

**CALIFORNIA COASTAL COMMISSION**

South Coast Area Office  
200 Oceangate, 10th Floor  
Long Beach, CA 90802-4302  
(562) 590-5071



Filed: November 12, 1997  
49th Day: December 31, 1997  
180th Day: May 11, 1998  
Staff: John T. Auyong *John*  
Staff Report: January 15, 1998  
Hearing Date: February 3-6, 1998  
Commission Action:

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: 5-97-223

APPLICANT: Stephen Shea/Ian Albert

AGENT: Moffatt and Nichol (Susan Brodeur)

PROJECT LOCATION: 3302 and 3312 Venture Drive, Trinidad Island, Huntington Harbour, City of Huntington Beach, County of Orange

PROJECT DESCRIPTION: Repair a damaged bulkhead, including cutting damaged timber pile to sound bearing surface, installing a jack between the pile and concrete footing, filling the void surrounding the repaired pile with concrete, installing a PVC sheetpile cut-off wall 1'6" seaward of the existing bulkhead and placing toe protection (1,560 square feet of rock) to prevent scour.

LOCAL APPROVALS RECEIVED:

City of Huntington Beach Public Works Approval-in-Concept

SUBSTANTIVE FILE DOCUMENTS:

1) Emergency Permit 5-97-223-G; 2) "Repair Recommendations for Perimeter Bulkhead Wall at Trinidad Island, Huntington Harbour" prepared for the Trinidad Island Homeowners Association by Moffatt & Nichol Engineers (Job No. 3988); 3) November 3, 1997 letter from Moffatt & Nichol Engineers to the Coastal Commission; 4) December 2, 1997 letter from Moffatt & Nichol Engineers to the Coastal Commission; 5) November 5, 1997 letter from Coastal Resources Management to Moffatt & Nichol Engineers.

SUMMARY OF STAFF RECOMMENDATION:

Staff is recommending approval of the proposed project with special conditions requiring the submission of revised plans regarding rock size.

STAFF RECOMMENDATION:

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*water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.*

The proposed development involves repair of a bulkhead necessary to protect two existing homes and a portion of the public lateral accessway around Trinidad Island seaward of the two homes. Trinidad Island is located in Huntington Harbour. The slope seaward of the bulkhead has eroded, creating a gap between the cut-off wall and the bottom of the harbor floor. This has allowed water to enter behind (i.e., landward of) the bulkhead and undermine the bulkhead's foundation. Further, the gap and erosion has exposed the bulkhead's supporting timber piles to deterioration from burrowing marine organisms.

The applicant is proposing to cut the damaged timber pile to sound bearing surface (i.e., remove the deteriorated sections to leave a non-deteriorated surface), install a jack between the sound bearing surface of the pile and concrete footing, and fill the void (i.e., the eroded area behind the bulkhead) surrounding the repaired pile with concrete. The concrete would extend 1'6" seaward of the bulkhead. By filling the void, the timber piles would no longer be subject to deterioration from marine organisms. A vertical PVC plastic sheetpile cut-off wall would be placed on the seaward face of the concrete. Seaward of the PVC sheetpile, toe protection would be placed to prevent further erosion of the harbor bottom seaward of the bulkhead.

The coastal engineer indicate that the proposed project is the least environmentally damaging feasible alternative. Other alternatives considered are; 1) soft bottom fill or sand fill which is vegetated rather than rock, and 2) extending the bulkhead deeper into the harbor bottom to the point where erosion of the harbor bottom seaward of the bulkhead would not create a gap under the bulkhead which allows water to go under and behind the bulkhead.

The first alternative is not feasible because vegetation on the subject site would have difficulty establishing. This is because the docks on-site would shade the fill area, depriving the vegetation of sunlight. Further, the proximity of the docks to the bulkhead means that the fill would be narrow and of too steep a slope to allow vegetation to take root. Without the roots of vegetation to help hold a soft or sandy slope together, the slope would erode away as it did previously.

