

**CALIFORNIA COASTAL COMMISSION**

CENTRAL COAST AREA  
SOUTH CALIFORNIA ST., SUITE 200  
VENTURA, CA 93001  
(805) 641 - 0142

**RECORD PACKET COPY**

Filed: 9/29/00  
49th Day: 11/17/00  
180 Day: 3/28/00  
Staff: J. Johnson  
Staff Report: 2/23/01  
Hearing Date: 3/15/01  
Commission Action:

**STAFF REPORT: REGULAR CALENDAR**

**APPLICATION NO.:** 4-99-186

**APPLICANT:** Planning Division, Los Angeles County Department of Public Works; Attn: David Yam

**AGENT:** Albert Anidi, Planning Division, Los Angeles County Department of Public Works

**PROJECT LOCATION:** Vicinity of 33904 Pacific Coast Highway, City of Malibu, Los Angeles County

**PROJECT DESCRIPTION:** Construct a concrete beach access ramp 305 feet long by 22 feet wide to replace El Nino storm damaged roadway and concrete access ramp, a steel sheet pile retaining/seawall with timber facia to support the access ramp, remove 790 sq. ft. of existing asphalt concrete roadway surface and abandon a total of 1032 feet of the existing roadway, 0.59 acres of grading with a 340 foot long slope drain, grade 5,882 cubic yards of cut, 9 cubic yards of fill, and export 5,873 CY of dirt to a disposal site located outside coastal zone.

<b>Lot area:</b>	<b>23 acres</b>
<b>Beach Ramp Max. Height Above Mean Sea Level:</b>	<b>+ 24.2 feet</b>
<b>Beach Ramp Sheet Pile Max. Underpinning Depth Below MSL:</b>	<b>4.8 feet</b>
<b>Piling depth into Bedrock</b>	<b>3 feet</b>
<b>Bottom Elevation of Sheet Piles</b>	<b>- 2 feet</b>
<b>Mean Sea Level</b>	<b>+ 2.8 feet</b>

**SUMMARY OF STAFF RECOMMENDATION**

Staff recommends that the Commission approve with five Special Conditions addressing an applicant's assumption of risk, landscape and erosion control plan, removal of excavated material, construction responsibilities and debris removal, and construction timing limitation. The applicant is requesting approval to construct a replacement emergency vehicle access ramp to the sandy beach near the west end of Nicholas Canyon County Beach Park. The existing beach access road and beach ramp was damaged during the 1998/99 winter storms. The replacement beach ramp will reduce the length of the roadway and ramp from 1,337 feet to 305 feet long, west of an existing restroom and includes a steel sheet pile retaining/seawall with timber facia to

support the access ramp. The applicant proposes to grade the slope landward of the ramp. The applicant has studied nine alternatives for a shoreline protective device to adequately protect the beach ramp, modified the project design twice by selecting the ninth alternative. Staff believes this proposed project, as conditioned, will be consistent with the applicable resource protection provisions of the Coastal Act.

### **STAFF NOTE**

Because this application was filed on September 29, 2000, the Commission is required under the Permit Streamlining Act to act on this application at the March 13 – 16, 2001 Commission meeting. Unless the applicant grants additional time for Commission review by signing the Agreement for Extension of Time for a Decision on Coastal Development Permit form as provided by the Permit Streamlining Act, the Commission must act on this application no later than the March 13 – 16, 2001 Commission meeting.

**LOCAL APPROVALS RECEIVED:** County of Los Angeles Department of Regional Planning "Approval in Concept" dated June 8, 2000; County of Los Angeles Fire Department "Approved Access Requirements Only" dated 8/31/00.

**SUBSTANTIVE FILE DOCUMENTS:** See Appendix A

### **I. STAFF RECOMMENDATION:**

**MOTION:** I move that the Commission approve Coastal Development Permit No. 4-99-186 pursuant to the staff recommendation.

### **STAFF RECOMMENDATION OF APPROVAL:**

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

### **RESOLUTION TO APPROVE THE PERMIT:**

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

## **II. Standard Conditions**

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

## **III. Special Conditions**

### **1. Applicant's Assumption of Risk**

Prior to the issuance of the Coastal Development Permit, the applicant shall submit a signed document in a form and content acceptable to the Executive Director, which shall provide: (a) that the applicant understands the site may be subject to extraordinary hazard from storm waves, erosion or flooding and the applicant assumes the liability from such hazards and unconditionally waives any claim of liability against the Commission or its successors in interest for damage from such hazards and agrees to indemnify and hold harmless the Commission, its officers, agents, and employees against any and all claims, demands, damages, costs, expenses or liability arising from the project and relating to such hazards.

### **2. Landscaping and Erosion Control Plans**

Prior to issuance of a coastal development permit, the applicant shall submit landscaping and erosion control plans, prepared by a licensed landscape architect or a qualified resource specialist, for review and approval by the Executive Director. The plans shall incorporate the following criteria:

**A) Landscaping Plan**

- 1) All graded & disturbed slope areas on the subject site shall be planted and maintained for erosion control purposes within (60) days of completion of the beach access ramp. To minimize the need for irrigation all landscaping shall consist primarily of appropriate native plant species endemic to coastal bluffs as listed by the California Native Plant Society, Santa Monica Mountains Chapter, in their document entitled Recommended List of Plants for Landscaping in the Santa Monica Mountains, dated February 5, 1994. Such planting shall be adequate to provide 90 percent coverage within two (2) years. Invasive, non-indigenous plant species which tend to supplant native species shall not be used.
- 2) Plantings will be maintained in good growing condition throughout the life of the project and, whenever necessary, shall be replaced with new plant materials to ensure continued compliance with applicable landscape requirements;
- 3) The Permittee shall undertake development in accordance with the final approved plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Coastal Commission - approved amendment to the coastal development permit, unless the Executive Director determines that no amendment is required.

**B) Interim Erosion Control Plan**

- 1) The plan shall delineate the areas to be disturbed by grading or construction activities and shall include any temporary access roads, staging areas and stockpile areas. The natural areas on the site shall be clearly delineated on the project site with fencing or survey flags.
- 2) The plan shall specify that should grading take place during the rainy season (November 1 – March 31) the applicant shall install or construct temporary sediment basins (including debris basins, desilting basins or silt traps), temporary drains and swales, sand bag barriers, silt fencing, stabilize any stockpiled fill with geofabric covers or other appropriate cover, install geotextiles or mats on all cut or fill slopes and close and stabilize open trenches as soon as possible. These erosion measures shall be required on the project site prior to or concurrent with the initial grading operations and maintained through out the development process to minimize erosion and sediment from runoff waters during construction. All sediment should be retained on-site unless removed to an appropriate approved disposal location either outside the coastal zone or to a site within the coastal zone permitted to receive fill.
- 3) The plan shall also include temporary erosion control measures should grading or site preparation cease for a period of more than 30 days, including but not

limited to: stabilization of all stockpiled fill, access roads, disturbed soils and cut and fill slopes with geotextiles and/or mats, sand bag barriers, silt fencing; temporary drains and swales and sediment basins. The plans shall also specify that all disturbed areas shall be seeded with native grass species and include the technical specifications for seeding the disturbed areas. These temporary erosion control measures shall be monitored and maintained until grading or construction operations resume.

C) **Monitoring.**

Five years from the date of completion of the County of Los Angeles Building Permit for the proposed beach ramp the applicant shall submit for the review and approval of the Executive Director, a landscape monitoring report, prepared by a licensed Landscape Architect or qualified Resource Specialist, that certifies the on-site landscaping is in conformance with the landscape plan approved pursuant to this Special Condition. The monitoring report shall include photographic documentation of plant species and plant coverage.

If the landscape monitoring report indicates the landscaping is not in conformance with or has failed to meet the performance standards specified in the landscaping plan approved pursuant to this permit, the applicant, or successors in interest, shall submit a revised or supplemental landscape plan for the review and approval of the Executive Director. The revised landscaping plan must be prepared by a licensed Landscape Architect or a qualified Resource Specialist and shall specify measures to remediate those portions of the original plan that have failed or are not in conformance with the original approved plan.

3. **Removal of Excavated Material**

The applicant is authorized to remove excess excavated, cut and debris material consisting of 5,873 cubic yards of material. This material shall be transported to an appropriate disposal site located outside the Coastal Zone, or an approved site located in the Coastal Zone with a valid coastal development permit for disposal of fill material

4. **Construction Responsibilities and Debris Removal**

The applicant shall, by accepting this permit, agree and ensure that the project contractor: a) not stockpile dirt on the beach; b) properly cover and sand-bag all stockpiling beyond the beach to prevent runoff and siltation; c) not store any construction materials or waste where it may be subject to wave erosion and dispersion; d) promptly remove any and all debris from the beach that results from construction or demolition materials to an appropriate disposal site; e) implement measures to control erosion at the end of each day's work; and f) not allow any mechanized equipment in the intertidal zone at any time.

5. Construction Timing Limitation

The applicant may grade and construct the project during the summer provided that the applicant shall not conduct any construction activities during any holiday and holiday weekend or any weekend between and including the May Memorial Day Weekend and the September Labor Day Weekend.

IV. Findings and Declarations

The Commission hereby finds and declares:

A. Project Description and Location:

The applicant proposes to construct a concrete beach access ramp 305 feet long by 22 feet wide to replace a storm damaged roadway and concrete access ramp. A proposed steel sheet pile retaining/seawall with timber facia to support the access ramp will protect the new beach access ramp. The applicant proposes to remove 790 sq. ft. of existing asphalt concrete roadway surface and abandon a total of 1032 feet of the existing roadway, grade 0.59 acres and construct a 340 foot long slope drain, grade 5,882 cubic yards of cut, 9 cubic yards of fill, and export 5,873 CY of dirt to a disposal site located outside coastal zone. Grading (cut) related to roadway/ramp is 1,793 cubic yards of material while the cut related to the slope is 4,089 cubic yards of material. The proposed concrete beach access ramp includes a flat landing area on the sandy beach for emergency vehicle use and the landing is also surrounded by a sheet pile retaining/seawall for protection (Exhibits 2 – 15). The applicant is the County of Los Angeles responsible for protecting the public using its recreational facilities. The applicant asserts that this proposed project is designed to meet the minimum design standards to provide access for the fire department, law enforcement, lifeguard, and maintenance personnel to respond to fire emergencies, ocean rescue operations, park security, service drainage facilities while maintaining the beach in a safe and sanitary manner.

Nicholas Canyon County Beach Park consists of 23 acres of bluff top and beachfront land including a public parking lot, lifeguard station, access road to a pedestrian beach ramp and to an emergency vehicle access ramp. This access road extends from the public parking lot on a bluff area near the eastern portion of the park along the base of the bluff extending to the western portion of the park on fill material just above the sandy beach. A public restroom is located along the beach access road with service vehicle parking on the west side. (Exhibits 1 – 4) This beach access road starting from the base of the public parking area to the restroom is about 900 feet long. The former and remaining beach access road from the restroom to the western end of this road is about 1337 feet long. The beach access road is located at the 27 foot elevation level above the sandy beach.

The beach access ramp and the western portion of the road was severely damaged in the 1998 El Nino winter storms. In effect, the applicant's project, as now proposed, will be relocating the beach access ramp about 1,032 feet further east and abandon this length of roadway from the bottom of the ramp beyond to the west of the ramp. Over

time, this western portion of the former road now proposed to be abandoned will erode due to coastal processes. The ramp will begin at the existing public restroom inland of the beach access road and is about 900 feet west of the public parking lot for Nicholas Canyon County Beach Park. In effect, the project will shorten the length of the existing access road subject to storm damage in the future.

The project site is designated in the certified Los Angeles County Malibu/Santa Monica Mountains Land Use Plan as Parks which allows for recreational uses such as Nicholas Canyon County Beach Park. The environmentally sensitive habitat areas (ESHA) located on Nicholas Beach County Park are located about a minimum of 1,200 feet to the east along San Nicholas Canyon Creek from the project site. The offshore kelp beds beyond the applicant's property are also designed ESHA in the Los Angeles County Land Use Plan. The proposed project will not affect these ESHA areas.

## **B. Shoreline Protective Devices**

The applicant proposes to construct a concrete beach access ramp 305 feet long by 22 feet wide to replace a storm damaged roadway and concrete access ramp. A proposed steel sheet pile retaining/seawall with timber facia to support the access ramp will protect the new beach access ramp. The applicant proposes to remove 790 sq. ft. of existing asphalt concrete roadway surface and abandon a total of 1032 feet of the existing roadway, grade 0.59 acres and construct a 340 foot long slope drain, grade 5,882 cubic yards of cut, 9 cubic yards of fill, and export 5,873 CY of dirt to a disposal site located outside coastal zone. (Exhibits 1 – 12).

Coastal Act Section 30235 states:

### **Section 30235.**

**Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.**

#### **1. Proposed Project and Site Shoreline Characteristics**

The City of Malibu includes a narrow strip of coast that is some 27 miles long, along a backdrop of the Santa Monica Mountains. The applicant's proposed project is located on Nicholas Canyon Beach, a narrow width sandy beach backed by approximate 50 foot high bluffs above the beach access road. Pacific Coast Highway is located at the top of these bluffs. This portion of Nicholas Canyon Beach is relatively undeveloped except for public park improvements. To the west is Leo Carrillo State Beach that includes a campground inland of Pacific Coast Highway. To the east are numerous large residential bluff top lots. To the north are large vacant and residentially developed

lots and the Malibu Riding and Tennis Club.

a. **Nicholas Canyon Beach is an Eroding Beach**

The Reconnaissance Report, Malibu/Los Angeles County Coastline, Los Angeles County, California dated April 1994 by the U. S. Army Corps of Engineers characterizes the Nicholas Canyon Beach area as a narrow sandy beach backed by high bluffs. This report notes that:

Storm flooding is expected for the lower lying structures and damages to the two public beach facilities will occur periodically depending on the severity of the event.

In addition, this report forecasts the shoreline between the County line between Ventura and Los Angeles Counties, including the subject beach, as "stable to slow erosion". The key factor in determining the impact of the proposed steel sheet pile retaining/seawall or seawall on the shoreline is related to the overall trend of sand supply on the beach. Evaluating whether or not a pattern of beach erosion exists is Generally, beaches fit into one of three profile categories: 1) eroding; 2) equilibrium, or 3) accreting.

Nicholas Canyon Beach is located within the Littoral Cell, which extends geographically from Sequit Point to Point Dume, with Arroyo Sequit Creek, Encinal Canyon, Zuma Canyon Creek as major contributors of sand. The beach in the immediate vicinity of the project site is relatively narrow with and thin to thick veneer of sand on bedrock. The beach is eroded to bedrock and cobble during and after most winter storm seasons with the usual summer beach accretion period widening the sandy beach. Therefore, the proposed seawall may be subject to wave attack during the winter high tides and storm waves.

The applicant initially submitted a Preliminary Geotechnical Investigation Report dated September 1999 by INCA Engineers for the original proposed project to reconstruct the beach access ramp and roadway in a similar location with protective armor rock seaward of the beach ramp. Subsequent to this initial proposed project, the staff requested the applicant to study alternatives to the project and conducted two site visits with the applicant in December 1999 and on March 28, 2000. In March 2000, the applicant studied nine alternatives for staff review at the March 28, 2000 site visit. The applicant subsequently revised the proposed project on September 1, 2000 to the current proposed beach access ramp now relocated to the east with a sheet pile retaining/seawall together with the abandonment of about 1032 foot long portion of the existing and former roadway and removal of about 305 feet of the existing roadway to construct the ramp.

The applicant submitted on September 1, 2000 a Geotechnical and Wave Uprush Study Coastal Engineering Report for the proposed project, prepared by Patrick Nicholson, Professional Engineer, INCA Engineers Inc. for the proposal beach access ramp and sheet pile retaining/seawall. The report addressed the erosion rate with and without the protective device and the quantification of loss of sand on the beach



because of the armoring of the bluff face along the roadway. Cross sections were provided to document the erosion of the bluff face due to the 1998 storm. This report concludes that "The erosion rate without a protective device will be essentially the same." In addition, the report concludes that the erosion rate behind the wall will be negligible because the proposed seawall structure is designed for the extreme event of total scour in front of the wall down to bedrock. The sheet pile is embedded to the scour depth at the top of the bedrock and the piles between the sheet piles will be embedded into bedrock about three feet deep to prevent scour, the mining of the retained material, and the protection of the beach access ramp during a peak storm event.

