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STATE OF CALIFORNIA -- THE RESOURCES AGENCY

CALIFORNIA COASTAL COMMISSION

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

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Staff Report: Hearing Date:

Staff:

5/31/02

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STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.:

4-95-103

APPLICANT: Beach Restaurant Partners – Antonio R. Romasanta

AGENTS:

Nancy Lucast, Lucast Consulting; David Neish

PROJECT LOCATION: 1 State Street, City of Santa Barbara along southern bank of Mission Creek between Mason Street and State Street bridges.

PROJECT DESCRIPTION: As built +- 115 ft. long timber retaining wall, 20 timber piles with 3" to minus fill gravel, 18" - 24" 4 sack slurry underlain with 6" concrete as backfill within channel of Mission Creek. The retaining wall was constructed as an emergency action to replace a section of an existing timber retaining wall which was destroyed as a result of high storm flows and flooding on lower Mission Creek in January 1995. The new structure encroaches up to 10 feet further into the active channel of the creek beyond the location of the destroyed retaining wall.

LOCAL APPROVALS RECEIVED: City of Santa Barbara Public Works Department

SUBSTANTIVE FILE DOCUMENTS: March 2, 1998 Report on "Biological Impacts of Bank Stabilization Work on Mission Creek . . ." by Lawrence E. Hunt, Consulting Biologist; March 12, 1998 Report on "Subsurface Soils Analysis" by Pacific Materials Laboratory, Inc.; Letter Reports of March 3, 1995, May 24, 1995, February 23, 1998 and October 22, 2002 by Penfield & Smith; February 24, 1995 letter from Santa Barbara County Flood Control & Water Conservation District & Water Agency; Letters of June 8 & July 19, 1995 from City of Santa Barbara Department of Building and Safety; July 17, 1995 letter from Army Corps of Engineers; Consistency Determination No. CD-117-99, Corps of Engineers, Lower Mission Creek Flood Control Improvements 11/13/01.

SUMMARY OF STAFF RECOMMENDATION

Staff recommends **DENIAL** of the proposed development because it is not in conformity with Sections 30233, 30236, 30240 and 30253 of the Coastal Act. The proposed timber retaining wall was constructed as an emergency action after a section of retaining wall was destroyed by flooding of lower Mission Creek in January 1995. As constructed, however, the retaining wall encroaches into the active channel of Mission Creek resulting in the placement of fill in the Mission Creek Estuary and narrowing of the creek channel. The Mission Creek Estuary is recognized as an Environmentally Sensitive Habitat Area (ESHA) in the certified Local Coastal Program (LCP) for the City of Santa Barbara. The Estuary provides habitat for federally listed species including Tidewater Goby and Southern Steelhead. Because the retaining wall, as constructed, includes the placement of fill in an estuary and designated ESHA, and is not a permitted use in either, it is inconsistent with the provisions of Sections 30233 and 30240 of the Coastal Act. In addition, the as-built wall further narrows the channel of Mission Creek, thereby exacerbating flood hazards in the creek inconsistent with the provisions of Section 30253 of the Coastal Act. Finally, although the wall is considered a flood control project under Section 30236 of the Coastal Act it is not consistent with that Section's provision to incorporate the best mitigation measures feasible. Because the wall could have been constructed in the same location as the destroyed wall (per communications with Dr. Mark Johnsson, Staff Geologist and Lesley Ewing, Staff Engineer) the as-built wall is not the least environmentally damaging feasible alternative. The least environmentally damaging alternative would be to construct the wall in the same Additionally, constructing the wall in the same location location as the destroyed wall. would avoid the placement of fill material in a wetland and ESHA and narrowing an already constrained creek channel with a demonstrated flood risk.

I. STAFF RECOMMENDATION:

The staff recommends that the Commission adopt the following resolution:

MOTION:

I move that the Commission approve Coastal Development Permit No. 4-95-103 for the development proposed by the applicant.

STAFF RECOMMENDATION OF DENIAL:

Staff recommends a **NO** vote. Failure of this motion will result in denial of the permit and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

RESOLUTION TO DENY THE PERMIT:

The Commission hereby denies a coastal development permit for the proposed development on the ground that the development will not conform with the policies of Chapter 3 of the Coastal Act. Approval of the permit would not comply with the California Environmental Quality Act because there are feasible mitigation measures or alternatives that would substantially lessen the significant adverse impacts of the development on the environment.

II. Findings and Declarations

The Commission hereby finds and declares:

A. Project Description and Background History

The subject development consists of an approximately +- 115 ft. long as-built timber retaining wall, with 20 treated timber piles (12" x 40') driven approximately 27 ft. below the bottom of Mission Creek. The project also included backfill of 18" – 24" concrete slurry over several feet of 3" to minus fill gravel wrapped with 2 layer drainage filter fabric and surfaced with 6" of concrete. As constructed, the retaining wall encroaches up to 10 ft. into the channel of Mission Creek thereby resulting in the realignment and narrowing of the creek channel.

The subject retaining wall was constructed after a portion of a previously existing retaining wall was undermined and partially destroyed by high storm flows and flooding within lower Mission Creek during heavy rains on January 10, 1995. (Santa Barbara County was declared a disaster area as a result of the storms by Governor Wilson and President Clinton.) A section of the existing timber retaining wall adjacent to the applicant's property (motel and restaurant) was destroyed or damaged. The applicant subsequently met with staff of Santa Barbara County Department of Flood Control and Water Conservation District and Water Agency (Flood Control District) on January 17, 1995 to request assistance. At the meeting the Flood Control District informed the applicant that it would be unable to help (the applicant) at that time due to enormous demands on the Department and urged the applicant to take necessary steps to shore up the creek bank as soon as possible. The Flood Control District was concerned that failure to shore up the creek bank would not only have jeopardized the applicant's structures but would have jeopardized other structures including public facilities such as the State and Cabrillo Street bridges due to the threat of future rain (see 2/24/95 letter from Flood Control District to Tony Romasanta - Exhibit 1). In addition, public utility lines located behind the damaged and destroyed portion of the retaining wall were exposed due to erosion and undermining of the creek bank. The applicant subsequently engaged the engineering firm of Penfield & Smith to construct the retaining wall in February 1995 (exhibit 2).