The second alternative is not feasible for several reasons. First, extending the bulkhead deeper into the harbor floor would result in the extension cutting into the support piles which angle under the bulkhead below the harbor floor. To avoid this, the bulkhead would have to be relocated seaward of its present location. Second, the proposed PVC sheetpiles are not long enough to extend deep enough into the harbor bottom. Steel

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sheetpiles which are long enough would be subject to corrosion, unlike the proposed plastic PVC sheetpiles.

The coastal engineer for the project contends that the proposed project would be an extension of the existing rock toe protection on the adjacent bulkhead to the west and would not have any adverse end effects on the adjacent site to the west. The coastal engineer also indicates that the proposed project would reduce erosion on the adjacent bulkhead to the east, which is similarly deteriorated and in need of repair, because the proposed rock would slow currents and thus erosive forces on the adjacent site.

The coastal engineer estimates that the proposed rock would last approximately fifty (50) years. Minor settling of the rock would be expected due to minor erosion at the toe of the rock. However, if the rocks are too small or too light, the rocks may roll away (i.e., migrate) as a result of tidal currents or other erosion factors. This would defeat the purpose of the toe protection. This might also possibly cause adverse impacts to navigation if the rock were to roll into the channel, or adverse impacts to marine habitat if the rock were to roll into sensitive marine habitat. Further, gathering the rock which rolled away to place them back by the bulkhead could require an extraordinary method of repair which involves a risk of substantial environmental impact.

Therefore, the Commission finds that revised plans which specify the rock size and which are required. The Commission also finds that the revised plans must be accompanied by written documentation which demonstrates that the selected rock size is sufficiently large and heavy so that it would not be likely to roll away. Thus, as conditioned for this requirement, the Commission finds that the proposed project would be consistent with Section 30235 of the Coastal Act.

## 2. Marine Habitat

Section 30230 of the Coastal Act states:

*Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

The subject site is located in the waters of Huntington Harbour. Except at extreme low tides, the proposed project would be underwater. Eelgrass, a sensitive marine plant which provides valuable, high quality habitat for a variety of sensitive species, was not present on the subject site. Further, the subject site is not designated in the certified local coastal program as an environmentally sensitive habitat area. Therefore, there is no

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marine habitat on-site for the proposed project to impact. In addition, the California Department of Fish and Game has reviewed the application and has determined that the proposed project would not result in significant adverse impacts on marine habitat. Thus, the Commission finds that the proposed project is consistent with Section 30230 of the Coastal Act.

**D. Public Access**

Section 30212 of the Coastal Act states, in relevant part:

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

*(2) adequate access exists nearby . . .*

*(b) For purposes of this section, "new development" does not include:*

*(4) The reconstruction or repair of any seawall; provided, however, that the reconstructed or repaired seawall is not seaward of the location of the former structure.*

The subject site is located on Trinidad Island in Huntington Harbour. Much of Huntington Harbour consists of private communities. However, Trinidad Island is publicly accessible via a bridge from the mainland. On-street parking is the major source of public parking. The island provides public access and recreation opportunities via a 2.7 acre greenbelt park with a bicycle pedestrian path, two small vista parks, a fishing dock, and a walkway along the water around the western half of the island. The walkway, which runs through the subject site, has suffered minor cracking due to the failing bulkhead proposed to be repaired.

The proposed development involves the repair of a bulkhead which would result in seaward encroachment of the base of the bulkhead. Therefore, the proposed project is considered new development for the purposes of Coastal Act Section 30212. However, the proposed project would be underwater. There is no beach area which provides lateral public access on-site upon which the proposed project would encroach. Further, there is no beach area off-site which provides public access that could be eroded as a result of changes in shoreline processes due to the proposed project.

Therefore, the Commission finds that no public access is necessary with the proposed development. In fact, the proposed project benefits public access by repairing the bulkhead which provides support for the lateral public accessway which rings the shoreline of the western part of Trinidad Island. Thus, the Commission finds that the proposed development would be consistent with Section 30212 of the Coastal Act.

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**E. Local Coastal Program**

The City of Huntington Beach local coastal program ("LCP") is effectively certified. However, the proposed project is located seaward of the mean high tide line and thus is within the Coastal Commission's original permit jurisdiction area. Therefore, pursuant to Section 30519 of the Coastal Act, the LCP does not apply to the proposed project. However, the certified LCP may be used for guidance in evaluating the proposed project for consistency with the Chapter 3 policies of the Coastal Act.