Staff reviewed the proposed project against the above cited shoreline data. The data presented indicates that this section of Nicholas Canyon Beach is an eroding beach. Therefore, based on the preponderance of evidence of these studies, considered in conjunction with site-specific evidence of beach erosion, the Commission concludes that the site proposed for placement of the sheet pile retaining/seawall is located on a beach that is narrow and eroding.

**b. Location of the Proposed Shoreline Protective Device in Relation to the Mean High Tide Line and Wave Action.**

The Commission notes that loss of beach is widely understood to occur when shoreline protective devices are placed on equilibrium or eroding beaches. In order to determine the impacts of the proposed seawall on the shoreline, the location of the protective device in relation to the Mean High Tide Line (MHTL) and expected wave runup must be analyzed. The profile data cited below, shows that the position of the seawall does intrude on the areas of wave runup and beach transport. Further, the data also indicates that the seawall is located no closer than 80 feet from a recently surveyed location of the MHTL.

**1. Mean High Tide Line**

The applicant has submitted data that indicates that the proposed seawall will be located no closer than 80 feet from a documented position of the MHTL in 1995. In addition, the applicant has submitted two letters from the State Lands Commission (SLC). The first letter from the SLC dated January 21, 2000 addresses a prior alternative project replacing the former 1,337 foot long section of the beach access road and ramp in a similar location as it existed prior to the 1998 storm damage. The applicant has since revised the project to abandon about 1,032 feet of the beach access road and relocate the proposed beach access ramp with a sheet pile retaining/seawall further east. The second State Lands Commission letter dated May 9, 2000 indicates that the SLC presently asserts no claims that the project intrudes onto sovereign tide and submerged lands (Exhibit 16).

**2. Wave Uprush**

With respect to inundation of the beach immediately seaward of the beach access ramp and sheet pile retaining/seawall, the data provided by the applicant's consultant, Patrick

Nicholson, INCA Engineers, indicates that such inundation will occur. What remains unclear is the frequency at which the inundation will occur.

It is important to accurately calculate the potential of wave runup and wave energy to which the seawall will be subjected. Dr. Douglas Inman, a widely recognized authority on Southern California shoreline processes, states that:

While natural sand beaches respond to wave forces by changing their configuration into a form that dissipates the energy of the waves forming them, seawalls are rigid and fixed, and at best can only be designed for a single wave condition. Thus, seawalls introduce a disequilibrium that usually results in the reflection of wave energy and increased erosion seaward of the wall. The degree of erosion caused by the seawall is mostly a function of its reflectivity, which depends upon its design and location.<sup>1</sup>

In past permit actions, the Commission has found that one of the most critical factors controlling the impact of a seawall on the beach is its position on the beach profile relative to the surf zone. All other things being equal, the further seaward the wall is, the more often and more vigorously waves interact with it. The best place for a seawall, if one is necessary, is at the back of the beach where it provides protection against the largest of storms. By contrast, a seawall situated too close to the MHTL is likely to cause constant interference with normal shoreline processes, resulting in frontal and end scour of the beach adjacent to and seaward of the wall, in addition to upcoast sand impoundment.

The applicant's letter response, received June 12, 2000, to the Commission staff's letter dated February 24, 2000 which requested a geotechnical and wave uprush report, notes the survey bench mark information indicates that the wave uprush limit line is located at the proposed retaining/seawall. Therefore, this data indicates that inundation of the beach fronting the proposed retaining/seawall will occur during high tide and winter storm conditions.

Based on the above discussion, the Commission finds that the proposed seawall, at its proposed location, has the potential to encroach into an area of the beach that is currently subject to wave action during high tide and storm events. As previously discussed, the Commission finds that Nicholas Canyon Beach is a narrow, eroding beach and that the proposed seawall will, at times, be subject to wave action during these tide and storm events. Thus, the following section evaluates the impacts of the proposed seawall on the beach based on the above information that identified the specific structural design, the location of the structure, and the shoreline geomorphology.

**c. Effects of the Shoreline Protective Device on the Beach**

The proposed 305 foot long shoreline protective device or seawall will be constructed at

---

<sup>1</sup> Letter from Dr. Inman to Coastal Commission staff civil engineer Lesley Ewing dated February 25, 1991.

the landward extent of the sandy beach within the area of the existing beach roadway to protect the proposed beach access ramp. The beach access ramp ranges from the 27 foot elevation at the east end to about the twelve foot elevation at its western terminus onto the sandy beach.

An engineered seawall is typically built along straight beaches or low coastal bluffs where fill can be placed landward of the seawall to support roadways and other developments that are constructed on fill land. In this case the seawall is proposed along the far back portion of the beach, now within the existing beach roadway, to protect the beach access ramp. Therefore, the seawall functions both as protection from wave attack and wave runup.

The proposed project involves a shoreline structure that, as a result of wave interaction, has the potential to affect the configuration of the shoreline and the beach profile and may have an adverse impact on the shoreline. Although the precise impact of a structure on the beach is a persistent subject of debate within the discipline of coastal engineering, and particularly between coastal engineers and marine geologists, it is generally agreed that a shoreline protective device will affect the configuration of the shoreline and beach profile. Adverse impacts upon the shoreline may accrue as the result of beach scour, end scour (undermining of the beach areas at the ends of the seawall), the retention of potential beach material behind the wall, the fixing of the back beach and the interruption of longshore processes. In order to evaluate these potential impacts relative to the proposed structure and its location at Nicholas Canyon Beach, each of the identified effects will be evaluated below.

#### 1. Encroachment on the Beach

Shoreline protective devices, such as seawalls, bulkheads, revetments, groins, etc., are physical structures that occupy space. When a shoreline protective device is placed on a beach area, the underlying beach area cannot be used for other beach purposes, such as recreation or lateral public access along the beach. If the underlying beach area is public beach, the public will not be able to use the beach area in the way it had prior to the placement of the protective device. This area will be altered from the time the protective device is constructed and the extent or area occupied by the device will remain the same over time, until the device is removed or is moved from its initial location. However, in this application the seawall will be located in an area where the existing roadway is located, it will not be located on the sandy beach. The seaward portion of the roadway will be excavated and removed to construct the seawall adjacent to the beach access ramp. Therefore, the proposed seawall will not encroach on the sandy beach.

#### 2. Beach Scour

Scour is the removal of beach material from the base of a cliff, seawall or revetment due to wave action. The scouring of beaches caused by seawalls is a frequently-observed occurrence. When waves impact a hard surface such as a coastal bluff, rock revetment, or vertical bulkhead, some of the energy from the wave will be absorbed, but much of it will be reflected back seaward. This reflected wave energy in combination

with the incoming wave energy, will disturb the material at the base of the seawall and cause erosion to occur in front and down coast of the hard structure. This phenomenon has been recognized for many years and the literature acknowledges that seawalls do affect the supply of beach sand. The following quotation summarizes a generally accepted opinion within the discipline of coastal engineering that:

Seawalls usually cause accelerated erosion of the beaches fronting them and an increase in the transportation rate of sand along them.<sup>2</sup>

The following quotation summarizes a generally accepted opinion within the discipline of coastal engineering that:

These structures are fixed in space and represent considerable effort and expense to construct and maintain. They are designed for as long a life as possible and hence are not easily moved or replaced. They become permanent fixtures in our coastal scenery but their performance is poor in protecting community and municipalities from beach retreat and destruction. Even more damaging is the fact that these shoreline defense structures frequently enhance erosion by reducing beach width, steepening offshore gradients, and increasing wave heights. As a result, they seriously degrade the environment and eventually help to destroy the areas they were designed to protect.<sup>3</sup>

The above 1981 statement signed by 94 respected coastal geologists indicates that sandy beach areas available for public use can be harmed through the introduction of seawalls. Thus, in evaluating an individual project, the Commission assumes that the principles reflected in that statement are applicable. To do otherwise would be inconsistent with the Commission's responsibilities under the Coastal Act to protect the public's interest in shoreline resources and to protect the public's access along the ocean and to the water, as discussed in more detail in the subsequent section concerning public coastal access.

The impact of seawalls as they are related to sand removal on the sandy beaches is further documented by the State Department of Boating and Waterways:

While seawalls may protect the upland, they do not hold or protect the beach which is the greatest asset of shorefront property. In some cases, the seawall may be detrimental to the beach in that the downward forces of water, created by the waves striking the wall rapidly remove sand from the beach.<sup>4</sup>

Finally this observation was underscored more recently in 1987 by Robert G. Dean in "Coastal Sediment Processes: Toward Engineering Solutions":

---

<sup>2</sup> Saving the American Beach: A Position Paper by Concerned Coastal Geologists (March 1981, Skidaway Institute of Oceanography), pg 4.

<sup>3</sup> Saving the American Beach: A Position Paper by Concerned Coastal Geologists (March 1981, Skidaway Institute of Oceanography), pg. 4.

<sup>4</sup> State Department of Boating and Waterways (formerly called Navigation and Ocean Development), Shore Protection in California (1976), page 30.

Armoring can cause localized additional storm scour, both in front of and at the ends of the armoring ... Under normal wave and tide conditions, armoring can contribute to the downdrift deficit of sediment through decreasing the supply on an eroding coast and interruption of supply if the armoring projects into the active littoral zone.<sup>5</sup>

It is generally agreed that where a beach is eroding, the erection of a seawall will eventually define the boundary between the sea and the upland. This result can be explained as follows. On an eroding shoreline fronted by a beach, a beach will be present as long as some sand is supplied to the shoreline. As erosion proceeds, the entire profile of the beach also retreats. This process stops, however, when the retreating shoreline comes to a seawall. While the shoreline on either end of the seawall continues to retreat, shoreline retreat in front of the seawall stops. Eventually, the shoreline fronting the seawall protrudes into the water, with the winter Mean High Tide Line (MHTL) fixed at the base of the seawall. In the case of an eroding shoreline, this represents the loss of a beach as a direct result of the seawall. In this specific case, erosion of the beach has occurred over time as identified by the wave erosion damage to the former beach access ramp and the western portion of the beach road in the 1998 El Nino winter storms.

As set forth in the discussion above, Nicholas Canyon Beach is eroding and, therefore, the seaward encroachment effects of the proposed seawall could have potentially adverse impacts as the beach erodes further landward and as the protective device becomes a dominant component of the shoreline system. The above cited erosion and damage to the former beach access ramp and road confirms that beach scour is a likely result of the placement of shoreline protective devices in an area subject to wave runup. In this case, the evidence has demonstrated that Nicholas Canyon Beach is a narrow and eroding beach.

The Geotechnical and Wave Uprush Study prepared by the applicant's engineer notes that the maximum wave uprush applicable to the subject site extends to the proposed seawall. If an eroded beach condition occurs with greater frequency due to the placement of the seawall, this site would also accrete sand at a slower rate. During periods of beach erosion, this site would erode more. The Commission notes that the proposed seawall will be located at the maximum wave uprush and will therefore be routinely acted upon by wave action during high tides and winter storm conditions. Therefore, based on the report prepared by the Army Corps of Engineers, noted above, the Commission finds that over time, the proposed seawall would be acted upon more frequently throughout the year. In addition in past permit actions, the Commission has found that shoreline protective devices that are subject to wave action tend to exacerbate or increase beach erosion. Therefore, this information suggests that the proposed seawall will be subject to wave action during the winter season and possibly other seasons, as the beach erodes over time.

The impacts of potential beach scour is important relative to beach use for two reasons. The first reason involves public access. It is important to note that Nicholas Canyon

---

<sup>5</sup> Coastal Sediments '87.

Beach is a Los Angeles County public beach park providing vertical and lateral beach access for the public recreational uses. If the beach scours at the base of the seawall, even minimal scouring in front of the 305 foot long wall will translate into loss of beach sand available (i.e. erosion) at a more accelerated rate than would otherwise occur under a normal winter season if the beach were unaltered. The second impact relates to the potential turbulent ocean condition. Scour at the face of the seawall will result in greater interaction with the wall, and thus, make the ocean along Nicholas Canyon Beach more turbulent than it would along an unarmored beach area. Therefore, the Commission finds that the proposed seawall will cause greater erosion than under natural conditions and less rapid sandy beach recovery through accretion of the beach.

The applicant's engineering consultant has indicated that the seawall will be acted upon by waves during storm conditions. The Geotechnical and Wave Uprush Study indicates that "the seawall is designed for the extreme event of total scour in front of the wall (down to bedrock) and with a Fire Truck surcharge on top of the wall". To quantify the loss of sand, the applicant's engineering consultant has reviewed a comparison between topographic site conditions in 1994 and 1999 which document the erosion of the bluff face (beach access road embankment) due to the 1998 storm. The consultant concludes that: "The erosion rate without a protective device will be essentially the same". However, the applicant's consultant documentation indicates a maximum of ten feet of erosion over this past five year period which further landward retreat will not occur in the future as a result of the proposed seawall. The proposed seawall will fix the back of the beach which will cause greater scour erosion than under natural condition and less rapid sandy beach recovery through accretion of the beach. Therefore, the Commission notes that the proposed seawall, over time, will result in potential adverse impacts to the beach sand supply resulting in increased seasonal erosion of the beach and longer recovery periods.

### 3. End Effects

End scour effects involve the changes to the beach profile adjacent to the shoreline protection device at either end. One of the more common end effects comes from the way waves reflect off of the shoreline protection device adding to the wave energy which is impacting the unprotected coastal areas on either end. Coastal engineers have compared the end effects impacts between revetments and seawalls. In the case of a revetment, the many angles and small surfaces of the revetment material reflect wave energy in a number of directions, effectively absorbing much of the incoming wave rather than reflecting it. Because of the way revetments modify incoming wave energy, there is often less problem with end effects or overtopping than that which occurs with a vertical seawall. In the case of a vertical seawall, return walls are typically constructed in concert with the seawall, and, thus, wave energy is also directed to the return walls causing end erosion effects.

The applicant's consultant did not provide any information on end effects of the seawall. The west end of the seawall is where the beach access ramp will be located. The west end will include a flat concrete pad for the landing of the beach access ramp surrounded by the proposed sheet pile retaining/seawall for protection when the sandy beach is eroded to the underlying cobble at the back of the beach. The sheet piles will

be embedded three feet below scour depth to the top of bedrock which is about fifteen feet deep at the landing. The landing is located at about fourteen feet above mean sea level. At the east end of the seawall, the height of the seawall at this landing will about sixteen feet above the existing grade and about fourteen feet deep within cobble to the top of the bedrock. Pilings will be driven about three feet into bedrock between the sheet piles. On either end of the seawall, there will be no seawall or revetment. The Commission notes that although end effect erosion will occur, it will be minimized by locating a proposed shoreline protection device as far landward as possible to reduce the frequency that the seawall is subject to wave action. In the case of the proposed project, and as noted previously, is located as far landward as possible while providing for the proposed relocated beach access ramp.

**d. Sea Level Rise**

Sea level has been rising slightly for many years. In the Santa Monica Bay area, the historic rate of sea level rise has been 1.8 mm/yr. or about 7 inches per century<sup>6</sup>. Sea level rise is expected to increase by 8 to 12 inches in the 21<sup>st</sup> century.<sup>7</sup> There is a growing body of evidence that there has been a slight increase in global temperature and that an accelerated rate of sea level rise can be expected to accompany this increase in temperature. Mean water level affects shoreline erosion in several ways and an increase in the average sea level will exacerbate all these conditions.

On the California coast the effect of a rise in sea level will be the landward migration of the intersection of the ocean with the shore. On a relatively flat beach, with a slope of 40:1, every inch of sea level rise will result in a 40-inch landward movement of the ocean/beach interface. For fixed structures on the shoreline, such as a single family residence, pilings, or seawalls, an increase in sea level will increase the inundation of the structure. More of the structure will be inundated or underwater than are inundated now and the portions of the structure that are now underwater part of the time will be underwater more frequently.