In a letter dated July 17, 1995 (exhibit 3), the Army Corps of Engineers (ACOE) notified the applicant that the flood damage work may require a permit from the Corps. The letter requested the applicant to provide a description of the work performed and the reasons for it including pictures and diagrams. No additional correspondence between the applicant and ACOE is noted. The City of Santa Barbara Department of Public Works notified the applicant of the need to obtain permits from the City and Coastal Commission in a letter dated June 8, 1995 (exhibit 4). Subsequently, the City notified the applicant of its preliminary review of the permit application including plans and calculations prepared by Penfield & Smith and its intent to issue a permit for the replacement timber wall and excavation of the opposite bank upon demonstration that all required Federal, State and local approvals are obtained (letter of July 19, 1995 (exhibit 5).

The proposed project is located within the lower Mission Creek Estuary. This reach of the creek is characterized by a significant amount of existing development on and along the banks. Structural development includes commercial & residential projects, parking lots and retaining walls. In addition to potential flooding, water quality and pollution in the creek is a serious problem. In addition to the as-built environment, Mission Creek and Estuary contains a diverse range of plant and marine life included federally listed species such as Tidewater Goby and Southern Steelhead. As previously noted, Mission Creek is recognized as an ESHA in the City's certified LCP.

B. Federal Consistency

The Commission approved a Federal Consistency Determination for the Army Corps of Engineers for lower Mission Creek flood-control improvements on August 9, 2001 subject to conditions. The proposed project will increase channel capacity to 3400 cubic feet per second (cfs) to provide a 20-year storm level of protection. The project includes planting of native riparian species along sloped banks stabilized by riprap and creation of additional riparian habitat by enlarging planted slopes in areas where property adjacent to the stream is purchased by the Corps. The Creek banks will consist of either a vertical wall or a combination vertical wall and riprap sideslope. The ungrouted riprap slope will form the upper half and native riparian vegetation will be planted within the riprap. Existing natural stream bottom will be maintained and measures to improve fish habitat will be included. The portion of the 1+ mile long project within the Coastal Zone will consist primarily of vertical walls, with 2 small sections that include a vegetated riprap slope above a vertical wall. Should the flood control improvements go forward as proposed by the Army Corps the existing retaining wall adjacent to the applicant's property would be replaced by either a vertical stone wall or combination wall and riprap slope.

In approving the CD for the flood control improvement project the Commission found that no other method of protecting existing structures is feasible. The Commission also acknowledged that the project included impacts to estuarine and riparian wetland resources and that Sections 30233, 30236 and 30240 would not allow approval of the stream alteration unless it included feasible mitigation and avoidance of significant

disruption to sensitive habitat such as tidewater goby and steelhead trout. Mitigation measures proposed in the project include: 1) creation of new riparian habitat on the stream banks; 2) widening the estuary; 3) construction of a low flow pilot channel above the estuary; 4) features to improve fish habitat; and 5) seasonal limitations on construction and maintenance activities. The Commission conditioned its concurrence to require the Corps to prepare and submit to the Commission plans for the pilot channel, adaptive creek maintenance, and, landscaping with native riparian vegetation. In addition, the Commission required the Corps to complete Tidewater Goby studies and development a management plan for Tidewater Gobies and to submit the results and recommendations of the study and management plan as part of a future Consistency Determination for the design phase review of the lower Mission Creek flood control project.

C. Marine Resources

The Coastal Act provides for the protection of stream resources. Section 30233(a) provides that:

- (a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:
- (I) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.
- (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
- (3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.
- (4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.

- (5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.
- (6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.
 - (7) Restoration purposes.
- (8) Nature study, aquaculture, or similar resource dependent activities.

Section 30236 of the Coastal Act provides that:

Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (I) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat

Section 30240 of the Coastal Act provides that:

- (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those 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 those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Section 30253 of the Coastal Act provides 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.

The Mission Creek drainage, the largest of several coastal stream systems in the Santa Barbara region, originates in the Santa Ynez Mountains north of Santa Barbara. The

headwaters of Mission Creek and its major tributary, Rattlesnake Creek, occur at 3,500 feet. During the rainy season, Mission Creek ranges from a comparatively small stream carrying an average maximum of 370 cfs during non-flood years to a creek with peak flows of 5120 cfs¹. The incidental trickle moving down the channel after mid-summer appears to be primarily urban runoff that enters Mission Creek via storm drains along its course. Mission Creek also periodically receives water from the Santa Barbara water tunnels.

The condition of the natural resources varies along the length of the Mission Creek watershed. The creek flows through steep terrain in the mountains with vegetation that is relatively undisturbed in its upper reaches. Between Canon Perdido Street and Cabrillo Boulevard, the natural habitat of the creek is highly modified. Only remnants of native vegetation remain in the creek and estuary, and the area adjacent to the creek consists of buildings, ornamental landscapes, parking lots, and roads. Natural habitat is significantly limited by urban development including periodic clearance of vegetation and accumulated sediments from the channel, the indiscriminate use of the channel as a dumping ground for refuse, intermittent and private hard siding of its channels, housing along both sides of the channel, bridges, discharge of storm water lines into the channel (especially underneath bridges), and the concentration of business developments within or adjacent to residential neighborhoods. In addition, the banks and stream bottom along lower Mission Creek have been altered with grout stone, sacked concrete, pipe and wire revetment, gabions, bulkhead structures, and other stabilization structures to prevent bank erosion and flooding of adjacent development. Thus, the physical characteristics of the creek have been modified to a great extent. Mission Creek discharges into the ocean east of Stearn's Wharf.