**F. California Environmental Quality Act**

Section 13096 of Title 14 of the California Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit, as conditioned, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(i) 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 impact which the activity may have on the environment.

The proposed development is located in an urban area. Development already exists on the subject site. All infrastructure necessary to serve the site exist in the area. The proposed project has been conditioned in order to be found consistent with the shoreline protection and marine resources policies of Chapter Three of the Coastal Act. Mitigation measures requiring a monitoring program will minimize all significant adverse impacts.

As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned, can be found consistent with the requirements of the Coastal Act to conform to CEQA.

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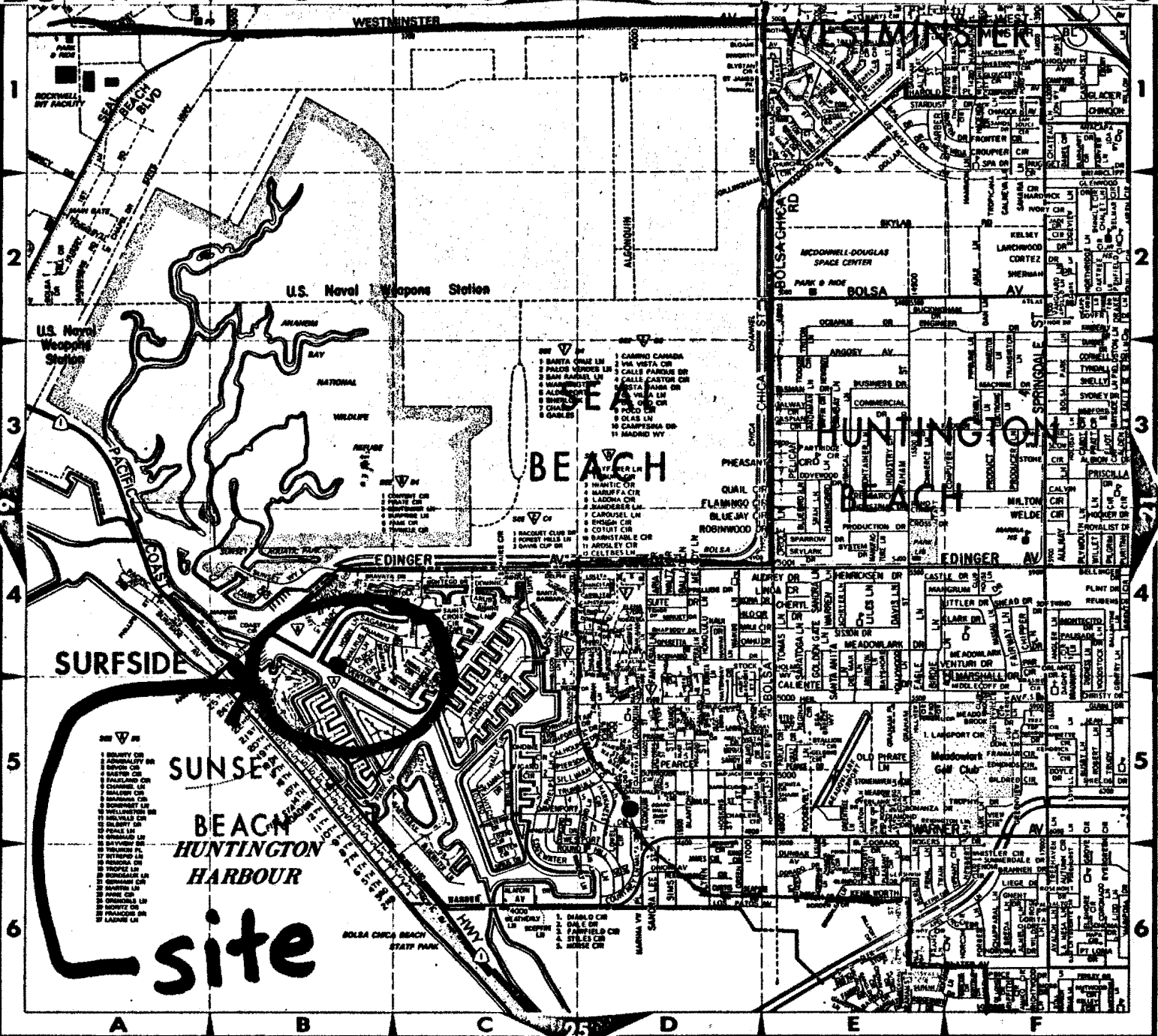
SEE MAP 14