Accompanying this rise in sea level will be increased wave heights and wave energy. Along much of the California coast, the bottom depth controls the nearshore wave heights, with bigger waves occurring in deeper water. Since wave energy increases with the square of the wave height, a small increase in wave height can cause a significant increase in wave energy and wave damage. So, combined with the physical increase in water elevation, a small rise in sea level can expose previously protected back shore development to both inundation and wave attack, and those areas that are already exposed to wave attack will be exposed to more frequent wave attack with higher wave forces. Structures that are adequate for current storm conditions may not provide as much protection in the future.

A second concern with global warming and sea level rise is that the climatic changes could cause changes to the storm patterns and wave climate for the entire coast. As

---

<sup>6</sup> Lyles, S.D., L.E. Hickman and H.A. Debaugh (1988) Sea Level Variations for the United States 1855 - 1986. Rockville, MD: National Ocean Service.

<sup>7</sup> Field et. al., Union of Concerned Scientists and the Ecological Society of America (November 1999) Confronting Climate Change in California, [www.ucsusa.org](http://www.ucsusa.org).

water elevations change, the transformation of waves from deep water will be altered and points of energy convergence and divergence could shift. The new locations of energy convergence would become the new erosion "hot spots" while the divergence points may experience accretion or stability. It is highly likely that portions of the coast will experience more frequent storms and the historic "100-year storm" may occur every 10 to 25 years. For most of California the 1982/83 El Niño event has been considered the "100-year storm". Certain areas may be exposed to storms comparable to the 1982/83 El Niño storms every few decades. In an attempt to ensure stability under such conditions, the Commission has required that all new shoreline structures be designed to withstand either a 100-year storm event, or a storm event comparable to the 1982/83 El Niño. Also, since it is possible that storm conditions may worsen in the future, the Commission has required that structures be inspected and maintained on a regular basis. The coast can be altered significantly during a major storm and coastal structures need to be inspected on a regular basis to make sure they continue to function as designed. If storm conditions worsen in future years, the structures may require changes or modifications to remain effective. In some rare situations, storm conditions may change so dramatically that existing protective structures may no longer be able to provide any significant protection, even with routine maintenance.

The applicant's consultant notes that there exists concern for rising sea level in the future as a consequence of global warming. The consultant concludes that:

The past century has experienced an increase in mean tide height of about 0.5 feet. While the future rate of sea level rise is not known, a very conservative estimate for this project is 0.75 feet of mean sea level rise during the future 50 year project life (triple the rate of sea level rise experienced during the past century).

The applicant's consultant confirms that the proposed seawall will be designed to withstand storms comparable to the winter storms of 1982-83 and of 1998.

**e. Alternative Seawall Locations and Designs**

There are numerous alternatives to consider ranging from alternative designs to alternative locations for a shoreline protective device and alternative locations for the proposed replacement beach access ramp. It has been found that the further landward the seawall is located, the less beach scour will result. The alternative of constructing a new seawall in a more landward location and abandoning a portion of the length of the beach access roadway (1,032 feet) may reduce the effects on the beach caused by wave runup during high tides and winter storms. This alternative is the one now proposed by the applicant.

In response to the application materials submitted by the applicant, Staff requested, in two letters dated September 22, 1999 and February 24, 2000, a discussion of alternatives to the initially proposed replacement of the damaged beach access ramp, an armor rock revetment as a shoreline protective device, and replacement of the damaged beach access road. The applicant submitted on March 28, 2000 at the Staff's second site visit an analysis and conceptual designs for a total of nine alternative



projects including the initially proposed rock revetment and the current proposed sheet pile retaining/seawall and relocated beach access ramp. At this site visit, the applicant amended the project to eliminate the armor rock revetment and substitute the use of sheet piling. However, this amended project continued to include construction of a shorter replacement roadway about 500 feet long with a proposed sheet pile retaining/seawall of about 500 feet long with a timber fascia along the retaining/seawall. This amended alternative removed about a 300 foot length of the damaged beach access road and relocated the beach ramp to the east. The additional seven alternatives range from reconstructing the entire 1,337 foot length of the beach access road and ramp west of the restroom and constructing a sheet pile retaining/seawall along the entire length to a combination of a sheet pile retaining/seawall and an armored rock revetment along the entire length to abandoning the beach roadway altogether along with the restroom adjacent to the roadway and constructing a new restroom near the parking area.

In a Staff letter dated February 24, 2000 and the Staff site visits with the applicant, the issue of the need for the replacement of the beach access road and ramp well beyond the existing restroom were raised and the need to protect the entire roadway. As a result the applicant further revised the project by amending the application on September 1, 2000 to remove 790 foot length of the existing asphalt concrete roadway, abandon a total of 1032 feet of the roadway and construct a 305 foot long beach access ramp with a sheet pile retaining/seawall to protect the proposed beach access ramp. In effect, the applicant's project, as now proposed, will be relocating the beach access ramp about 1,032 feet further east. The proposed beach access ramp will begin at the restroom inland of the beach road (Exhibit 4).

f. Conclusion

Coastal Act Section 30235 sets forth the Commission's mandate relative to permitting shoreline protective devices and beachfront development. In order for the Commission to permit the proposed project, which includes a 305 foot long seawall, it must find the project consistent with the Chapter 3 policies of the Coastal Act.

Coastal Act section 30235, cited above, states that shoreline protective devices such as seawalls and other construction that would alter natural shoreline processes shall be permitted when those structures are necessary to serve coastal-dependent uses or to protect existing structures or to protect public beaches in danger from erosion and when they are designed to eliminate or mitigate adverse impacts on local shoreline sand supply. In the case of this project, a seawall is necessary to protect the emergency vehicle beach access ramp. Further, as previously discussed in detail, the Commission finds that the subject site is located on a beach that is narrow and eroding, the proposed seawall would protect a reconstructed and relocated beach access ramp that will be subject to erosion due to high tides and storm waves.

In addition, in past permit actions, the Commission has required that all new development on a beach, including shoreline protective devices, be designed to reduce adverse impacts to the sand supply and beach scour resulting from the development. The Commission notes that the applicant has reviewed nine alternatives and identified

a feasible alternative to allow the seawall to be located as far landward as possible while minimizing the length of the beach access roadway beyond an existing public restroom. In past permit actions, the Commission has required a lateral public access easement for shoreline protective devices to mitigate adverse impacts to beach sand supply and public access. In this case, the applicant's property is a public beach park now providing vertical and lateral public access to and along the beach.

Therefore, the Commission finds that the proposed seawall meets the first and second tests of Section 30235 which allow such seawalls to be permitted when required to protect existing structures in danger from erosion on public beaches in danger from erosion and when designed to mitigate adverse impacts on local shoreline sand supply. In this case, the proposed retaining/seawall is setback as far landward on the beach as is feasible and is designed to mitigate and minimize adverse effects to shoreline processes to the maximum extent feasible. Therefore, the Commission finds that the proposed project, as conditioned, is consistent with Sections 30235 of the Coastal Act.

### **C. Hazards and Geologic Stability**

Section 30231 of the Coastal Act is designed to protect and enhance, or restore where feasible, marine resources and the biologic productivity and quality of coastal waters, including streams. Section **30231** of the Coastal Act states as follows:

**The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.**

In addition, Section **30240** of the Coastal Act states that environmentally sensitive habitat areas must be protected against disruption of habitat values:

**(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.**

**(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.**

Coastal Act Section **30253** states in part:

**New development shall:**

**(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.**

**(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.**

Section 30253 of the Coastal Act mandates that new development provide for geologic stability and integrity and minimize risks to life and property in areas of high geologic, flood, and fire hazard. The proposed development is located along the coast of the Santa Monica Mountain area, an area that is generally considered subject to an unusually high amount of natural hazards. Geologic hazards common to beachfront sites include landslides, and erosion and flooding from storm waves.

**1. Storm, Wave and Flood Hazard**

The Malibu coast has been subject to substantial damage as a result of storm and flood occurrences, geological failures and firestorms. Therefore, it is necessary to review the proposed project and project site against the area's known hazards. The proposed project involves the construction of a seawall to protect a relocated emergency vehicle beach access ramp along a public park located at Nicholas Canyon Beach. The site is susceptible to flooding and/or wave damage from storm waves and storm surge conditions. Along the Malibu coast, significant damage has also occurred to coastal areas from high waves, storm surge and high tides. In the El Nino winter of 1997-98, storms triggered mudslides and landslides and caused significant damage along the coast.

The 1997 - 1998 El Nino conditions produced wave overtopping and erosion severely damaging the former beach access road and ramp to the sandy beach prompting the applicant to request a coastal permit to replace this road and ramp. Experience from historic storm events in Malibu, particularly the high surf and storm wave conditions experienced during the winter of 1997 through 1998, indicates that this protection is essential to the long-term stability of the beach access road and ramp.

The applicant's submittal includes three reports, titled Value Engineering Study, Preliminary Geotechnical Investigation Report, and Geotechnical and Wave Uprush Report and a letter Response to Coastal Commission Comments prepared by INCA Engineers, Inc. dated September, 1999, September 1999, September 1, 2000, and June 12, 2000, respectively. These reports and letter response conclude that a shoreline protective device is necessary to protect the former beach access road and ramp from wave erosion damage. The applicant has also revised the project to relocate the beach access ramp to the east starting the ramp along the existing beach road adjacent to the public restroom while abandoning a 1,037 foot long portion of the former beach roadway and beach ramp.

During the winter season, the proposed seawall protecting the beach ramp will extend into an area exposed to wave attack, flooding, and erosion hazards that in the past have caused significant damage to development along the California coast, including the Malibu coastal zone and the beach area nearby the subject property. The Coastal Act recognizes that new development, such as the proposed seawall, may involve the taking of some risk. Coastal Act policies require the Commission to establish the appropriate degree of risk acceptable for the proposed development and to determine who should assume the risk. When development in areas of identified hazards is proposed, the Commission considers the hazard associated with the project site and the potential cost to the public, as well as the individual's right to use his property. In fact, the applicant's former beach access ramp was severely damaged in the 1998 El Nino winter storms.

As such, the Commission finds that due to the unforeseen possibility of wave attack, erosion, and flooding, the applicant shall assume these risks as a condition of approval. Because this risk of harm cannot be completely eliminated, Special Condition Number One requires the applicant to waive any claim of liability on the part of the Commission for damage to life or property which may occur as a result of the permitted development. The applicant's assumption of risk, when signed and executed, will show that the applicant is aware of and appreciated the nature of the hazards which exist on the site, and which may adversely affect the stability or safety of the proposed development.

The proposed project will decrease the amount of impervious coverage on-site with the proposed abandonment of 1,037 feet of existing roadway and former beach ramp to construct the replacement concrete beach access ramp 305 feet long by 22 feet wide. The applicant also proposes to grade about 0.59 acres of the slope immediately adjacent to the proposed relocated beach access ramp, construct a 340 foot long slope drain, grade 5,882 cubic yards of cut, nine cubic yards of fill, and export 5,873 cubic yards of dirt and debris to a disposal site located outside the coastal zone. The applicant asserts this slope grading is necessary to provide stability for the hillside in the area where the beach ramp will descend to the sandy beach (Exhibits 12 - 15). The majority of this cut material is necessary to provide slope stability along the length of the proposed beach ramp as it descends to the sandy beach. A slope drain (concrete "V" shaped ditch) is proposed along the top of the graded slope (Exhibits 11 and 12). The slope drain will convey water runoff from the slope above the graded slope to the beach at the west and through a new culvert beneath the beach ramp at the east and removing portion of existing pipe. Energy dissipaters are proposed at the two ends of the slope drain and culvert.

If not controlled and conveyed off-site in a non-erosive manner, this runoff may result in increased erosion, affect site stability. The applicant's proposed slope drain will collect and distributed runoff above the proposed graded slope in a non-erosive manner. To address the need for a landscape plan and interim erosion control measures, Special Condition Number Two is necessary. This Condition will require interim erosion control measures be implemented during construction to minimize short-term erosion and enhance site stability. In addition to controlling erosion during grading operations, landscaping of the graded and disturbed areas of the project will enhance the stability

of the site. Long-term erosion can be minimized by requiring the applicant to revegetate the site with native plants compatible with the surrounding environment. Invasive and non-native plant species are generally characterized as having a shallow root structure in comparison with their high surface / foliage weight. The Commission has found that such plant species do not serve to stabilize slopes and may adversely affect the overall stability of a project site. Native species, alternatively, tend to have a deeper root structure and aid in preventing erosion. Invasive, non-indigenous plant species tend to supplant species that are native to the Malibu / Santa Monica Mountains area. Increasing urbanization in this area has already caused the loss or degradation of major portions of native habitat and native plant seed banks through grading and removal of topsoil. Moreover, invasive and fast-growing trees and groundcovers originating from other continents which have been used for landscaping in this area have seriously degraded native plant communities adjacent to development. Therefore, the Commission finds that in order to ensure site stability, all disturbed, graded, and sloped areas on-site shall be landscaped with appropriate native plant species, as specified to be limited to species endemic to coastal bluffs in Special Condition Number Two.

In this application, the applicant is proposing a cut of 5,882 cubic yards of material, nine cubic yards of fill and the disposal of the remaining 5,873 cubic yards of cut material to be exported to a disposal site outside the coastal zone. Grading (cut) related to roadway/ramp is 1,793 cubic yards of material while the cut related to the slope is 4,089 cubic yards of material. Special Condition Number Three requires that this excess cut material be exported outside the coastal zone as proposed by the applicant.

Lastly, as noted above, the project involves some demolition and construction on a beachfront property subject to tidal influence. The proposed development, with its excavation of sandy beach and terrace deposits, beach level construction activity, and the excavation of a slope and disposal of cut material offsite, may result in disturbance of the offshore rocky intertidal and kelp bed habitat through erosion, siltation, and debris deposition which is required to be protected by Sections 30231 and 30240 of the Coastal Act. Construction equipment, materials and demolition debris could pose a significant hazard to beachgoers or swimmers if used or stored where subject to wave contact or situated in a manner that creates a hazard for beach users or marine life. As required by Special Condition Number Four, the applicant needs to ensure that the project contractor; a) not stockpile dirt on the beach; b) properly cover and sand-bag all stockpiling beyond the beach to prevent runoff and siltation; c) not store any construction materials or waste where it may be subject to wave erosion and dispersion; d) promptly remove any and all debris from the beach that results from construction or demolition materials to an appropriate disposal site; e) implement measures to control erosion at the end of each day's work; and f) not allow any mechanized equipment in the intertidal zone at any time. The Commission finds that the construction of the proposed project will minimize risks to life and property in this public beach area that is subject to wave hazards and the applicant will protect coastal resources during the removal of the former beach access ramp and road and the construction of the relocated beach access road and ramp and seawall.

The Commission finds that the project, as conditioned above, is consistent with Sections 30231, 30240 and 30253 of the Coastal Act.

**D. Public Access.**

The Coastal Act mandates the provision of maximum public access and recreational opportunities along the coast. The Coastal Act contains several policies which address the issues of public access and recreation along the coast.

Coastal Act Section 30210 states that:

**In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.**

Coastal Act Section 30211 states that:

**Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.**

Coastal Act Section 30212(a) provides that:

**Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:**

- (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources.**
- (2) adequate access exists nearby, or,**
- (3) agriculture would be adversely affected. Dedicated access shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.**

Coastal Act Section 30220 states that:

**Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such use.**

Coastal Act sections 30210 and 30211 mandate that maximum public access and recreational opportunities be provided and that development not interfere with the public's right to access the coast. Likewise, section 30212 of the Coastal Act requires

**Los Angeles County Department of Public Works**

that adequate public access to the sea be provided to allow use of dry sand and rocky coastal beaches. The proposed project will be located in the area of an existing roadway leading to a former beach access ramp. As proposed the seawall would be located as far landward as feasible within an area where the slope along the existing roadway is located.

The beaches of Malibu are extensively used by visitors of both local and regional origin and most planning studies indicate that attendance of recreational sites will continue to increase significantly over the coming years. The public has a right to use the shoreline under the public trust doctrine, the California Constitution and California common law. The Commission must protect those public rights by assuring that any proposed shoreline development does not interfere with or will only minimally interfere with those rights.

All projects requiring a coastal development permit must be reviewed for compliance with the public access and recreation provisions of Chapter 3 of the Coastal Act. Based on the access, recreation and development sections of the Coastal Act, the Commission has required public access to and along the shoreline in new development projects and has required design changes in other projects to reduce interference with access to and along the shoreline. Because the project site is a public beach park, there is no need for any public land dedications.