Although the Mission Creek watershed is not pristine, the drainage as a whole provides important aquatic resources. The creek adjacent to the project site lies within a dynamic freshwater-marine transition zone subject to tidal action in the middle to upper reach of the estuary. Even though the lower Mission Creek is significantly degraded, it provides habitat for two federally listed species, the steelhead trout and the tidewater goby. The steelhead trout uses Lower Mission Creek as a migratory corridor to the upper reaches of the watershed, which are suitable for fish spawning. In addition, a population of tidewater gobies lives within the Mission Creek estuary. Further, lower Mission Creek is designated as ESHA by the Commission in the City's LCP.

The proposed project is located immediately north and west of the State and Cabrillo Street bridges southeast of the Mason Street bridge in the middle reach of the estuary just upstream from the lagoon below the Cabrillo Street bridge. The City has recognized the biological resources of the estuary by placing interpretive panels describing the plant and animal habitat within the creek at the Cabrillo, State Street, and Mason Street bridges.

¹ Hydrology data from the U.S. Army Corps of Engineers 1995a.

The applicant has submitted a report on "Potential Biological Impacts of Bank Stabilization Work on Mission Creek . . . " prepared by Lawrence E. Hunt, Consulting Biologist (exhibit 6). The report notes that the reach of the creek adjacent to the project site is "moderately to severely disturbed by urbanization and associated flood control activities" including channelization, poor water quality and non-native vegetation. The northern bank opposite the timber retaining wall is "devoid of native vegetation" and the streambed "appears to consist of small gravel, sand, and silt and did not support any aquatic or aquatic emergent vegetation at the time of the survey." The report also notes, however, that, despite the disturbance, this reach of the creek "supports a fair diversity of aquatic invertebrate and terrestrial vertebrate species, especially birds, on a seasonal basis," including non-native species. Additionally, the report notes and discusses the presence of the two federally listed species - Tidewater Goby and Southern Steelhead - which are found in this reach of the creek. Gobies have been observed as far upstream as the Mason Street bridge. The report concludes that the "narrow habitat requirements of tidewater goby, coupled with the apparent one-year life span of most individuals, can make goby populations highly vulnerable to local extinction." Relative to Southern Steelhead, the report states, "although the project site does not support steelhead spawning habitat, fish must pass through the project site when moving between spawning sites in the upper watershed and the ocean or lagoon." The report also finds that "lagoons at the mouths of coastal streams may provide important nursery habitat for young steelhead."

Relative to biological impacts the report concludes that there "were and continue to be short- and long-term" impacts from the project. The short-term impact is increased sedimentation of the stream and lagoon during construction. The long-term impacts include "permanent loss of aquatic habitat within the footprint of the new retaining structure and, destabilization of the channel bed and the northern bank due to decreased conveyance arising from encroachment into the active channel." Long-term impacts to Tidewater Goby include "permanent loss of foraging and breeding habitat within the retaining wall footprint" which is considered a significant impact by the consulting biologist because "gobies have been sighted throughout this reach of Mission Creek and may have used the project area." Relative to Southern Steelhead the report concludes that "encroachment of the retaining wall into the active channel has constricted the width of the channel and may reduce the ability of steelhead to move upstream and downstream." The report finds that this impact is adverse but not significant.

The report notes that channel constriction and reduced conveyance may result in destabilization of the northern bank during flood flows. The report recommends that the northern bank could provide an area for habitat restoration which would help stabilize the bank in addition to increasing habitat.

The Commission finds that Mission Creek provides habitat for Tidewater Goby and Southern Steelhead, both of which are Federally listed species, and that the Creek, although significantly degraded, is considered ESHA pursuant to Section 30240 of the Coastal Act. Under Section 30240 ESHAs must be protected against any significant

disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. The subject retaining wall in the creek is not a use dependent on those resources. Further, the Commission finds that the section of the creek containing the retaining wall running along the applicant's property is located within the estuary of Mission Creek. Section 30233 of the Coastal Act permits the diking, filling, or dredging of estuaries for eight specified uses only, and only where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects. A flood control structure such as the subject retaining wall is not an allowable use under Section 30233.

Section 30236 of the Coastal Act, however, allows for the channelization or alteration of streams for flood control projects where such projects incorporate the best mitigation measures feasible and where such protection is necessary for public safety or to protect existing development. In approving the Consistency Determination for the Army Corps Lower Mission Creek Flood Control Project, the Commission found that Section 30236 allowed the approval of flood control facilities in certain circumstances, even when such projects do not comply with the allowable use and resource dependent tests of Sections 30233 and 30240 of the Coastal Act. The Commission found that the language in Section 30236 permits flood control facilities in streams and estuaries, where demonstrated to be necessary and designed to be the least environmentally damaging feasible alternative and to incorporate the best mitigation measures feasible. A flood control device such as the subject retaining wall can only be approved. however, if it meets all of the requirements of Section 30236. It must be necessary for public safety or to protect existing development and it must be the least environmentally damaging feasible alternative for protecting existing structures and/or providing public safety.