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SEE MAP 19

SEE MAP 21



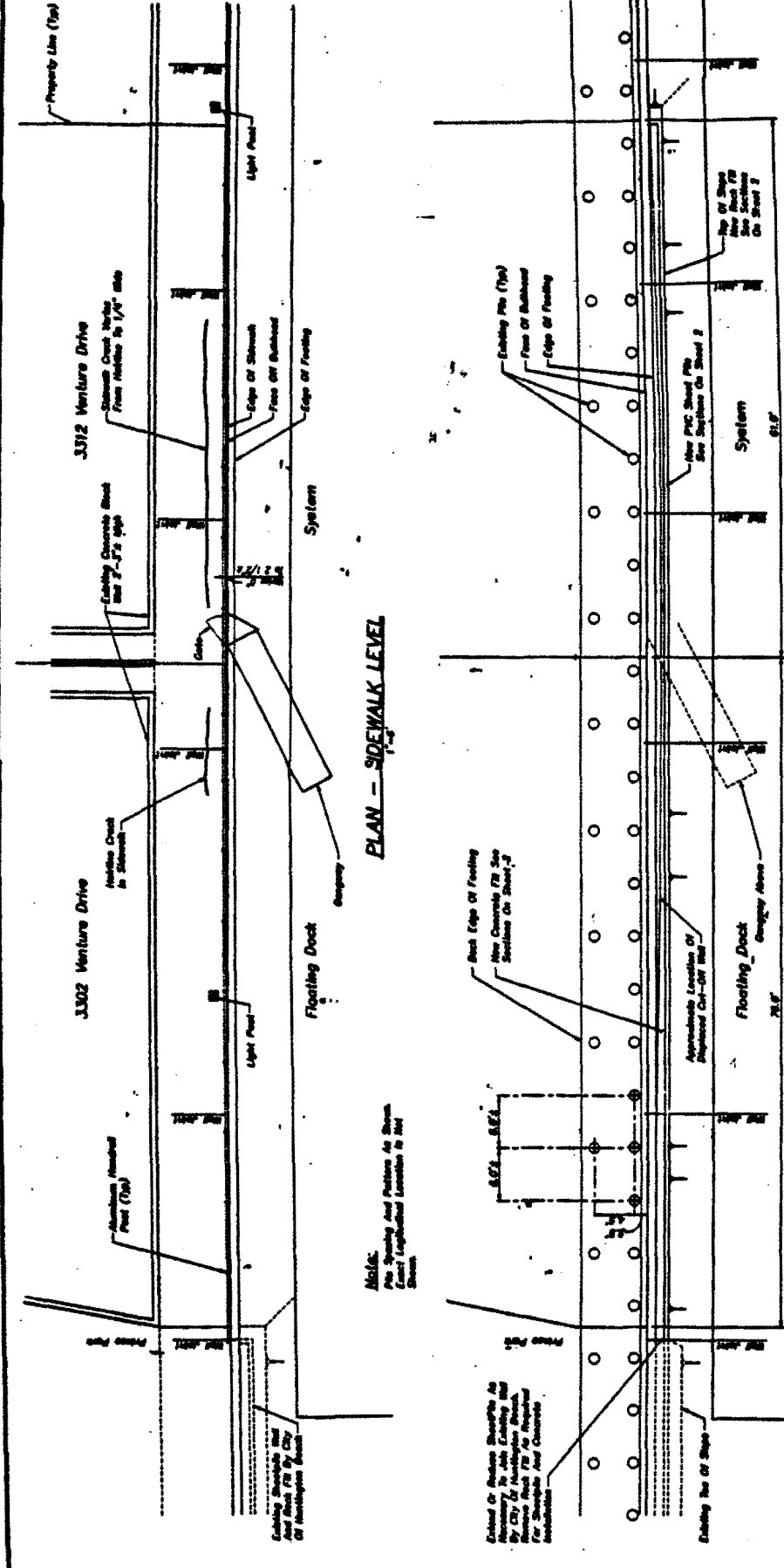
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COASTAL COMMISSION  
VICINITY MAP