The applicant proposes to use the existing public parking lot for staging construction materials and equipment. The parking lot is located about 700 feet to the east of the project site. Nicholas Canyon Beach County Park is used by many members of the public year round and most heavily during the summer months, although it is used less than other urban beach parks within Los Angeles County. Construction activities during summer months and particularly holidays and holiday weekends may conflict with heavy public use of the beach and park. Therefore, Special Condition Number Five is necessary to limit the construction activities to weekdays during the summer while prohibiting summer weekend and holiday construction activities. Special Condition Number Five allows the applicant to grade and construct the project during the summer provided that the applicant will not conduct any construction activities during any holiday and holiday weekend or any weekend between and including the May Memorial Day Weekend and the September Labor Day Weekend.

For all of these reasons, therefore, the Commission finds that as proposed, the project is not consistent with Sections 30210, 30211, 30212, and 30220 of the Coastal Act.

**E. Visual Resources**

Section 30251 of the Coastal Act states that:

**The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and**

**enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinated to the character of its setting.**

Coastal Act Section 30251 requires that visual qualities of coastal areas shall be considered and protected, landform alteration shall be minimized, and where feasible, degraded areas shall be enhanced and restored.

The project site is located on Nicholas Canyon Beach, a recreational oriented portion of Malibu with two public beach parks, the subject County Beach Park and Leo Carrillo State Beach Park, and the Malibu Riding and Tennis Club, and a limited number of larger lot residential development. The Commission notes that the visual quality of the Nicholas Canyon Beach area in relation to public views from Pacific Coast Highway has not been significantly degraded from past residential development as it is further to the west along Pacific Coast Highway. Pacific Coast Highway is a major coastal access route, not only utilized by local residents, but also heavily used by tourists and visitors to access the several public beaches located in the surrounding area which are only accessible from Pacific Coast Highway.

The public uses Nicholas Canyon County Beach Park by walking from the public parking lot near the entrance from Pacific Coast Highway on the eastern portion of the park along the beach access road to an existing pedestrian beach access ramp and then onto the sandy beach. The public will view the proposed project from the majority of the sandy beach within the subject park, the public restroom area, and along the proposed beach access ramp.

As stated above, Coastal Act Section 30251 requires that new development be sited and designed to protect views to and along the ocean and scenic coastal areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. In this case, the proposed project's grading of the slope has the potential to create adverse effects to coastal views from these public viewing areas. In addition, the sheet pile retaining/seawall also has the potential to create adverse effects to coastal views from public viewing areas. To mitigate the potential adverse visual effects of the sheet pile retaining/seawall, the applicant proposes to add a timber facia to screen the steel sheet piles from public view along the beach. To address the potential to create adverse effects to coastal views as a result of the slope grading necessary to stabilize the slope adjacent to the proposed descending beach ramp, Special Condition Number Two requires that the slope be landscaped with native plants endemic to coastal bluffs to adequately screen graded slope from public viewing areas and to enhance visual quality along the coast. Therefore, the Commission finds that the proposed project, as conditioned above, is consistent with Section 30251 of the Coastal Act.

#### **F. Local Coastal Program**

Section 30604 of the Coastal Act states that:



(a) Prior to certification of the local coastal program, a coastal development permit shall be issued if the issuing agency, or the commission on appeal, finds that the proposed development is in conformity with Chapter 3 (commencing with Section 30200) and that the permitted development will not prejudice the ability of the local government to prepare a local coastal program that is in conformity with Chapter 3 (commencing with Section 30200). A denial of a coastal development permit on grounds it would prejudice the ability of the local government to prepare a local coastal program that is in conformity with Chapter 3 (commencing with Section 30200) shall be accompanied by a specific finding which sets forth the basis for that conclusion.

Section 30604(a) of the Coastal Act provides that the Commission shall issue a Coastal Permit only if the project will not prejudice the ability of the local government having jurisdiction to prepare a Local Coastal Program which conforms with Chapter 3 policies of the Coastal Act. The preceding sections provide findings that the proposed project, as conditioned, will be in conformity with the provisions of Chapter 3 of the Coastal Act. As conditioned, the proposed development will not create adverse impacts and is found to be consistent with the applicable policies contained in Chapter 3. Therefore, the Commission finds that approval of the proposed development, as conditioned, will not prejudice the City of Malibu's ability to prepare a Local Coastal Program for the Malibu/Santa Monica Mountain area which is also consistent with the policies of Chapter 3 of the Coastal Act as required by Section 30604 (a).

**G. CEQA**

Section 13096(a) of the Commission's administrative regulations requires Commission approval of a Coastal Development Permit application to be supported by a finding showing the application, as conditioned, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity would have on the environment.

The Commission finds that the proposed project, as conditioned, will not have significant adverse effects on the environment, within the meaning of the California Environmental Quality Act of 1970 and that there are no feasible alternatives that could lessen these significant adverse effects on the environment. Therefore, the proposed project has been adequately mitigated and is consistent with CEQA and the policies of the Coastal Act.

## APPENDIX A

### SUBSTANTIVE FILE DOCUMENTS

State Lands Commission letters dated May 9, 2000 and January 21, 2000;

Preliminary Geotechnical Investigation Report by INCA Engineers, Inc., dated September 1999.

Value Engineering Study, by INCA Engineers, Inc., dated September 1999.

Geotechnical and Wave Uprush Study, by INCA Engineers, Inc. received September 1, 2000.

Response to CCC comments dated February 24, 2000 received on June 12, 2000.

Certified Malibu/Santa Monica Mountains Land Use Plan. County of Los Angeles. 12/11/86.

Adopted City of Malibu General Plan. November 1995

City of Malibu. Article IX Interim Zoning Ordinance. 1993.

### **STUDIES AND PUBLICATIONS**

U.S. Army Corps of Engineers. Los Angeles District. Reconnaissance Study of the Malibu Coast. 1994

National Academy of Sciences. Responding to Changes in Sea Level. Engineering Implications. National Academy Press, Washington D.C. 1987.

Robert Dean, Coastal Sediment Processes: Toward Engineering Solutions, 1987

Field et. al., Union of Concerned Scientists and the Ecological Society of America, Confronting Climate Change in California, November 1999, [www.ussusa.org](http://www.ussusa.org)

Lyles, S. D., L. E. Hickman and H. A. Debaugh, Sea Level Variations for the United States 1855 – 1986, Rockville, MD, National Ocean Service, 1988

Skidaway Institute of Oceanography, Saving the American Beach: A position Paper by Concerned Coastal Geologists, March 1981, pg 4

State of California. State Department of Boating and Waterways (formerly Navigation and Ocean Development). Shore Protection in California, 1976.

Weiss, David Structural Engineer & Associates, Coastal Engineering Report for Kilb Residence, dated January 28, 1998; Addendum Coastal Engineering Report, dated

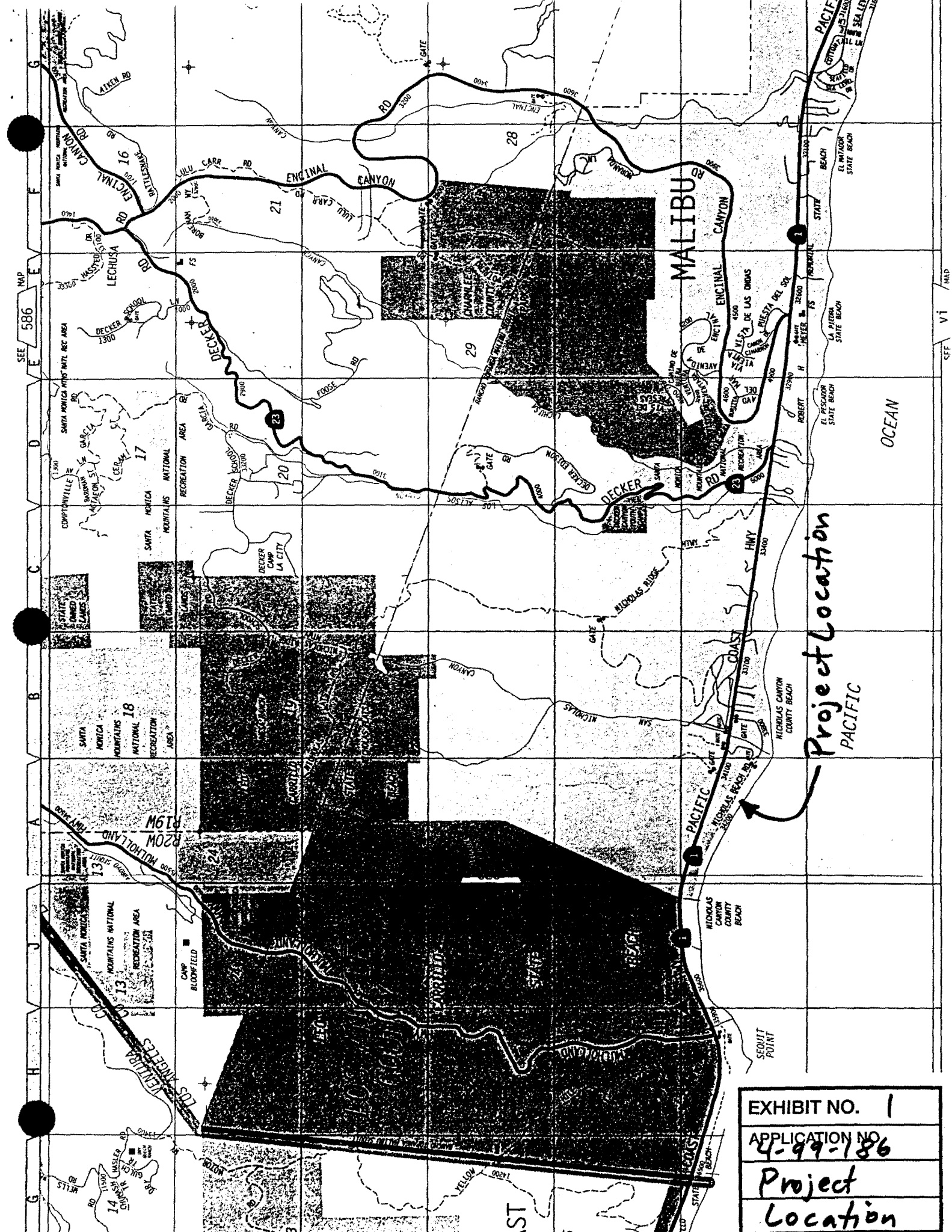
June 4, 1999; Proposal to Obtain Approval, dated August 1, 1999; Coastal Application Number 4-98-019, dated February 2, 2000; Additional Discussion Protective Bulkhead, dated March 5, 2000; Coastal Application Number 4-00-111, dated June 7, 2000; Additional Information letter on Alternatives, dated August 23, 2000.

**LETTER**

Letter to Lesley Ewing from Douglas Inman, Ph.D., February 25, 1991

**COASTAL PERMIT APPLICATIONS** Coastal Permit No. 4-00-111, Kilb; Staff Report Lechuza Villas West 2/4/97; Coastal Permit Number 4-94-200, Dussman; Coastal Permit Number 4-97-191, Kim; Coastal Permit Number 4-97-171, Sweeney; Coastal Application Number 4-98-158, O'Conner, Coastal Permit Number 4-98-056, O'Toole.





Project Location  
PACIFIC

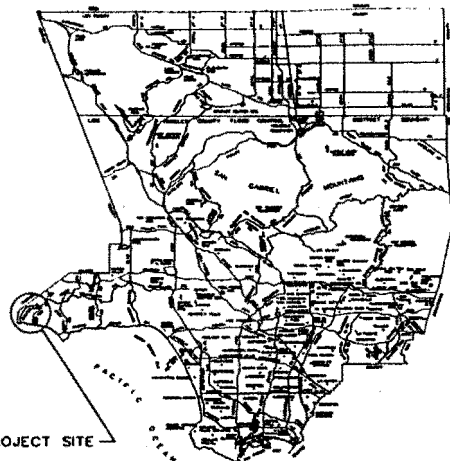
EXHIBIT NO. 1
APPLICATION NO. 4-99-186
Project Location

COUNTY OF LOS ANGELES  
DEPARTMENT OF PUBLIC WORKS

NICHOLAS CANYON BEACH ACCESS ROAD

INDEX TO PROJECT DRAWINGS

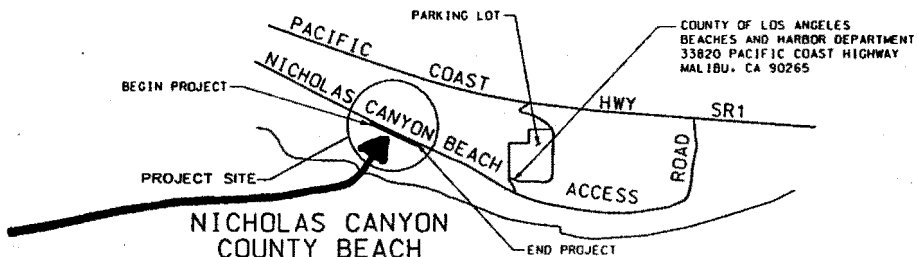
SH. NO.	DESCRIPTION
1	TITLE SHEET
2	NOTES REFERENCES AND LEGEND
3	TYPICAL SECTIONS
4	DEMOLITION PLAN
5	ROADWAY PLAN AND PROFILE
6	RETAINING WALL PLAN AND PROFILE
7	RETAINING WALL SECTIONS
8	STRUCTURAL DETAILS 1 OF 2
9	STRUCTURAL DETAILS 2 OF 2
10	REINFORCED CONCRETE PIPE CULVERT
11	MISCELLANEOUS DETAILS
12	GRADING PLAN
13	LOG OF TEST BORINGS



LOCATION MAP

PROJECT SITE  
Thomas Bros. Pgs. 626-66

TOTAL LENGTH 0.1 MILE  
ACCELERATED ROAD CONSTRUCTION PROGRAM  
CASH CONTRACT NO. 9082



PACIFIC OCEAN

KEY MAP  
NOT TO SCALE

*Project Site*

CONSTRUCTION LEGEND

- (2) PORTLAND CEMENT CONCRETE CURB
- (8) ASPHALT CONCRETE PAVEMENT
- (9) ASPHALT CONCRETE PAVEMENT ON BASE MATERIAL
- (10) ASPHALT CONCRETE PAVEMENT VARIABLE THICKNESS
- (13) COLDMILL ASPHALT CONCRETE PAVEMENT
- (17) RETAINING STRUCTURE
- (18) DRAINAGE SYSTEM AS SHOWN ON SHEET INDICATED
- (34) REINFORCED CONCRETE PAVEMENT ON BASE

CONSTRUCTION SYMBOLS

- (NO) INDICATES WORK PER CONSTRUCTION LEGEND
- 2" P4 ABOVE LINE:  
INDICATES THE TYPE OF STANDARD OR THICKNESS OF SURFACE MATERIAL IN INCHES.
- 14" CMB BELOW LINE:  
REFERENCE TO DETAIL OR THICKNESS OF BASE MATERIAL IN INCHES.