After completion of the new timber retaining wall, the project engineers, Penfield & Smith, in a letter dated May 24, 1995 (exhibit 7), noted that the structure encroached into the Mission Creek channel and recommended that an area along the opposite side of the creek be excavated to provide approximate equivalent conveyance. This recommendation was based on the project area's flood hazard designation. The letter included plans and sections for the proposed excavation. (The quantity of material to be excavated would be approximately 400 cubic yards.) In its letter of July 19, 1995 (exhibit 5), the City acknowledged its review of the plans prepared by Penfield & Smith and noted the plan's "intent of maintaining equal conveyance capacity of the channel." The letter further stated that the Public Works Department was ready to issue a permit for the timber wall and "the necessary excavation of the opposite bank" once all necessary Federal, State, and local approvals are obtained.

The above referenced Penfield & Smith letter reports and the 3/12/98 Subsurface Soils Analysis by Pacific Materials Laboratory were subsequently reviewed by Commission Staff Geologist, Dr. Mark Johnsson. In a memorandum to Commission Enforcement Staff dated February 1, 2002, Dr. Johnsson notes that the encroachment of the new wall "necessarily reduces the capacity of Mission Creek." In reference to the previously

described proposal to excavate approximately 400 cubic yards from the opposite creek bank as mitigation for the encroachment, Dr. Johnsson questions whether the excavation area would remain open given the proposed excavation area's location on the inside bend of a meander loop. This is because meandering streams typically deposit sediment on the inner bank of meander loops forming a point bar, such as the excavation area, while eroding the outer bank. Therefore, a channel of reduced capacity could still be the result since the outer bank is fixed by the retaining wall. Dr. Johnsson suggests that more information concerning point bar dynamics at the subject site is necessary before the proposed excavation can be fully evaluated.

In response to Dr. Johnsson's memorandum, Penfield & Smith submitted a report to the applicant dated October 22, 2002 (exhibit 8). The report notes that the northern creek bank is "heavily vegetated and stabilized with mature plants." (The 1998 Biological Impacts report by Lawrence Hunt notes that the northern bank opposite the retaining wall is "devoid of native vegetation.") The report also notes that "no significant agradation of the creek was observed" after several years that included the 1998 El Nino storms and several subsequent years of below-average rainfall. Further, the report notes that sediment removal in this area of Mission Creek has historically not been required which indicates that reduction in creek capacity due to development of a point bar on the inside of the bend is unlikely. Based on these observations, the consultant recommends that the construction of the bulkhead has had and will have "little, if any, future impact on the physical functionality of the channel and appurtenant structures." The report also recommends that excavation of the northern creek bank to provide equivalent flow conveyance "is likely to cause more harm to the channel through sedimentation and disturbance than leaving it in the current condition." The report therefore recommends that no excavation take place.

In review of this document, Staff notes that the primary concern expressed in Dr. Johnsson's memorandum—that any excavation intended to restore capacity to Mission Creek would tend to fill through time—has not been tested. Although it may be true that this area of Mission Creek has not required sediment removal or dredging, that is because the channel was in equilibrium with existing conditions. If that equilibrium is disturbed, either through the encroachment of the new retaining wall or through excavation on the outer bank of the meander loop, it might be expected that a new equilibrium would be established. Specifically, an excavation in an area usually characterized by deposition might tend to be filled through time, during periods of low flow.

Despite the engineering consultant's recommendations that the construction of the retaining wall has not had and will not have any future adverse impacts on channel function, the as-built wall does encroach several feet into a creek channel subject to confirmed flood risks and a history of flooding. In its draft Feasibility Study for the aforementioned Mission Creek Flood Control Project, the Army Corps states:

The primary problem affecting the lower Mission Creek study area is the threat of flooding to property, which affects the health, safety and well-

being of the residents of Santa Barbara. This is substantiated by flood records dating back to 1862. Records show that the area has suffered at least 20 considerable floods since 1900. Increased urbanization of the Santa Barbara area over the last century has contributed to increased runoff, and therefore, increased flooding frequencies.

Records since 1900 show that floods occurred in the Santa Barbara County area in 1906, 1907, 1909, 1911, 1914, 1918, 1938, 1941, 1943, 1952, 1958, 1962, 1964, 1967, 1969, 1973, 1978, 1980, 1983, 1995, and 1998.²

Narrowing an already constrained creek channel in an area with a confirmed flood risk as a component of a project intended for flood control to protect adjacent development from flood hazards can only be approved if there is there is no less environmentally damaging feasible alternative. As previously discussed, construction of the as-built retaining wall which encroaches several feet into the creek channel and includes the placement of fill in the Mission Creek Estuary cannot be found consistent with Section 30236 of the Coastal Act as long as there is a less environmentally damaging feasible alternative.

Relative to encroachment into the creek channel and feasible alternatives, the applicant maintains that it was necessary to construct the new pilings several feet into the creek beyond the existing wall because the new pilings had to be placed in front of the old pilings and, in order to accommodate the pile driving machinery, there was not enough room to place them closer to the pre-existing wall and pilings because of the size of the crane basket which held the new pilings during construction. However, construction designs for and photos of the as-built retaining wall have been reviewed by the Commission' Staff Engineer, Lesley Ewing. Ms. Ewing and Dr. Johnsson conclude that it would have been feasible to construct the new wall closer to the pre-existing wall and, possibly, within the same footprint. The new pilings could have been staggered between the existing pilings, for example. Further, the creek had receded back into its channel by the time the new wall was constructed. Even if a wall encroaching into the creek had been necessary on an emergency basis, such a structure could not be approved on a permanent basis, because it is not consistent with section 30236 of the Coastal Act.