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SEE MAP 25

COASTAL COMMISSION  
EXHIBIT B-97-23



PLAN - SIDEWALK LEVEL

PLAN - FOUNDATION LEVEL

COASTAL COMMISSION  
D-97-223 : Plans  
EXHIBIT # B  
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Note:  
The Spacing And Pattern At Stream  
Level Indicated Location In 2001

Edge of Bulkhead Shown  
On Sheet 7. See Existing  
Ground Profile On Sheet 7  
For Details. See Notes  
For Shoring And Other  
Details.

CONTRACTOR:  
JAMES R. LEE  
JAMES R. LEE COMPANY, INC. (A) 20000  
3022 WEST T STREET  
MILPITAS, CA 95034  
311 4th Avenue (202)835-4383 FAX (202)835-7943  
COT PHONE (202)835-1230 FINDER (202)835-1230

OWNER:  
MR. STEVE BEE  
3102 ALEXANDER DRIVE  
SHIRAZ ISLAND  
MR. ALBERT MAY  
3102 ALEXANDER DRIVE  
SHIRAZ ISLAND

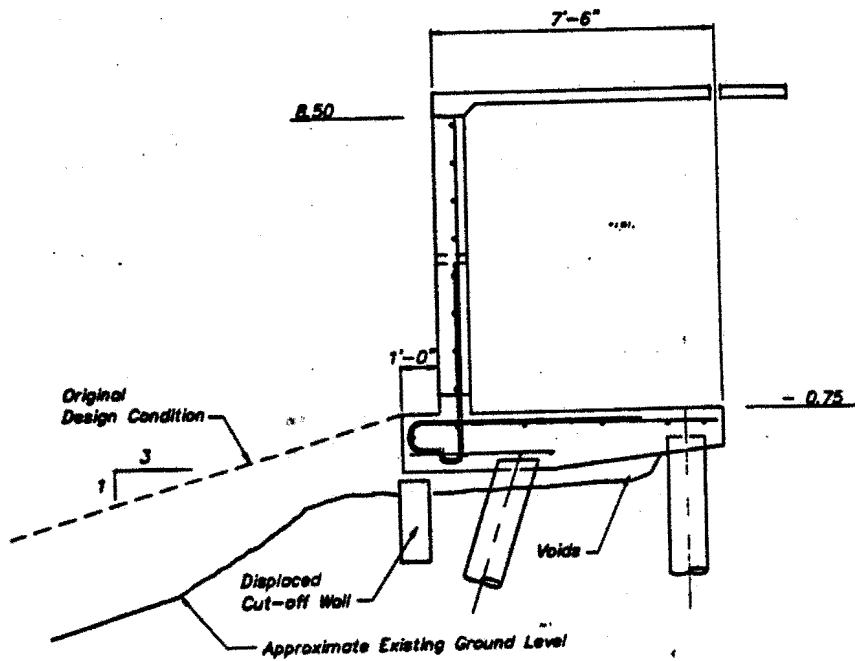
VENTURE BEACH DEVELOPMENT

SCALE:  
1" = 20'