ALL DRAINAGE FACILITIES SHOWN SHALL BE MAINTAINED BY DEPARTMENT OF BEACHES AND HARBORS

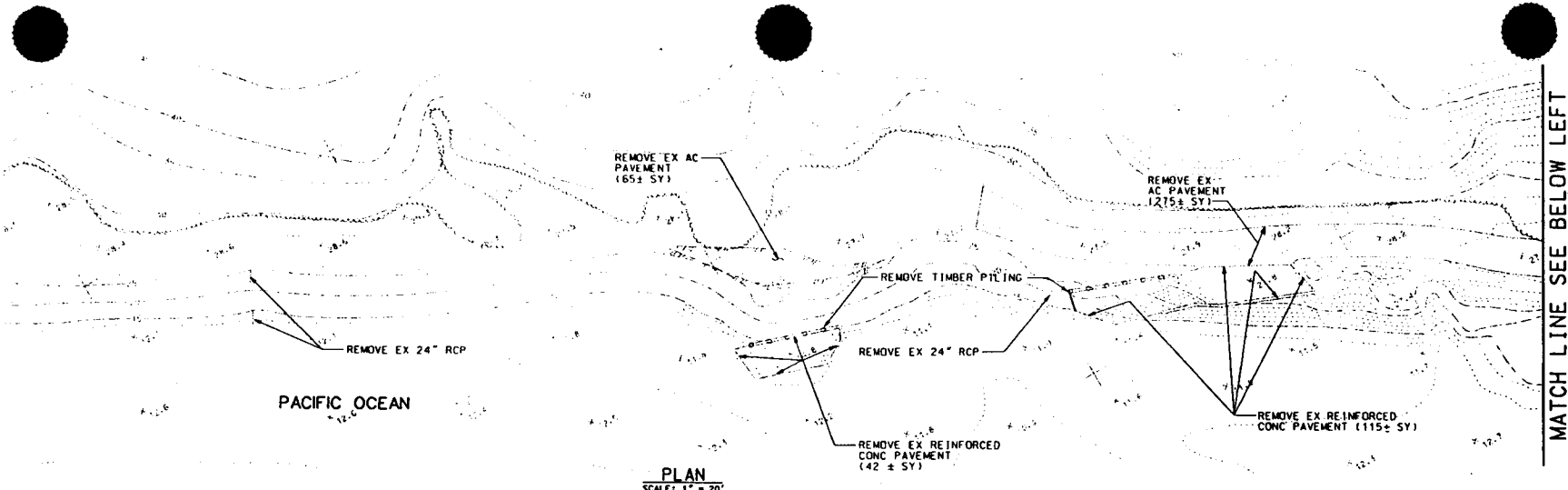
REFERENCES

- 1 CSFB 930-161
- 2 LAC ISD CAPITAL PROJECT 86324/70843

DEPARTMENT OF BEACHES AND HARBORS TWO DAYS BEFORE YOU DIG CALL USA TOLL FREE 1-800-422-4133	APPROVED HARRY H. STONE DIRECTOR OF PUBLIC WORKS BY: _____ DATE: _____ RECOMMENDED BY: _____ DATE: _____ SUBMITTED BY: _____ DATE: _____	COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS NICHOLAS CANYON BEACH ACCESS ROAD TITLE SHEET CASH CONTRACT 9082	COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS NICHOLAS CANYON BEACH ACCESS ROAD TITLE SHEET CASH CONTRACT 9082 JOB X2309082 PROJECT ID# PDC001532 SHEET 1 OF 13
	DATE: _____ REVISIONS: _____ PROJECT OWNER: _____ DATE: _____		

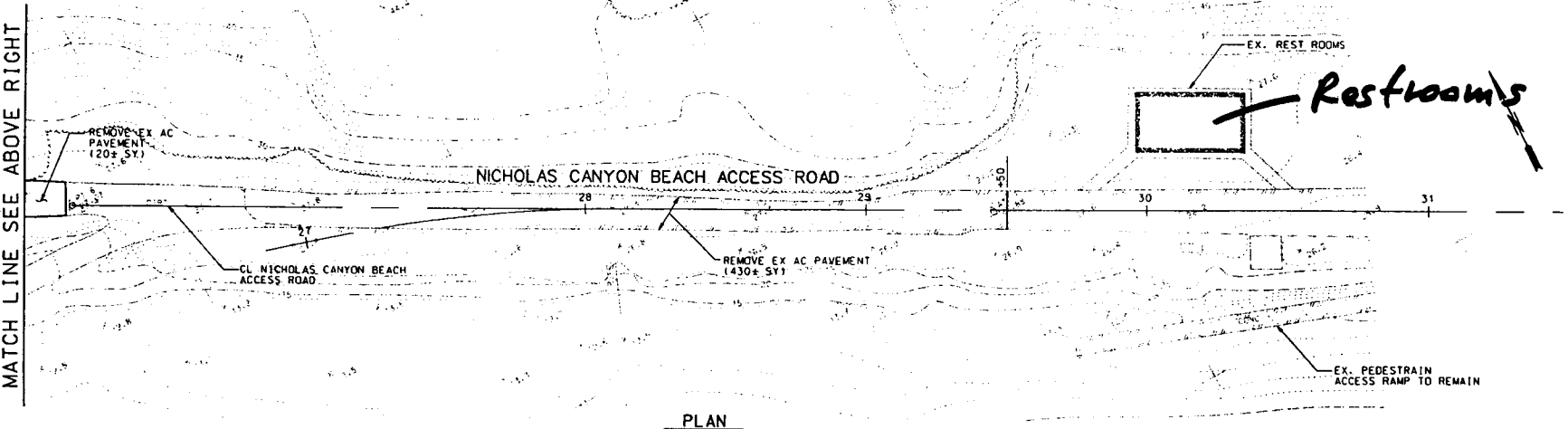
EXHIBIT NO. 2  
 APPLICATION NO. 4-99-186  
 Project Site

P. NICHOLSON NCSB1011.DGN  
 M. SATISH  
 P. HOPKINS



PLAN  
SCALE: 1" = 20'

MATCH LINE SEE BELOW LEFT



PLAN  
SCALE: 1" = 20'

MATCH LINE SEE ABOVE RIGHT

DATE	BY	DESCRIPTION
REVISIONS		

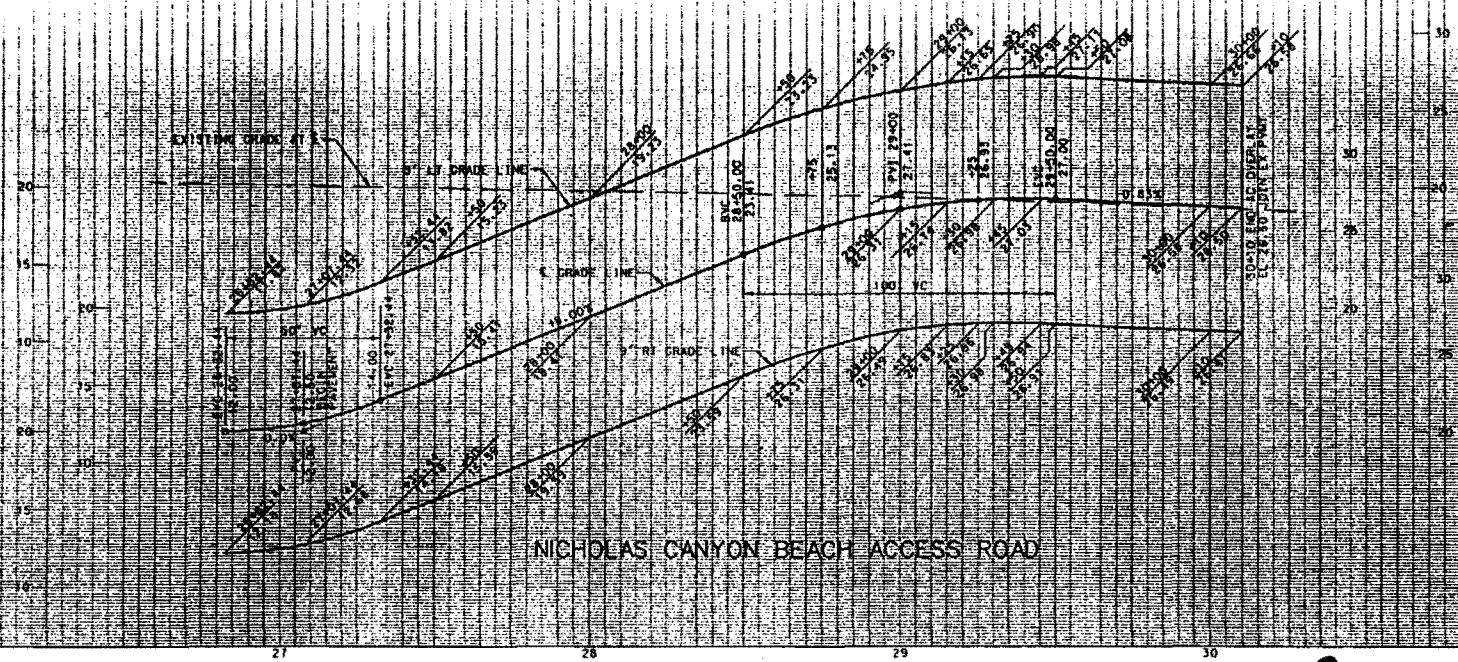


COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS  
**NICHOLAS CANYON BEACH ACCESS ROAD**  
 DEMOLITION PLAN  
 CASH CONTRACT 9082  
 JOB X2309082 | PROJECT ID= RDC0013132 | SHEET: 4 OF 13

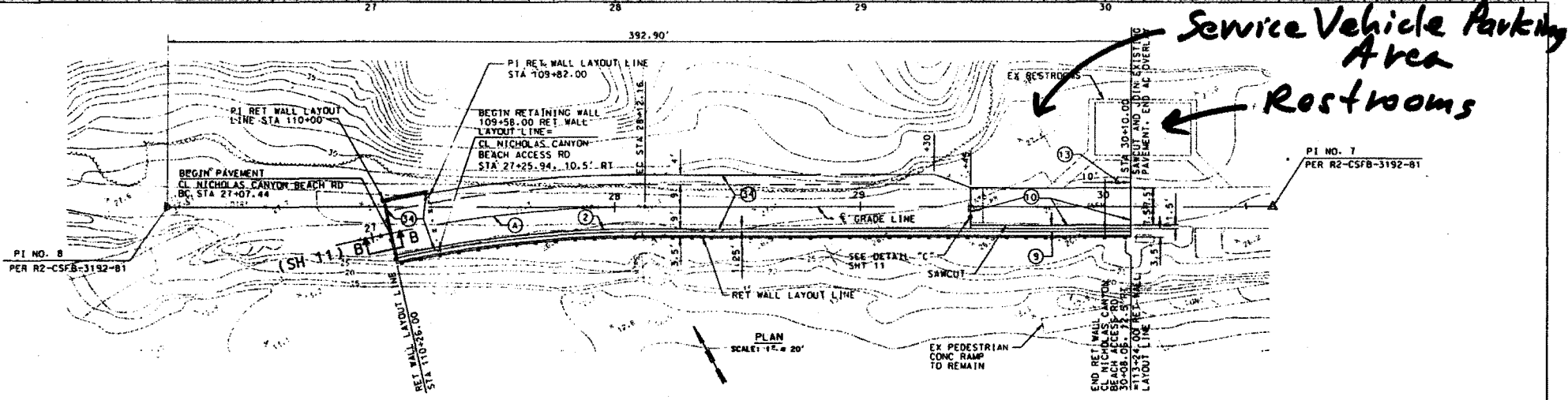
**EXHIBIT NO. 3**  
 APPLICATION NO. **4-99-1986**  
**Demolition Plan**

P. NICHOLSON (REGISTERED) DGN  
 W. SATTISH  
 P. HOFFMANS

SCALE HORIZ. 1" = 20'  
VERT. 1" = 4'



NICHOLAS CANYON BEACH ACCESS ROAD



CURVE DATA						
CURVE	RADIUS	CENTRAL ANGLE			LENGTH	TANGENT
		DEG	MIN	SEC		
(A)	500.00'	12	00	00	104.72'	52.55'

**BENCH MARK**  
 28-24, CSFB 930-161  
 ELEVATION 36.987  
 65' ON MONUMENT IN WELL 3200'  
 W/O REST ROOMS ON NICHOLAS CANYON BEACH ACCESS ROAD

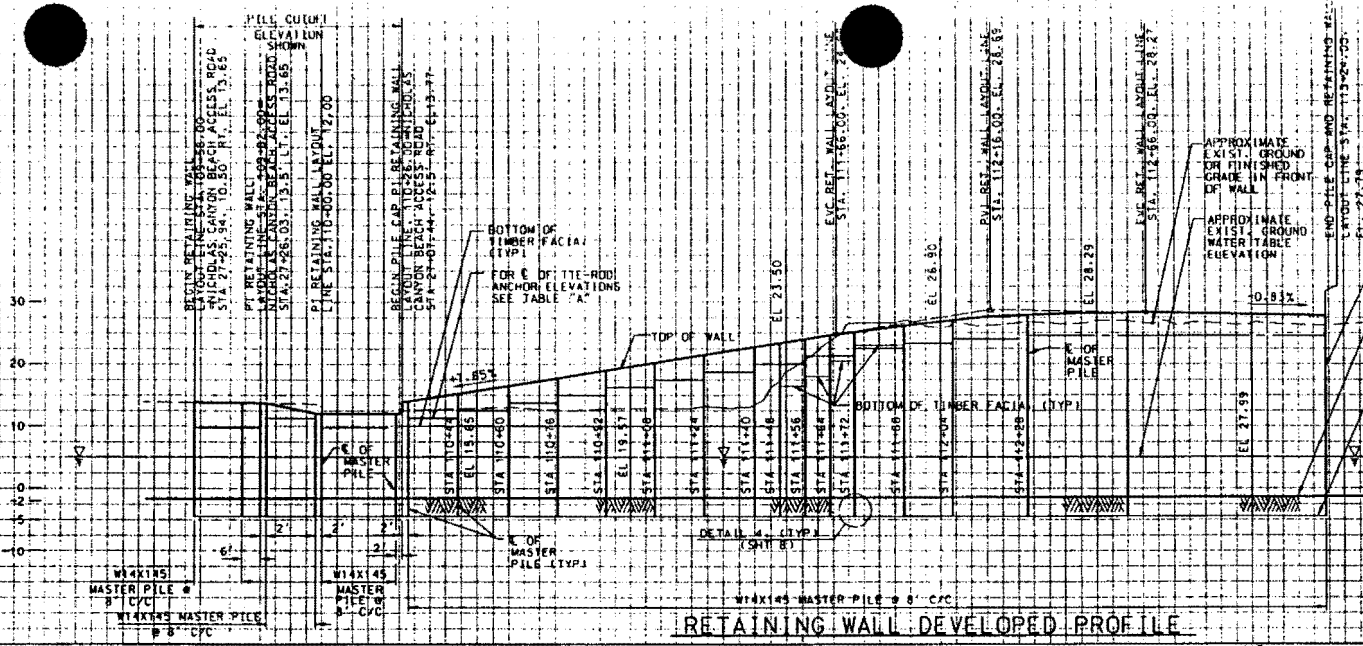
DATE	BY	DESCRIPTION



COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS  
**NICHOLAS CANYON BEACH ACCESS ROAD**  
 ROADWAY PLAN AND PROFILE  
 CASH CONTRACT 9082  
 JOB K2309082 PROJECT ID# R0C0013132 SHEET 5 OF 13

EXHIBIT NO. 4  
 APPLICATION IN PROGRESS  
 Roadway Plan

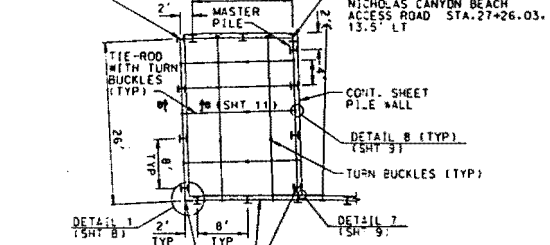




FOR MASTER PILE (TYP)  
ASSUMED ROCK SURFACE APPROXIMATE SHEET PILE WALL TIP ELEVATION TO BE FIELD VERIFIED DURING CONSTRUCTION  
MASTER PILE ASSUMED TIP ELEVATION WITH MINIMUM 3' EMBEDMENT IN ROCK

RETAINING WALL DEVELOPED PROFILE

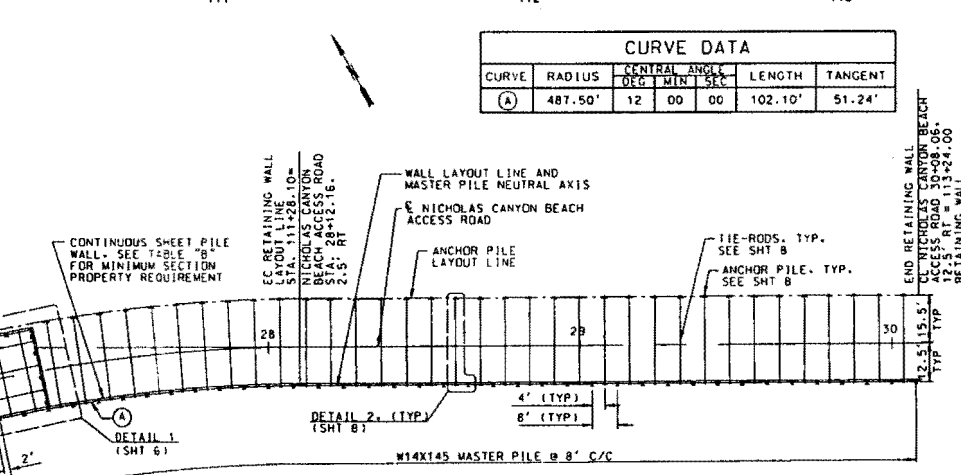
P1 RETAINING WALL LAYOUT LINE STA. 110+00.00 = NICHOLAS CANYON BEACH ACCESS ROAD STA. 27+07.44, 13.50' LT.