As previously discussed, Section 30236 of the Coastal Act allows the alteration of streams for flood control projects only where necessary for public safety or to protect existing development and, where no other method for protecting existing structures in the floodplain is feasible. The Commission finds that construction of a retaining wall to replace the destroyed and/or damaged wall at the subject site is a flood control project and is necessary for public safety and to protect existing development. Before approving a flood control project the Commission must find that it meets all of the

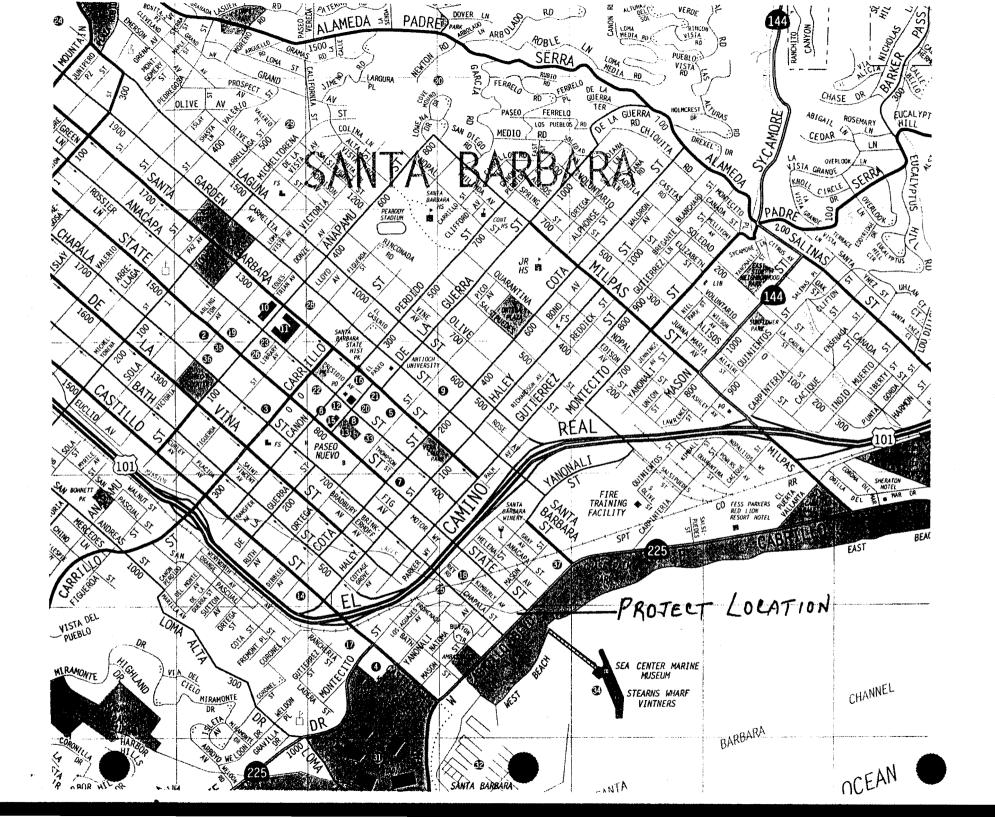
² Draft Feasibility Report, Santa Barbara County Streams, Lower Mission Creek Corps of Engineers, December 1999, pp. 13-17.

requirements of Section 30236, however. If there is a less environmentally damaging feasible alternative the project cannot be found consistent with Section 30236. This test is similar to the alternatives analysis requirement of Section 30233 which does not allow for filling a stream channel or estuary when there is a less damaging feasible alternative. Further, Section 30240 does not allow for the placement of fill in an ESHA and Section 30253 requires that new development minimize risks to life and property in areas of high flood hazard and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area. Constructing the new retaining wall in the same footprint as the destroyed portion of the wall would avoid narrowing the creek channel and would minimize risks from flooding and property damage in the future. In this case, the Commission finds that there is a less environmentally damaging feasible alternative in the form of constructing the retaining wall in the same location as the destroyed wall. Construction of the wall in the same location as the destroyed wall would avoid the placement of fill in an estuary and designated ESHA and narrowing an already constrained creek channel with a demonstrated flood risk. Therefore, the Commission finds that the as-built wall does not conform to the applicable provisions of Sections 30233, 30240, 30253 and 30236 of the Coastal Act.

D. Violation

Previously described development has occurred on the subject site without benefit of the required Coastal Development Permit. The applicant is proposing to retain the asbuilt timber retaining wall with timber piles and backfill. As described above, the Commission finds that the as-built project does not conform with Sections 30233, 30240, 30253, and 30236 of the Coastal Act.

Although construction has taken place prior to submission of this permit application, consideration of the application by the Commission has been based solely upon the Chapter 3 policies of the Coastal Act.





ta Barbara County F. d Control & Water Conservation District and Water Agency

123 E. Anapamu Street, Santa Barbara, California 93101 (805) 568-3440 Fax: (805) 568-3434

Phillip M. Demery Public Works Director

Thomas D. Favram Deputy Director, Water Resources

FFR 2 8 1995

February 24, 1995

Mr. Tony Romasanta 800 Garden St., Suite K. Santa Barbara, CA 93101

RE:

Mission Creek @ State Street

Dear Mr. Romasanta:

The Santa Barbara County Flood Control District is in receipt of your letter dated February 23. 1995 regarding the emergency work you completed on your property on Mission Creek. In addition, we met at the site on February 24, 1995.