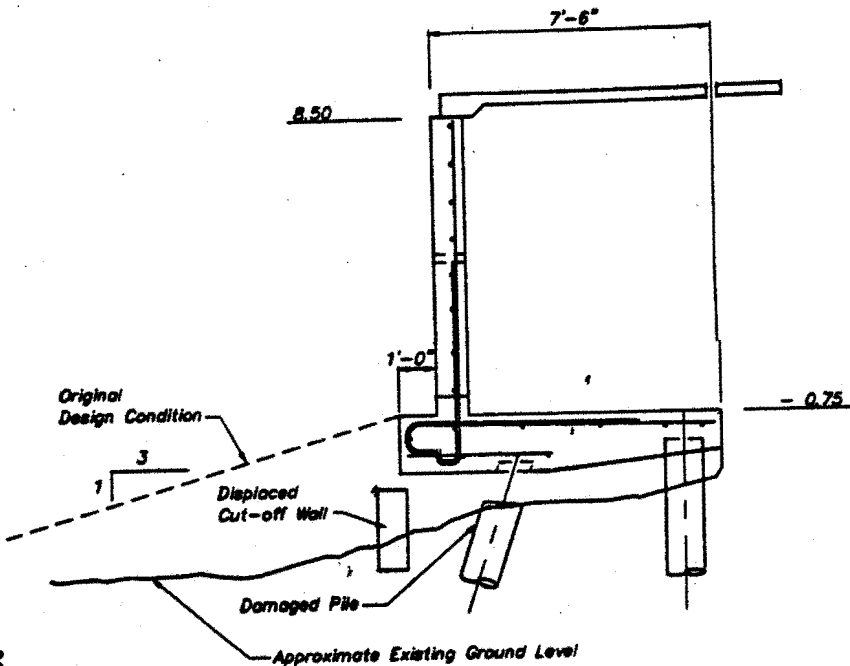
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7/2/01



**TYPICAL SECTION W/O PILE DAMAGE**  
SCALE: 3/8"=1'-0"



**TYPICAL SECTION W/ PILE DAMAGE**  
SCALE: 3/8"=1'-0"

**TYPICAL EXISTING CONDITIONS**

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Plans

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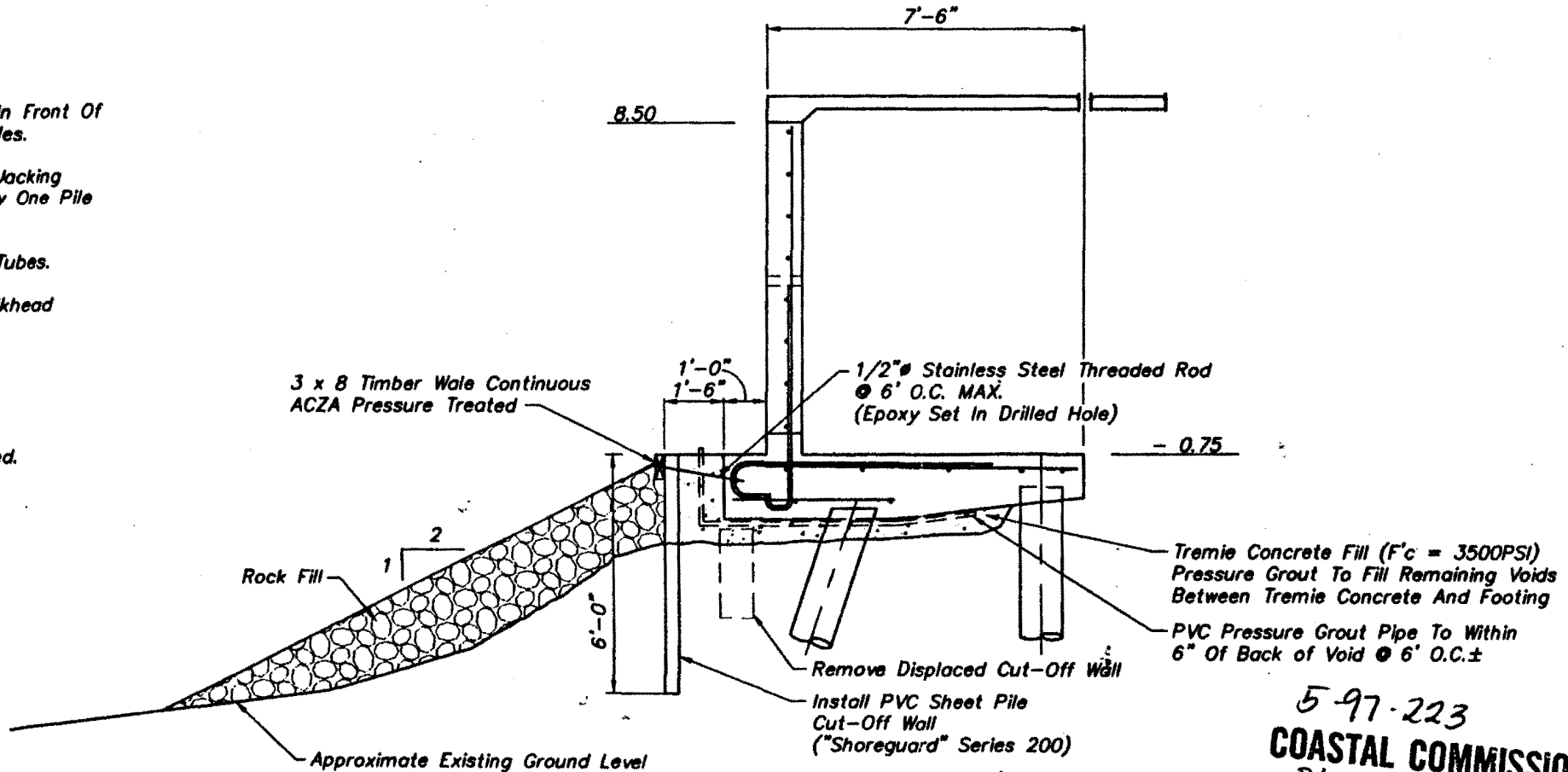
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e Piles.