P1 RETAINING WALL LAYOUT LINE STA. 110+26.00 = NICHOLAS CANYON BEACH ACCESS ROAD STA. 27+07.44, 12.5' RT.

DETAIL 1 SCALE: 1" = 10'

RETAINING WALL LAYOUT LINE STA. 110+13.50 = NICHOLAS CANYON BEACH ACCESS ROAD STA. 27+07.44



RETAINING WALL PLAN SCALE: 1" = 20'

CURVE DATA						
CURVE	RADIUS	CENTRAL ANGLE			LENGTH	TANGENT
		DEG	MIN	SEC		
(A)	487.50'	12	00	00	102.10'	51.24'

TABLE "A"		
TIE-ROD ANCHOR @ EL.		
RETAINING WALL LAYOUT LINE STA.	@ ELEVATION (FEET)	
109+58. TO 109+80.	9.75	
109+82. TO 109+98.	11.25	
109+82. TO 110+24.	9.75	
110+28. TO 110+44.	11.25	
110+44. TO 110+60.	12.50	
110+60. TO 110+76.	13.75	
110+76. TO 110+92.	15.00	
110+92. TO 111+08.	16.25	
111+08. TO 111+24.	17.50	
111+24. TO 111+40.	18.75	
111+40. TO 111+56.	20.00	
111+56. + 111+72.	21.25	
111+72. TO 111+88.	22.50	
111+88. TO 112+04.	23.25	
112+04. TO 112+28	24.00	
112+28. TO 113+24	24.50	

SHEET PILE MINIMUM SECTION PROPERTIES			
ASTM A328 fy' = 39,000 PSI (HOT ROLLED)			
SECTION TYPE	Sx (IN <sup>3</sup> /FT)	I (IN <sup>4</sup> /FT)	MIN. INTERLOCK STRENGTH (K/FT)
SHEET PILE	3.1	4.7	376

**BENCH MARK**  
28-24, CSFB 930-16'  
ELEVATION 26.28'  
CS ON MONUMENT IN WELL 200'  
W/O BEST ROOMS ON NICHOLAS CANYON BEACH ACCESS ROAD

DATE	BY	DESCRIPTION
REVISIONS		



COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS  
**NICHOLAS CANYON BEACH ACCESS ROAD**  
RETAINING WALL PLAN AND PROFILE  
CASH CONTRACT 9082  
JOB X2309082 PROJECT ID# RDC0013152 SHEET 6 OF 13

**EXHIBIT NO. 5**  
**APPLICATION NO. 1986**  
**Retaining Wall Plan**

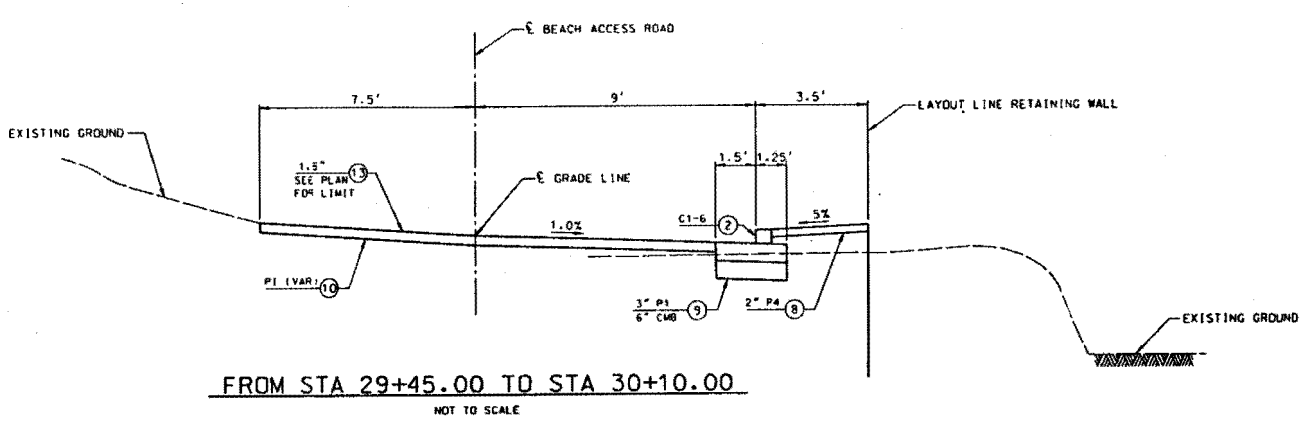
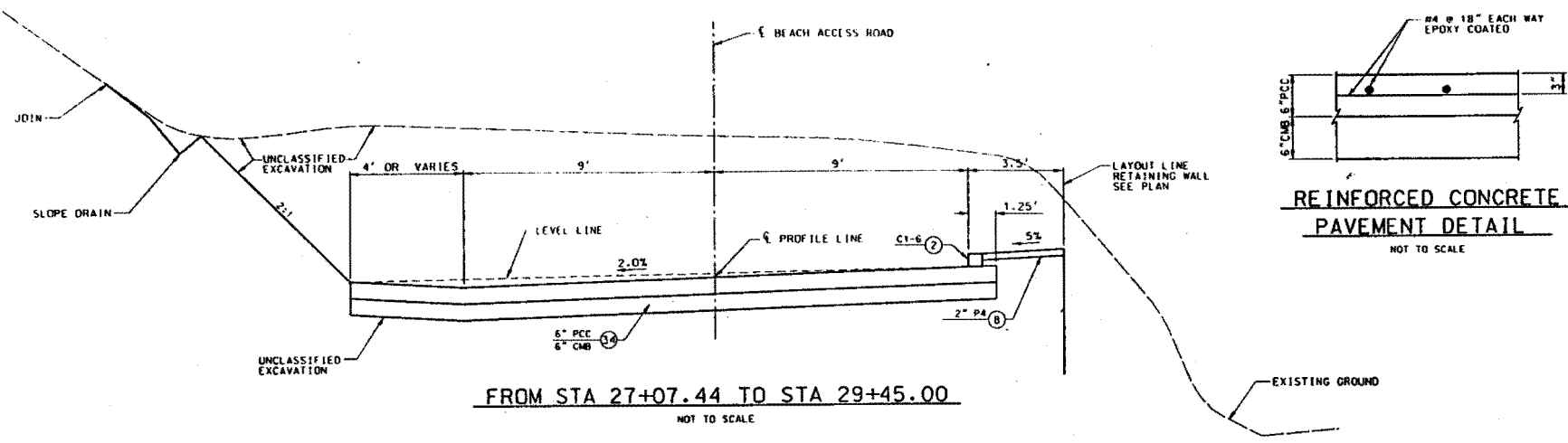


EXHIBIT NO. 6

APPLICATION NO. 4-99-186

Typical Section

DATE	BY	DESCRIPTION



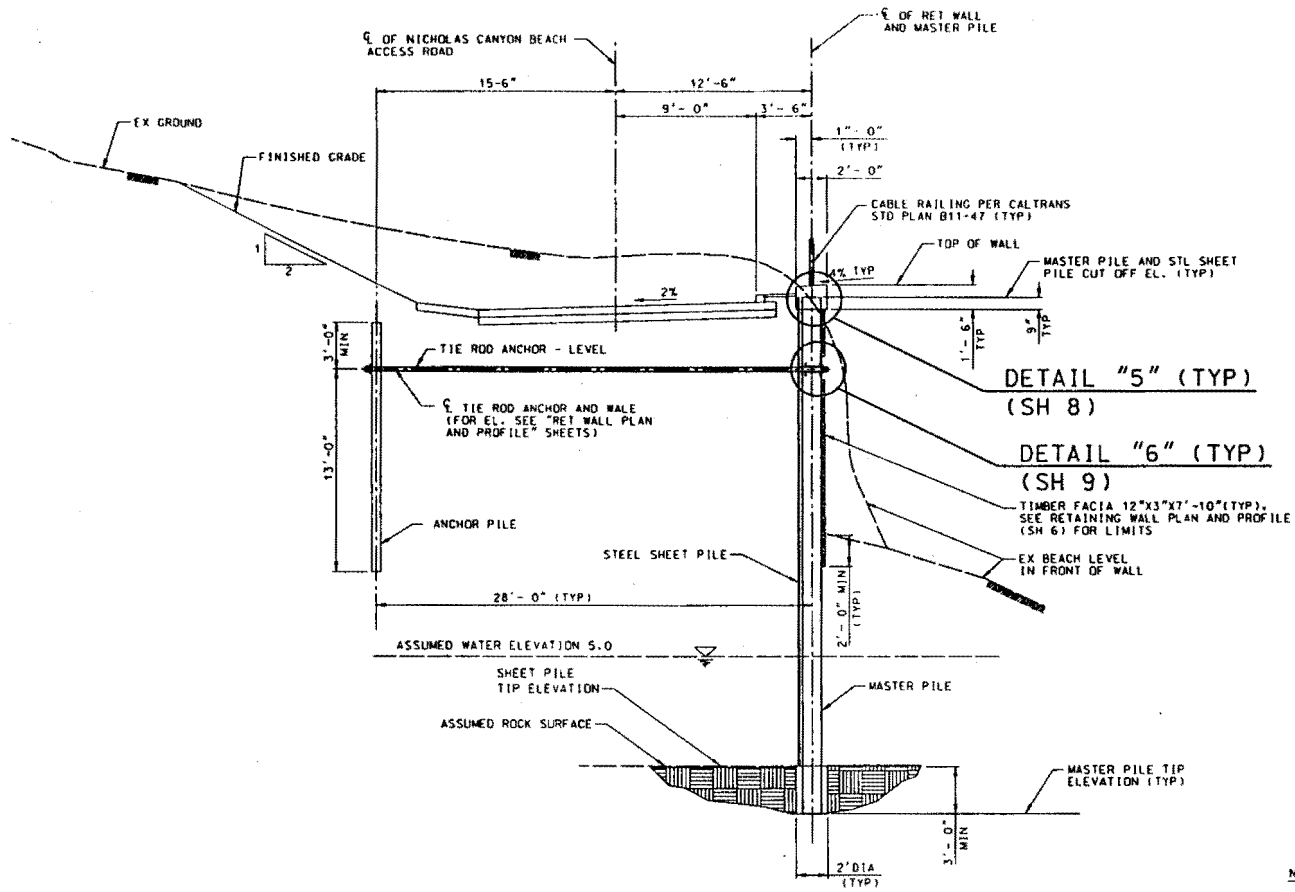
COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

NICHOLAS CANYON BEACH ACCESS ROAD

TYPICAL SECTIONS

CASH CONTRACT 9082

JOB K23090B2 | PROJECT ID# RUC0013132 | SHEET 3 OF 13



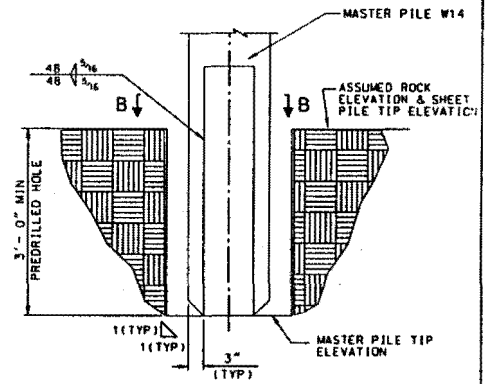
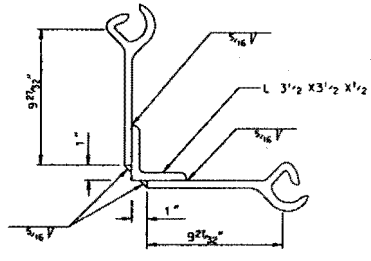
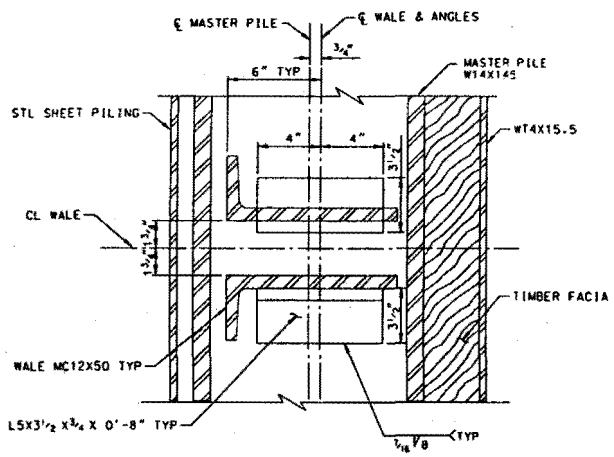
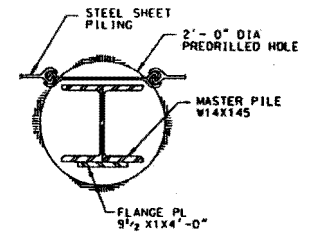
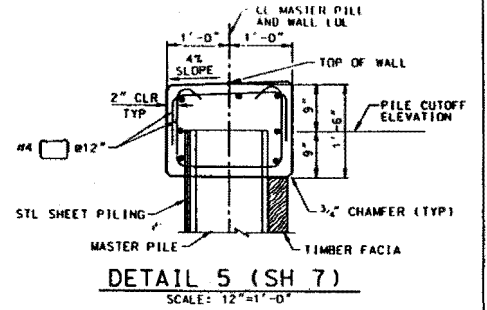
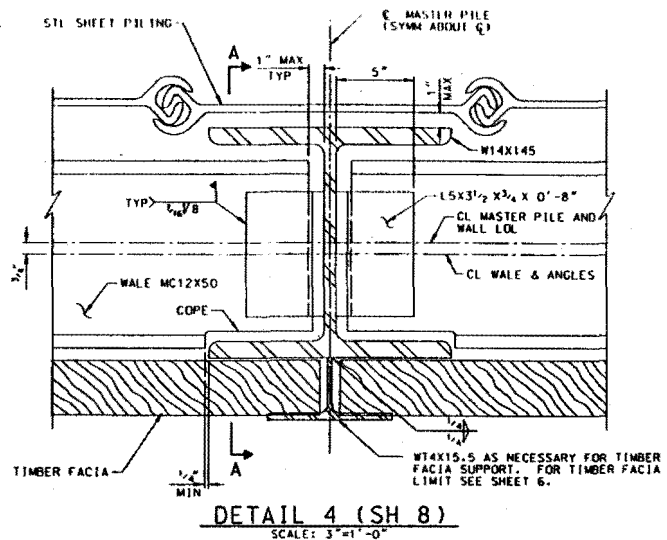
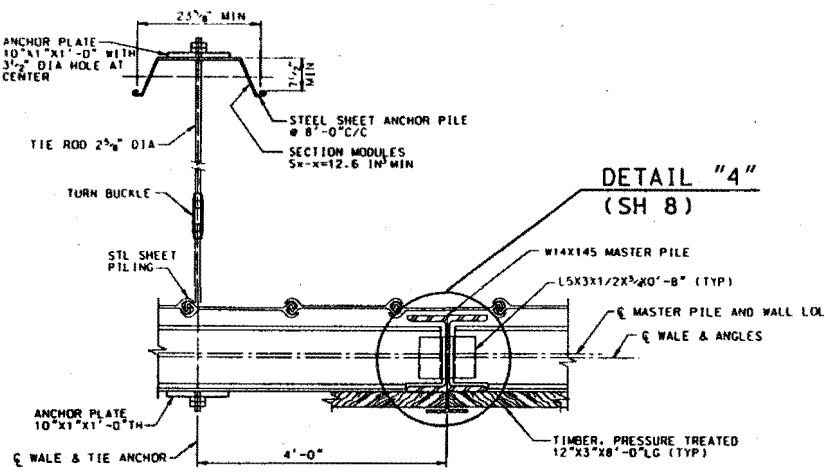
TYPICAL SECTION  
 FROM RET WALL LAYOUT LINE STA 10+26 TO STA 13+24.00  
 SCALE: 1/4"=1'-0"

NOTE:  
 1. FOR ROADWAY TYPICAL SECTIONS  
 SEE TYPICAL SECTIONS SHEET 3

EXHIBIT NO. 7  
 APPLICATION NO. 9-99-1986  
 Retaining Wall  
 Section

DATE		DESCRIPTION	PROJECT ENGINEER	DATE
REVISIONS				

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS  
**NICHOLAS CANYON BEACH ACCESS ROAD**  
 RETAINING WALL SECTIONS  
 CASH CONTRACT 9082



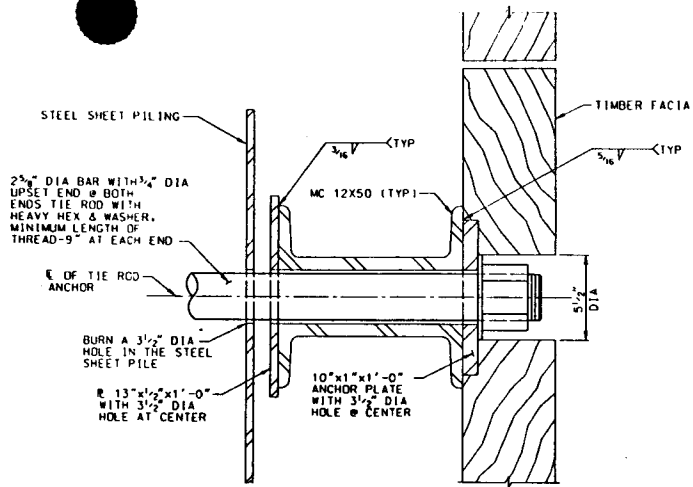
- NOTES:**
1. ALL MISCELLANEOUS METALS SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.
  2. ALL STRUCTURAL STEEL AND MISCELLANEOUS METALS SHALL BE COATED WITH PROTECTIVE COATING.