As you recall, we met on the site on January 17, 1995. At that time you requested assistance from Flood Control because your structure was being undermined and other portions of the creek were constricted. At that meeting, I informed you that the District would be unable to assist you at that time due to enormous demand on our Department. You also recall that I urged you to take the necessary steps to shore up the creek bank. I was concerned that failure to do so would not only have jeopardized your structure, but any future "unraveling" of the revetment would have jeopardized other structures including public facilities such as the State and Cabrillo Street bridges. Because of the urgency of the situation, I suggested that you undertake this work as soon as possible due to the threat of future rain.

Upon viewing the site on February 24, 1995, it appears that you have successfully restored the creek revetment in the failed areas. I might additionally note that your work merely restored the damaged revetment and that no improvements were made that I saw.

While I regret we were unable to help you, I am please to see you diligently pursue this needed work to its completion. Should you or any other agency have any questions regarding this work I would be happy to make myself available. Please feel free to contact me at 568-3440.

Sincerely.

Thomas D. Fayram

Deputy Director, Public Works

Water Resources Division

Dave Davis, Community Development Director, City of SB cc: Pat Kelly, Acting Public Works Director, City of SB

THOS

EXHIBIT NO. APPLICATION NO.

4-95-103



2530 FINANCIAL SQUARE DRIVE, #110 OXNARD, CALIFORNIA 93030 805-983-7499 • FAX 805-983-1826

111 EAST VICTORIA STREET
P. O. BOX 98 • SANTA BARBARA, CALIFORNIA 93102
805-963-9532 • FAX 805-966-9801

EXHIBIT NO. 2

APPLICATION NO.

4-95-103

SAI

805-544-5445 • FAX 805-544-4872

W.O. 11,558.01

March 3, 1995

Mr. Antonio R. Romasanta 800 Garden Street, Suite K Santa Barbara, CA 93101

Subject: Flood Damage Repair

A.P.N. 033-102-12 1 State Street Santa Barbara, CA MAY 1 8 1995

CALIFORNIA

COASTAL COMMISSION

SOUTH CENTRAL COAST DISTRICT

Dear Mr. Romasanta:

Lower Mission Creek flooded during the early morning heavy rains on January 10, 1995. A section of the existing timber retaining structure adjacent to the creek through your property was lost or significantly damaged.

The replacement timber structure was reviewed by me during construction and after completion. A plan and typical section are included herewith for your information. Approximately 119 linear feet of structure was constructed and included the driving of approximately 20-12" treated timber piles. The piles were 40 feet in length and were driven approximately 27 feet below the bottom of Mission Creek.

Other construction items as noted on the typical section include the following.

- 4"x10" treated timber attached to the piles with ½"x10" to 12" lag bolts.
- 3/4" galvanized tiebacks attached to concrete deadmans at 10'± 0.C.
- Backfill included 18" to 24" of 4 sack concrete slurry over several feet of 3" to minus fill gravel wrapped with 2 layer drainage filter fabric.
- The area was surfaced with 6" of concrete.

It is my opinion that the quality of construction was excellent and that construction was completed substantially in conformance with the plan and typical section included herewith.



Mr. Antonio R. Romasanta March 3, 1995 Page 2

If you require additional information, please contact me.

Yours truly,

B. Ray Gateley, RCE 21,54 Project Engineer

W:\WORK\11558\BRGTR.LTR

EXHIBIT



BRG

Penfield & Smith

ROMASANTA

SH____OF___ _____DATE-3/Z/9:

ENGINEERS . SURVEYORS

FLOOD DAMAGE

W.O. NO. 11,558.C

111 E. VICTORIA STREET, SANTA BARBARA, CALIF. (805) 963-9532

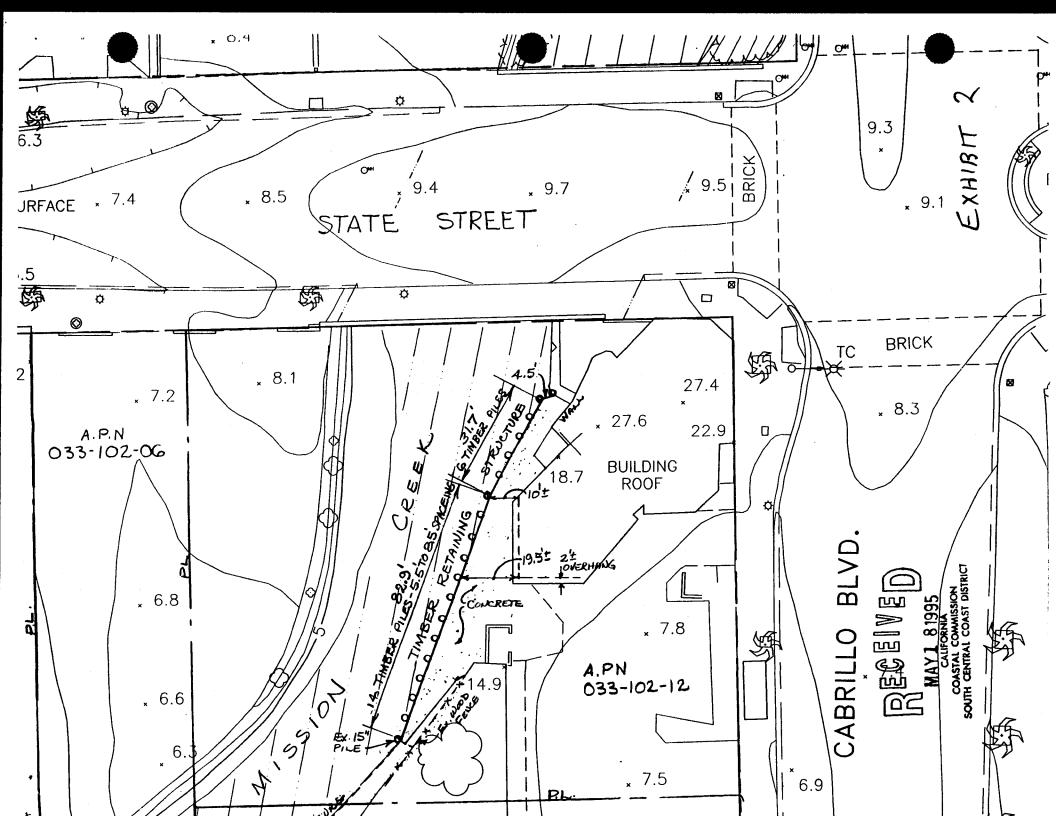
KERAIR -

2" TREATED TIMBER PILES (L=40+) 4'X10"TREATED TIMBER (TYP) 12 ×10 to 12 LAG BOLTS -6"P.C. CONCRETE -18" to 24"-4 SACK SLURRY 34"GALY. TIEBACKS @ 10 ± 0.C . CONC. DEADMAN EDGE OF EROSIN 3"to minus fili GRAVEL WRAPED WITH 2 LAYOR DRAINAGE FILTER FABRIC . COASTAL COMMISSION SOUTH CENTRAL COAST DISTRICT

TYPICAL SECTION

TIMBER RETAINING STRUCTURE

SCALE: 14"=1'-0"





DEPARTMENT OF THE ARMY

LOS ANGELES DISTRICT, CORPS OF ENGINEERS 300 NORTH LOS ANGELES STREET LOS ANGELES, CALIFORNIA 90012

July 17, 1995

EXHIBIT NO. 3	
APPLICATION NO.	
4-95-103	
JUL 1 81995	

CALIFORNIA

COASTAL COMMISSION SOUTH CENTRAL COAST DISTRICT

Office of the Chief Regulatory Branch

Mr. Antonio R. Romasanta 800 Garden Street, Suite K Santa Barbara, California 93101

Dear Mr. Romasanta:

It has come to our attention that you have conducted flood damage repair work in Mission Creek at 1 State Street, in the City and County of Santa Barbara, California. This activity may have required a U.S. Army Corps of Engineers permit.

A Corps of Engineers permit is required for:

- a) structures or work in or affecting "navigable waters of the United States" pursuant to Section 10 of the Rivers and Harbors Act of 1899. Examples include, but are not limited to,
 - 1. constructing a pier, revetment, bulkhead, jetty, aid to navigation, artificial reef or island, and any structures to be placed under or over a navigable water;
 - 2. dredging, dredge disposal, filling and excavation;
- b) the discharge of dredged or fill material into, including any redeposit of dredged material within, "waters of the United States" and adjacent wetlands pursuant to Section 404 of the Clean Water Act of 1972. Examples include, but are not limited to,
 - 1. creating fills for residential or commercial development, placing bank protection, temporary or permanent stockpiling of excavated material, building road crossings, backfilling for utility line crossings and constructing outfall structures, dams, levees, groins, weirs, or other structures;
 - 2. mechanized landclearing, grading which involves filling low areas or land leveling, ditching, channelizing and other excavation activities that would have the effect of destroying or degrading waters of the United States;
 - allowing runoff or overflow from a contained land or water disposal area to re-enter a water of the United States;
 - 4. placing pilings when such placement has or would have the effect of a discharge of fill material;
 - c) any combination of the above.

Within the next 30 days, please provide us with a description of the work you performed and the reason(s) it was needed. Pictures and/or diagrams of the project site before and after construction would also be helpful. Following the receipt of this information, we will determine whether the work is in violation of either of the Acts listed above. Should the work be found to be in violation, you may be asked to submit an after-the-fact permit application to resolve the enforcement action.

Enclosed you will find a permit application form and a pamphlet that describes our regulatory program. If you have any questions, please contact Mr. Michael Jewell of my staff at (805) 641-0301. Please refer to this letter and 95-50320-MSJ in your reply.

Sincerely,

David J. Castanon Chief, North Coast Section

Enclosures

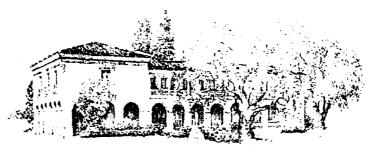
CF: M. Capelli, California Coastal Commission K. Wilson, California Department of Fish and Game

MARK CAPELLY CA. COASTAR COMM.

CITY OF SARTA BARBARA



Planning Division	564-5470
Housing & Redevelopment Division	
Division of Land Use Controls	564-5485
Director's Office	
Fax Number	



630 GARDEN STREET POST OFFICE BOX 1990 SANTA BARBARA, CA 93102-1990

COASTAL COMMISSION SOUTH CENTRAL COAST DISTRICT

June 8, 1995

Anthony Romasanta 800 Garden Street, Suite K Santa Barbara, CA 93101

Subject:

1 State Street, Mission Creek Channel Improvements

Dear Tony,

This letter is to follow-up and memorialize our field visit to your site March 7, 1995 with you, your son Mark, Tom Fayram, of County Flood Control, Dave Davis, Community Development Director, Mark Capelli, of the Coastal Commission, Dan McLaughlin, Building Inspection Supervisor and David Gomez, Building Inspector and myself.

After observing the subject work undertaken after the January 10,1995 flood a discussion was held regarding the need to obtain after-the-fact permits for the work performed. The permits necessary include a coastal permit from the Coastal Commission and a City permit for the pilings and whalers. There was discussion that the new wall has encroached into the creek and that there was a need to provide and certify equal conveyance capacity of the channel as a result of the work performed. You were advised of the need to retain a civil engineer with federal floodplain regulatory expertise to perform the required analysis and to provide calculations and the required certifications. It was noted that additional work may be necessary to achieve the equal conveyance required by the City/Federal floodplain management regulations. You indicated that Penfield and Smith was your engineer on the project and would provide such analysis documentation with your application.