stall Jacking  
Only One Pile

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e Bulkhead

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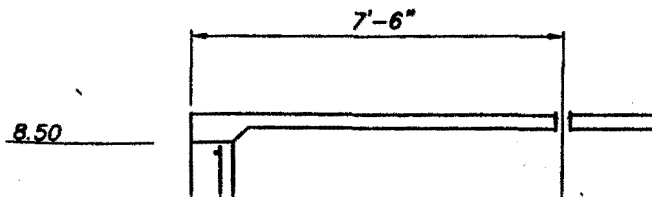


**TYPICAL REPAIR W/O PILE DAMAGE**

SCALE: 3/8"=1'-0"

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Plans

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1" Thick Plate

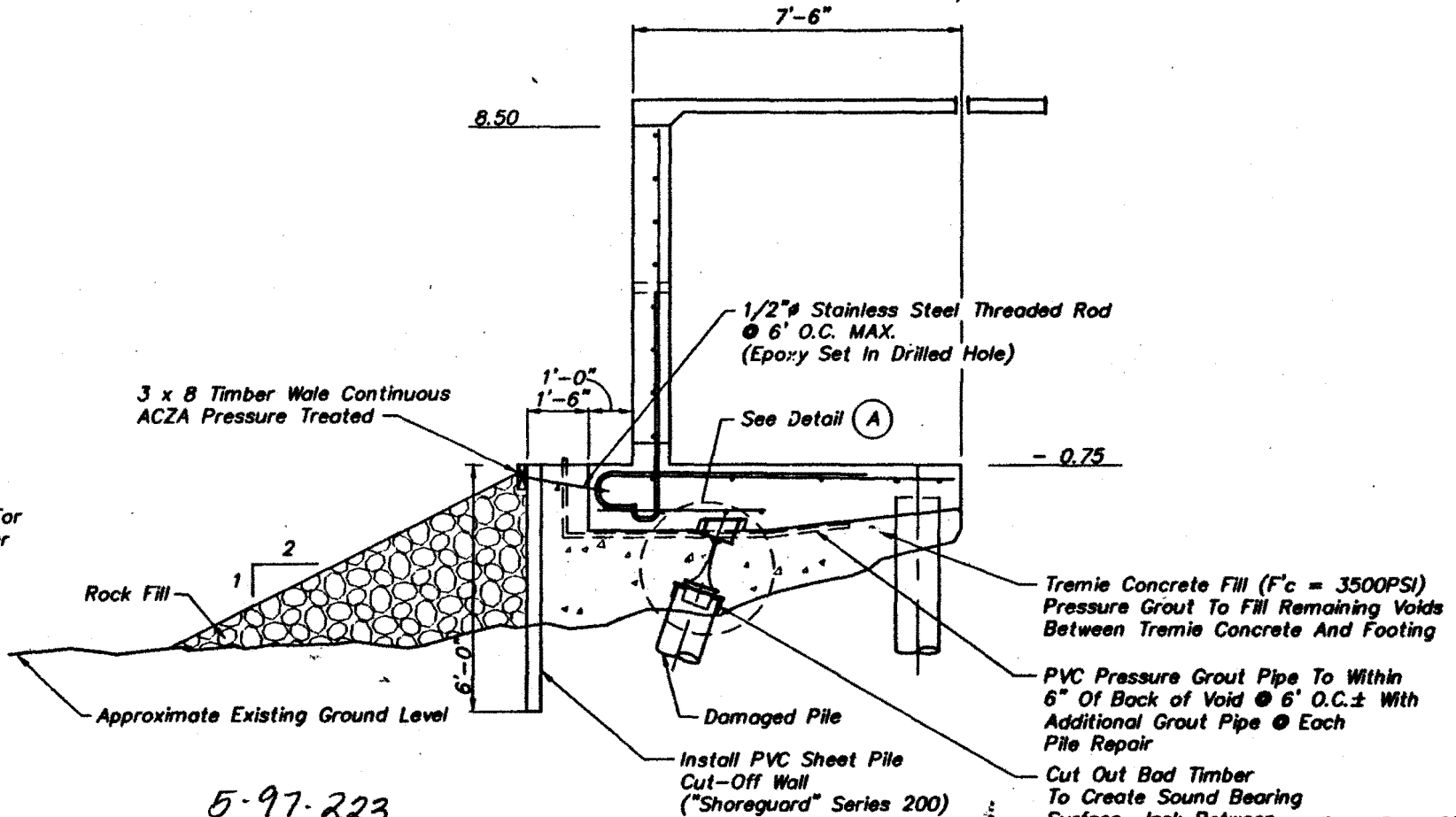
Ton Screw Jack

3" x 10' x 6" Guides For  
k W/ 3/8" Bolt Keeper

1" Thick Steel Plate

3" Pipe Tabs For  
des 4" x 8" Long

ber Pile Varies In  
meter 12" To 18"



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 Plans

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**TYPICAL REPAIR W/ PILE DAMAGE**

SCALE: 3/8"=1'-0"

**TYPICAL REPAIR TYPES**

Tremie Concrete Fill (F'c = 3500PSI)  
 Pressure Grout To Fill Remaining Voids  
 Between Tremie Concrete And Footing

PVC Pressure Grout Pipe To Within  
 6" Of Back of Void @ 6' O.C.± With  
 Additional Grout Pipe @ Each  
 Pile Repair

Cut Out Bad Timber  
 To Create Sound Bearing  
 Surface. Jack Between  
 Pile & Concrete  
 Footing To Transfer  
 Load To Pile (Typical)

South Coast District Office



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 SEP 26 1997

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 COASTAL COMMISSION