DATE	BY	DESCRIPTION	PROJECT ENGINEER	DATE

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS  
**NICHOLAS CANYON BEACH ACCESS ROAD**  
 STRUCTURAL DETAILS 1 OF 2  
 CASH CONTRACT 9082  
 JOB X2309082 PROJECT ID# RDC001312 SHEET # OF 15

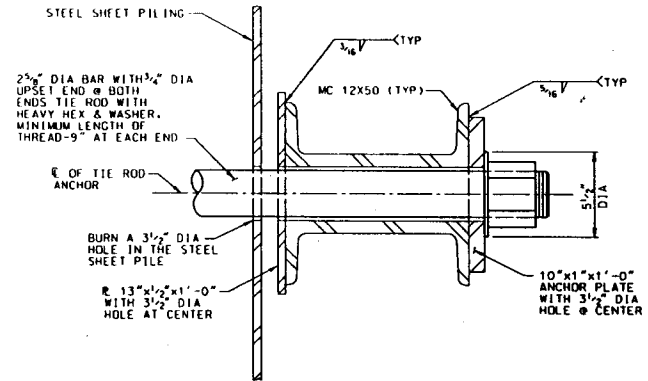
**EXHIBIT NO. 8**  
**APPLICATION NO. 99-186**  
**Structural Details 1 of 2**

P. NICHOLSON  
 M. S. 11151  
 P. NICHOLSON  
 M. S. 11151  
 P. NICHOLSON  
 M. S. 11151



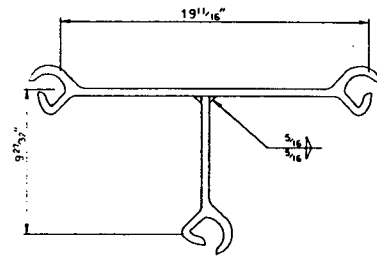
DETAIL 6 (SH 7)

SCALE: 3"=1'-0"



DETAIL 8 (SH 6)

SCALE: 3"=1'-0"



DETAIL 7 (SH 9)

NOT TO SCALE

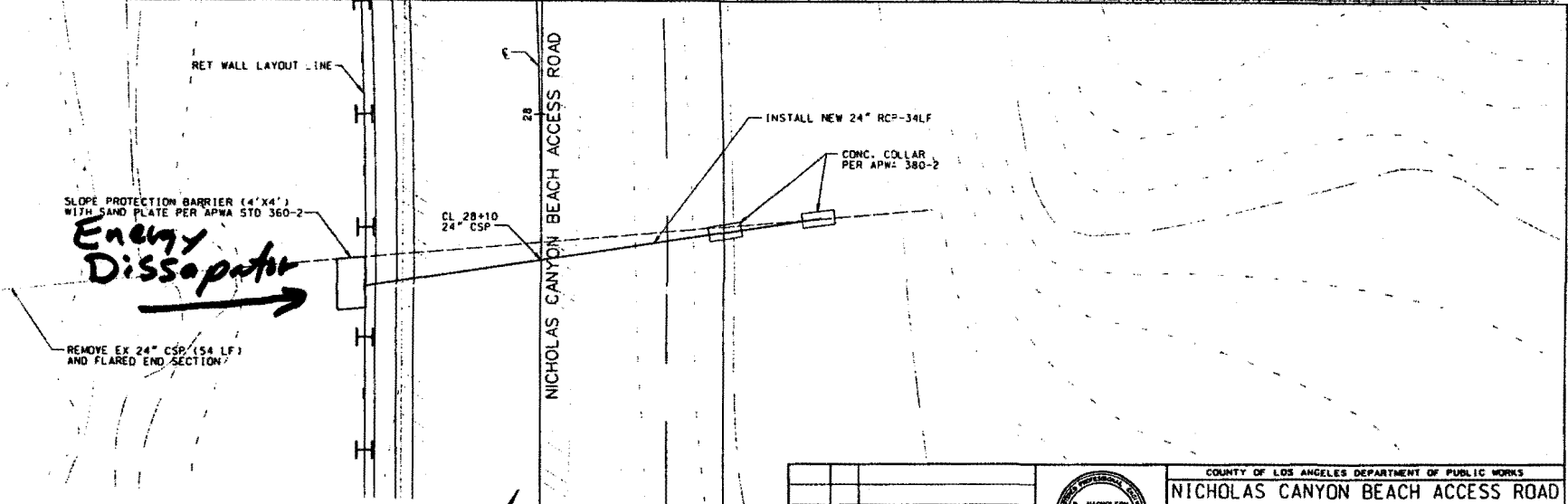
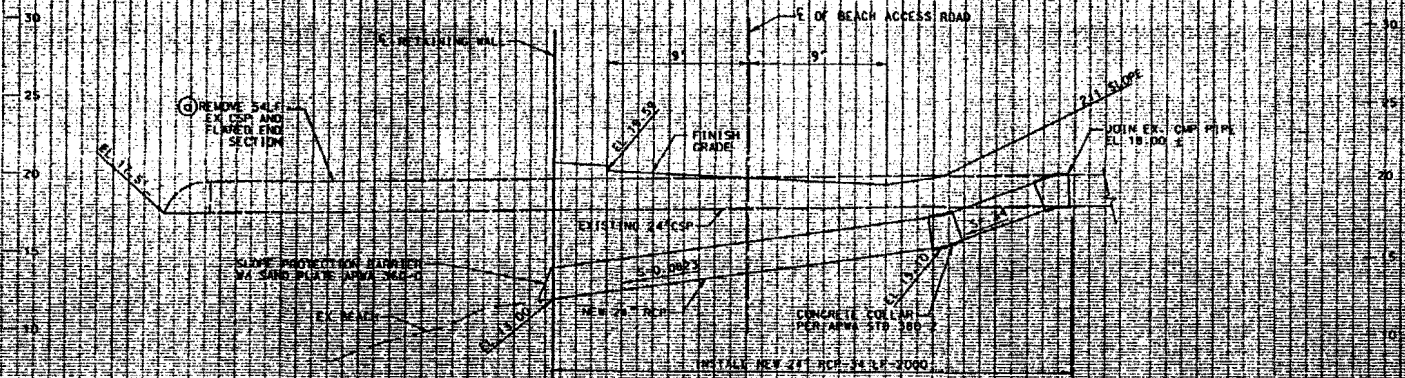
NOTES:

1. ALL MISCELLANEOUS METALS SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.
2. ALL STRUCTURAL STEEL AND MISCELLANEOUS METALS SHALL BE COATED WITH PROTECTIVE COATING.

EXHIBIT NO. 9  
 APPLICATION NO. 198  
 Structural  
 Details 2 of 2

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS <b>NICHOLAS CANYON BEACH ACCESS ROAD</b> STRUCTURAL DETAILS 2 OF 2 CASH CONTRACT 9082			PROJECT ENGINEER	DATE
DATE	MR.		DESCRIPTION	PROJECT ENGINEER
REVISIONS		JOB K2309082 PROJECT ID: RDC0013132 SHEET 9 OF 13		

SCALE: HORIZ. 1" = 4'  
 VERT. 1" = 4'



PLAN  
 SCALE: 1" = 4'

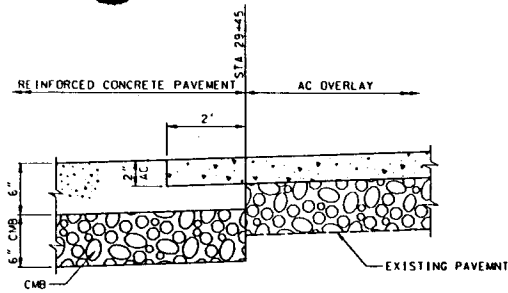
DATE	BY	DESCRIPTION



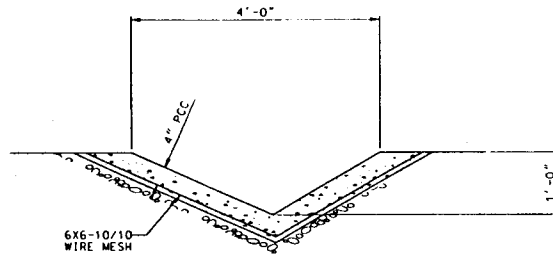
COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS  
**NICHOLAS CANYON BEACH ACCESS ROAD**  
 REINFORCED CONCRETE PIPE CULVERT  
 CASH CONTRACT 9082  
 JOB: K2309082 PROJECT ID: R0C0013132 SHEET 10 OF 13

EXHIBIT NO. 10  
 APPLICATION NO. 4799186  
 Concrete Culvert

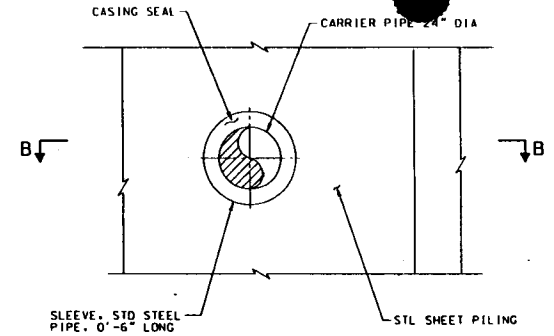
DATE: \_\_\_\_\_  
 REVIEWED BY: \_\_\_\_\_  
 DESIGNER: M. SATTI SH  
 CHECKER: P. NICHOLSON  
 CAD PROJECT FILE NAME: R0C0013132.DGN  
 C. SHAKER



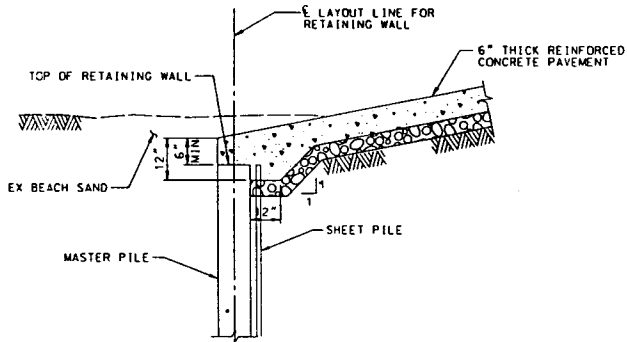
**DETAIL C (SEE SH 5)**  
NOT TO SCALE  
**AC PAVEMENT TRANSITION**



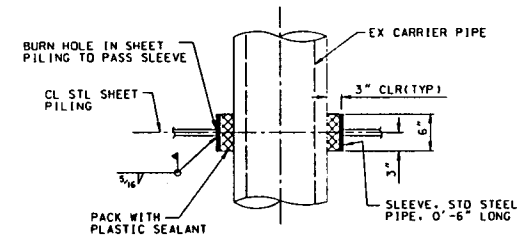
**SLOPE DRAIN**  
NOT TO SCALE



**ELEVATION**  
NOT TO SCALE



**SECTION B-B (SH 5 AND SH 6)**  
NOT TO SCALE



**SECTION B**  
NOT TO SCALE  
**TYPICAL PIPE THRU STEEL SHEET PILING**

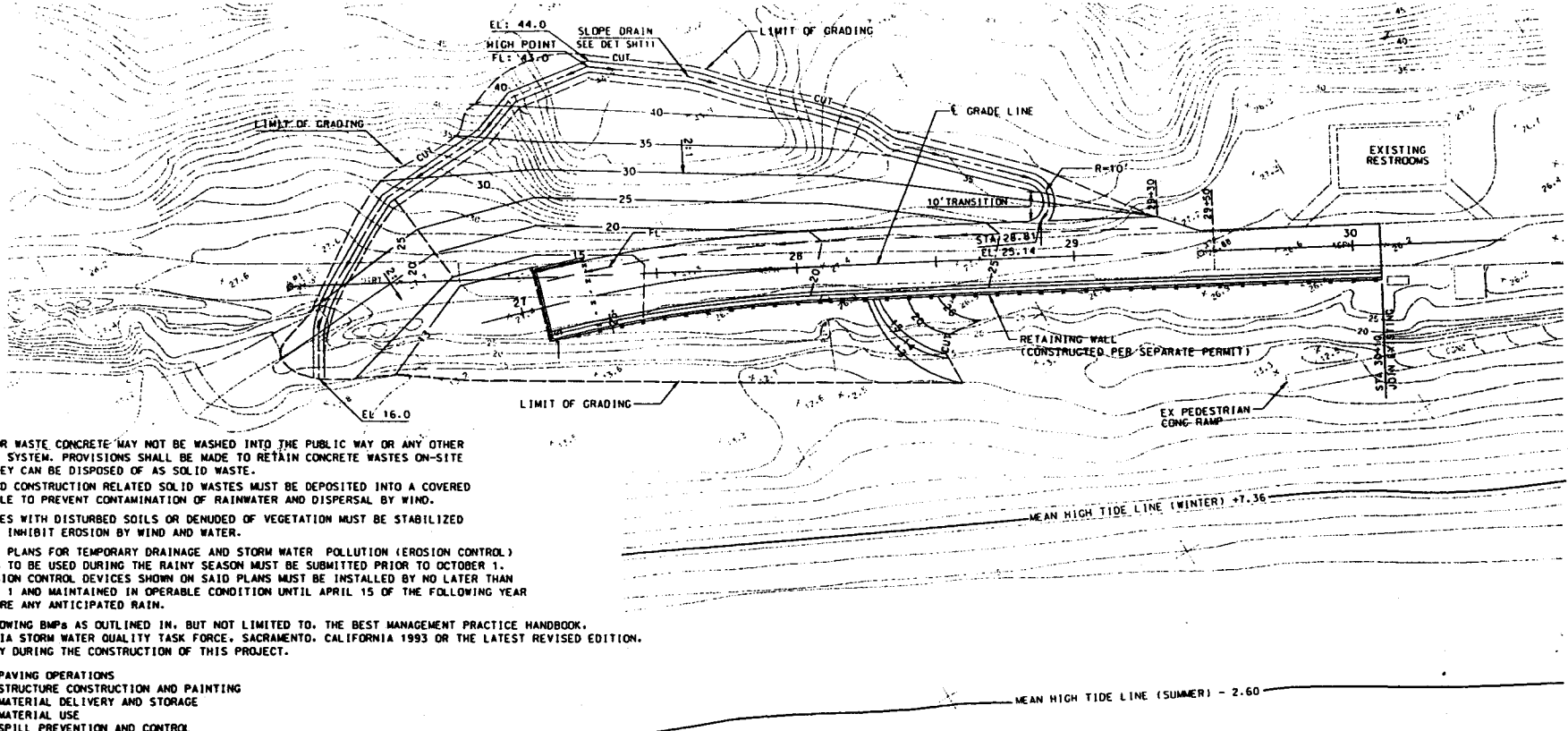
**EXHIBIT NO. 11**  
**APPLICATION NO. 986**  
**Slope Drain**

DATE		AM	DESCRIPTION	PROJECT ENGINEER	DATE
REVISIONS					
COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS <b>NICHOLAS CANYON BEACH ACCESS ROAD</b> MISCELLANEOUS DETAILS CASH CONTRACT 9082					
JOB: X2305202   PROJECT ID: RDC0013132   SHEET 11 OF 13					

**GRADING NOTES:**

- (g) ALL GRADING AND CONSTRUCTION SHALL CONFORM TO CHAPTERS 70 AND 71 OF THE LOS ANGELES COUNTY BUILDING CODE UNLESS SPECIFICALLY NOTED ON THESE PLANS (7013.1)
- (h) ANY EXPORT OF MATERIAL FROM THE SITE TO OFF-SITE PROPERTY REQUIRES AN APPROVED GRADING PLAN.
- (i) A COPY OF THE GRADING PERMIT AND APPROVED GRADING PLANS MUST BE IN THE POSSESSION OF A RESPONSIBLE PERSON AND AVAILABLE AT THE SITE AT ALL TIMES.
- (j) EVERY EFFORT SHOULD BE MADE TO ELIMINATE THE DISCHARGE OF NONSTORM WATER FROM THE PROJECT SITE AT ALL TIMES.

