have to be removed so the wall is capable of future protection from additional flows. This material can be removed from behind the wall by manual labor using 5 gallon buckets and carrying the debris to the front of the caretaker's cottage at the driveway where it can be placed in a small truck. This was the procedure used to clean up the debris flow materials that impacted the caretaker's cottage 4 years ago. A portable conveyer belt system could also be used to aid in removal of debris material. The debris flow material will then be transported up the driveway to the horse corral on the Mullin property where it can be spread over a large area in a very thin lift (3 to 6 inches). This material will be tracked or wheel rolled in-place.

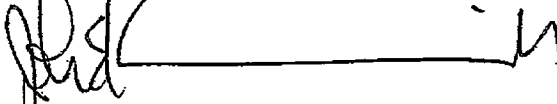
Should a debris flow slide occur, the Mullin caretaker will alert Haro, Kasunich and Associates to inspect the occurrence and coordinate removal of the debris material as outlined in this letter.

Mr. Peter Mullin
Project No. M6365.2
Mullin Caretaker Cottage Proposed Debris Flow Wall
21 January 2010
Page 2

If you have any questions, please call our office.

Very truly yours,

HARO, KASUNICH AND ASSOCIATES, INC.



John E. Kasunich
G.E. 455

JEK/sq
Copies: 1 to Addressee
2 to Christine Kemp