DEPARTMENT OF FISH AND GAME

1416 NINTH STREET  
P.O. BOX 944209  
SACRAMENTO, CA 94244-2090  
(916) 653-4875



5-97-223

November 12, 1997

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COASTAL COMMISSION

Mr. John T. Auyong  
Staff Analyst  
California Coastal Commission  
200 Oceangate, 10th Floor  
Long Beach, California 90802-4302

Dear Mr. Auyong:

The Department of Fish and Game (DFG) has reviewed the proposal for the repair of an existing bulkhead at 3302 and 3312 Ventura Drive, Trinidad Island, Huntington Harbor (Coastal Development Permit 5-97-223-G). The project, as proposed, will not have a significant impact to marine resources and habitats and DFG does not object to the issuance of a Coastal Development Permit.

Thank you for the opportunity to review this proposal. Should you have any questions, please contact Mr. Richard Nitsos, Environmental Specialist, Environmental Services Division, Department of Fish and Game, 330 Golden Shore, Suite 50, Long Beach, California 90802, telephone (562) 590-5174.

Sincerely,

Ronald D. Rempel, Chief  
Environmental Services Division

cc: Mr. Richard Nitsos  
Department of Fish and Game  
Long Beach

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COASTAL COMMISSION

Fish and Game Comments

EXHIBIT # C

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