- (k) ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON-SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES OR WIND.
- (l) STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
- (m) FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.



- (n) EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON-SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
- (o) TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
- (p) ANY SLOPES WITH DISTURBED SOILS OR DENUDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.
- (q) SEPARATE PLANS FOR TEMPORARY DRAINAGE AND STORM WATER POLLUTION (EROSION CONTROL) MEASURES TO BE USED DURING THE RAINY SEASON MUST BE SUBMITTED PRIOR TO OCTOBER 1. THE EROSION CONTROL DEVICES SHOWN ON SAID PLANS MUST BE INSTALLED BY NO LATER THAN NOVEMBER 1 AND MAINTAINED IN OPERABLE CONDITION UNTIL APRIL 15 OF THE FOLLOWING YEAR AND BEFORE ANY ANTICIPATED RAIN.
- (r) THE FOLLOWING BMPs AS OUTLINED IN, BUT NOT LIMITED TO, THE BEST MANAGEMENT PRACTICE HANDBOOK, CALIFORNIA STORM WATER QUALITY TASK FORCE, SACRAMENTO, CALIFORNIA 1993 OR THE LATEST REVISED EDITION, MAY APPLY DURING THE CONSTRUCTION OF THIS PROJECT.

- CA002 - PAVING OPERATIONS
- CA003 - STRUCTURE CONSTRUCTION AND PAINTING
- CA010 - MATERIAL DELIVERY AND STORAGE
- CA011 - MATERIAL USE
- CA012 - SPILL PREVENTION AND CONTROL
- CA020 - SOLID WASTE MANAGEMENT
- CA023 - CONCRETE WASTE MANAGEMENT
- CA030 - VEHICLE AND EQUIPMENT CLEANING
- CA031 - VEHICLE AND EQUIPMENT FUELING
- CA032 - VEHICLE AND EQUIPMENT MAINTENANCE
- ESC02 - PRESERVATION OF EXISTING VEGETATION
- ESC10 - SEEDING AND PLANTING
- ESC11 - MULCHING
- ESC21 - DUST CONTROLS
- ESC31 - TEMPORARY DRAINS AND SWALES
- ESC33 - TEMPORARY SWALES

ESTIMATED QUANTITY OF CUT = 5882.00 CY  
 ESTIMATED QUANTITY OF FILL = 9.0 CY  
 ESTIMATED TOTAL GRADED AREA = 0.59 ACRE

PLAN  
 SCALE: 1" = 20'

**BENCH MARK**  
 28-24, CSFB 930-161  
 ELEVATION 26.281  
 CS BM MONUMENT IN WELL ±200'  
 W/O REST ROOMS ON NICHOLAS CANYON BEACH ACCESS ROAD

DATE	BY	DESCRIPTION	PROJECT ENGINEER	DATE

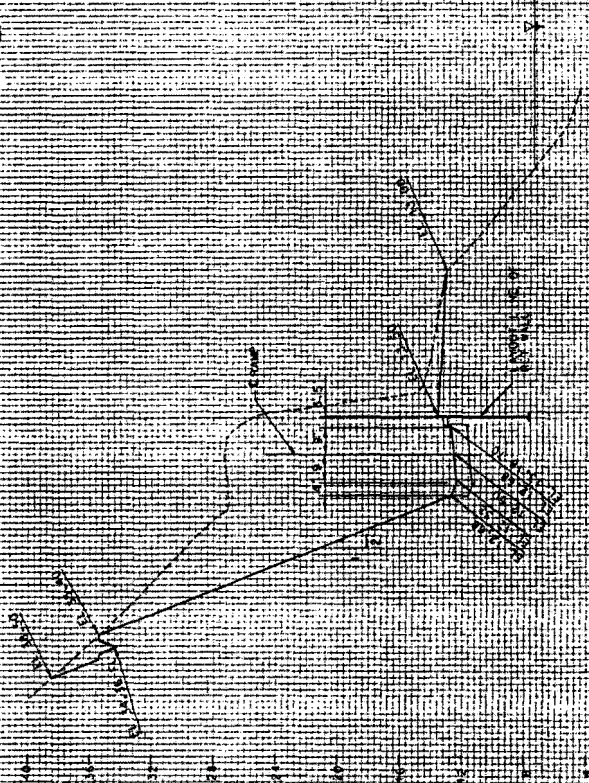


COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS  
**NICHOLAS CANYON BEACH ACCESS ROAD**  
 GRADING PLAN  
 CASH CONTRACT 9082  
 JOB #2309082 | PROJECT ID# RDC0015132 | SHEET 12 OF 13

**EXHIBIT NO. 12**  
**APPLICATION NO. 986**  
**Grading Plan**



SCALE: HORIZ. 1" = 40'



SECTION AT STA 21+07.44  
 100' 0" 80' 0" 60' 0" 40' 0" 20' 0" 0' 0"

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS  
 NICHOLAS CANYON BEACH ACCESS ROAD  
 CASH CONTRACT NO. 9082

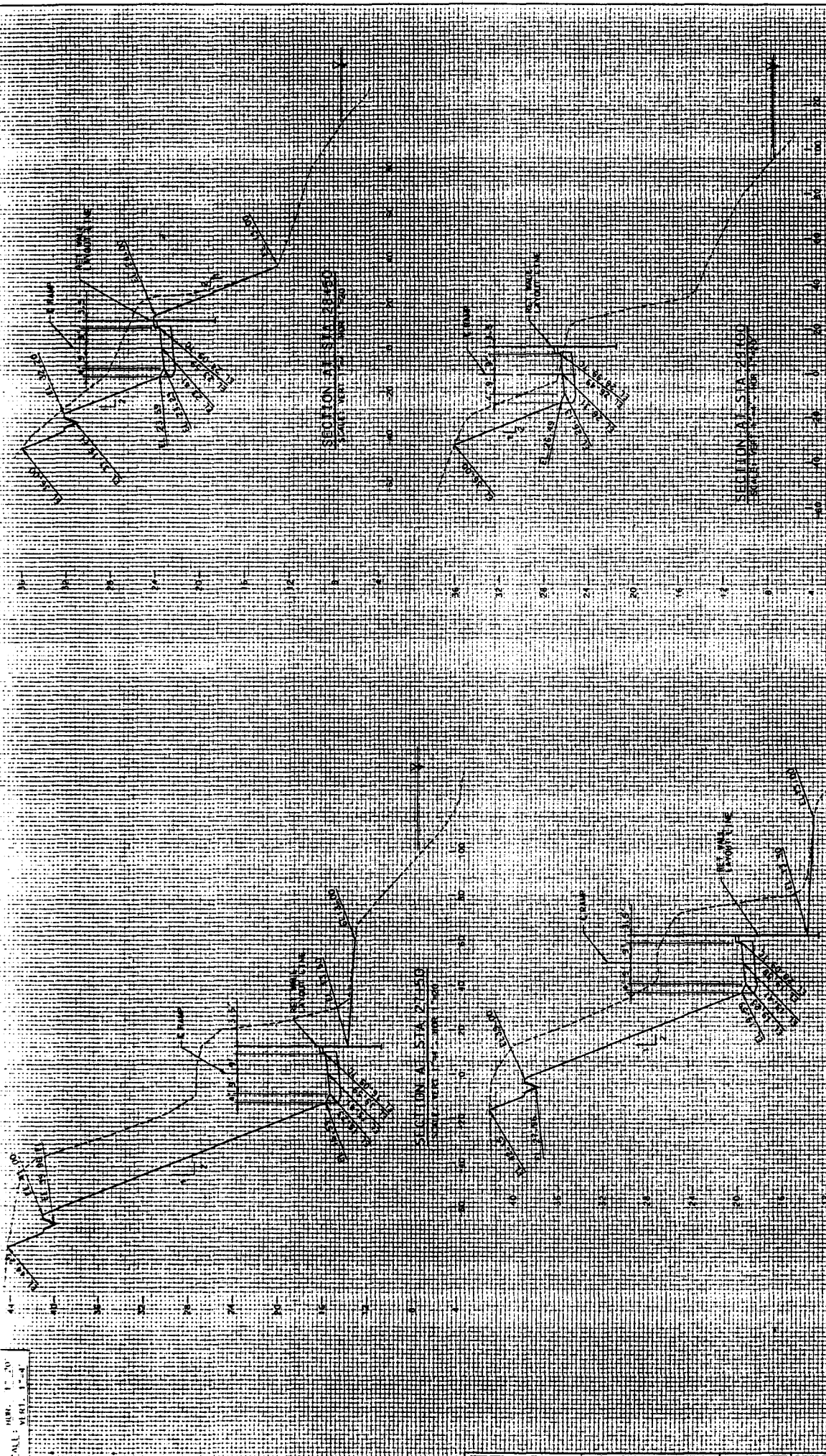


DATE	BY	DESCRIPTION

PROJECT NUMBER: 2101  
 DRAWN BY: NEVIS DONS  
 SHEET 1 OF 3

EXHIBIT NO. 13  
 APPLICATION NO. 4-49-1986  
 Cross Section  
 1 of 3

P. NICHOLSON  
 REGISTERED PROFESSIONAL ENGINEER  
 NO. 12345  
 STATE OF CALIFORNIA  
 CIVIL



COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

**NICHOLAS CANYON BEACH ACCESS ROAD**

CROSS SECTIONS 2 OF 3  
CASH CONTRACT 9082

JOB: X23090RZ | DWG: [ ]

DATE: [ ]

PROJECT: [ ]

SHEET 2 OF 3

DATE	NO.	DESCRIPTION

SECTION AT STA. 28+00  
SCALE: VERT. 1" = 10' HORIZ. 1" = 40'

SECTION AT STA. 28+100  
SCALE: VERT. 1" = 10' HORIZ. 1" = 40'

SECTION AT STA. 28+200  
SCALE: VERT. 1" = 10' HORIZ. 1" = 40'

SECTION AT STA. 28+300  
SCALE: VERT. 1" = 10' HORIZ. 1" = 40'

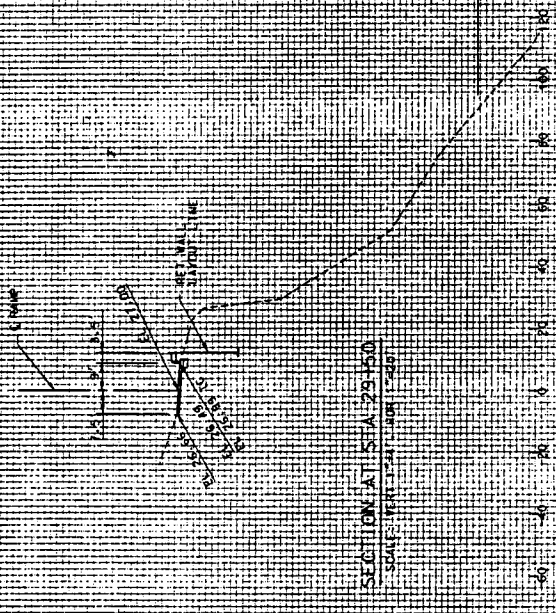
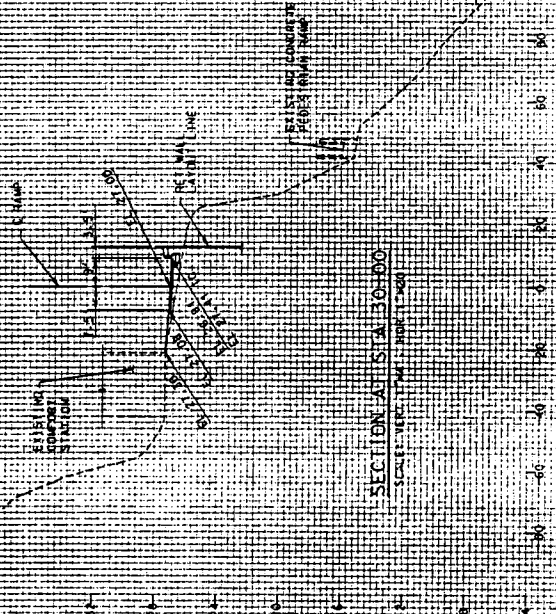
EXHIBIT NO. 14

APPLICATION NO. 4-99-186

Cross Section  
2 of 3

SCALE: VERT. 1" = 10' HORIZ. 1" = 40'

POST: 1" = 20'  
SCALE: 1" = 100'



COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS  
**NICHOLAS CANYON BEACH ACCESS ROAD**  
 CROSS SECTIONS 3 OF 3  
 CASH CONTRACT 9082  
 JOB X21012-21 DWG SHEET 3 OF 3

NO.	DATE	REVISIONS	DESCRIPTION



**EXHIBIT NO. 15**  
 APPLICATION NO. **4-99-786**  
**Cross Section**  
**3 of 3**

E. POON  
 M. SATISH  
 P. NICHOLSON

T 10/11

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



PAUL D. THAYER, Executive Officer  
California Relay Service From TDD Phone 1-800-735-2922  
from Voice Phone 1-800-735-2922  
Contact Phone: (916) 574-1892  
Contact FAX: (916) 574-1925

May 9, 2000

File Ref: SD 99-12-17.1

Ms. Sarah Scott  
Los Angeles County  
Department of Public Works  
P.O. Box 1460  
Los Angeles CA 91801-1460

Dear Ms. Scott: Coastal Development Project Review for Proposed Nicholas Canyon Beach Access Road, Malibu

SUBJECT: Coastal Development Project Review for Proposed Nicholas Canyon Beach Access Road, Malibu

This is in response to your letter to the California State Lands Commission (SLC) regarding the proposed project on the property. This is a follow up to our January 21, 2000 letter, a copy of which is attached. You have requested our review of a revised project description for the subject project. The County's project will be smaller in scope and will involve only the construction of a replacement access ramp and a shorter retaining wall. Our previous statement that the CSLC presently asserts no claims that the project intrudes onto sovereign tide and submerged lands remains unchanged.

This conclusion is without prejudice to any future assertion of state ownership or public rights, should circumstances change, or should additional information come to our attention. County Beach improvements appear to be located above the ten foot contour elevation.

If you have any questions, please contact Jane E. Smith, Public Land Management Specialist, at (916) 574-1892.

Sincerely,

Robert L. Lynch, Chief  
Division of Land Management

Attachment

EXHIBIT NO. 16
APPLICATION NO. 4-99-186
SLC
letter