Since that meeting, we have determined that Public Works Department has the lead agency role with the City in reviewing, routing for other agency approval and permitting your project. Marti Schultz, Supervising Engineer is responsible for the review and coordination of such projects.

As we have not received an application to date, you are hereby given notice that you still need to obtain the necessary Coastal Commission and Public Works permit for the channel improvements. Your prompt attention to this matter will be appreciated.

EXHIBIT NO. 4
APPLICATION NO.
4-45-103

Anthony Romasanta 1 State Street, Mission Creek Channel Improvements June 8, 1995

Sincerely,

Roy Harthorn, Chief of Building and Safety

cc: David D. Davis, Community Development Director
Pat Kelly, Acting Public Works Director
Marti Schultz, Supervising Engineer

/Mark Capelli, California Coastal Commission
Steve Wagner, Santa Barbara County Flood Control

ETY OF SARTA BARBARA

OMMUNITY DEVELOPMENT DEPT.

Planning Division	564-5470
Housing & Redevelopment Division	
Division of Land Use Controls	564-5485
Director's Office	564-5455
Fax Number	564-5477



630 GARDEN STREET POST OFFICE BOX 1990 SANTA BARBARA, CA 93102-1990

FEB 1 8 1993

CABROKER COASTAL COMMISSION ROUTH CENTRAL COAST DISTRICT

July 19, 1995

Anthony Romasanta 800 Garden Street, Suite K Santa Barbara, CA 93101

Subject:

1 State Street, Mission Creek Channel Improvements

Dear Mr. Romasanta.

This letter is to advise you we have completed the review of your permit application for Mission Creek channel improvements adjacent to your property at 1 State Street, Santa Barbara California. We have reviewed the plans and calculations prepared by Ray Gateley, C.E. with Penfield and Smith Engineers and accept Mr. Gateley's design for certain repairs and realignment of the creek channel. Mr. Gateley's design and calculations further identify additional work yet to be performed with the intent of maintaining equal conveyance capacity of the channel.

The Public Works Department stands ready to issue a permit for the replacement timber channel bank protection and the necessary excavation of the opposite bank upon demonstration that all Federal, State and local approvals required before issuance of a permit are obtained or deemed unnecessary (S.B.M.C. 22.24.130.B). Also by copy of this letter to the Santa Barbara County Flood Control District, the California Department of Water Resources and the Federal Insurance Administration, this office is fulfilling its requirements to notify such agencies prior to any alteration of a watercourse (S.B. M.C. 22.24.130.G.).

Sincerely,

Marti Schultz, Supervising Engineer

Roy Harthorn, Chief of Building and Safety

My dutho

APPLICATION NO.

4-95-103

Anthony Romasanta
July 19, 1995
1 State Street, Mission Creek Channel Improvements

cc: David D. Davis, Community Development Director
Pat Kelly, Acting Public Works Director
Mark Capelli, California Coastal Commission
Steve Wagner, Santa Barbara County Flood Control
Bill Hom, California Department of Water Resources
Henry Chau, Federal Insurance Administration
Ray Gateley, Penfield & Smith



Lawrence E. Hunt

MAR 0.6 1993

CONSULTING BIOLOGIST

COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICE

Mr. Antonio Romasanta 800 Garden Street, Suite K Santa Barbara, CA 93101

2 March 1998

RE: POTENTIAL BIOLOGICAL IMPACTS OF BANK STABILIZATION WORK ON MISSION CREEK NEAR INTERSECTION OF STATE STREET X CABRILLO BOULEVARD, SANTA BARBARA, CALIFORNIA

Dear Mr. Romasanta,

This letter summarizes the results of my field reconnaissance of the project site 27 February 1998 and reviews the potential biological impacts resulting from the 1995 reinforcement work on the southern retaining wall of Mission Creek immediately upstream of the State Street x Cabrillo Boulevard intersection.

- 1. Introduction. High storm flows and flooding on lower Mission Creek during the winter of 1995/96 caused erosion and destruction of the southern channel retaining wall and bank. This led to slumping and other potential structural damage to adjacent commercial property. The applicant (T. Romasanta) was instructed by the Santa Barbara County Flood Control District to proceed immediately with repairs to prevent addition structural damage to the property (Fayram, 1995). This work required the placement of approximately 20 timber piles and associated timber retaining structure for a distance of approximately 115 feet along the south creek bank. The new structure encroaches from 0 to 10 feet into the active channel of the creek. The work was begun in February and was completed by March 1995.
- 2. Existing Conditions. The project site lies within a dynamic freshwater-marine transition zone of Mission Creek. Consequently the project site is subject to tidal action and, during high tides and low flow conditions, contains water of varying salinity.

This reach of Mission Creek is moderately to severely disturbed by urbanization and associated flood control activities including: urban encroachment of the floodplain, confinement of the formerly meandering watercourse to a fixed, narrow channel, removal of natural bank vegetation and introduction of non-native plant species, channelization of bed and bank of the stream, change in seasonal flow regimes, and degradation of water quality. The watercourse and streambanks in the immediate project area are highly disturbed. The northern (western) bank is devoid of native vegetation and bare soil predominates. Non-native species such as pampas grass (Cortaderia selloana), tree tobacco (Nicotiana glauca), and other invasive woody and herbaceous species dominate the existing vegetation along this bank. The southern (eastern) bank consists of a vertical timber retaining structure which rises approximately 10-15 feet above the streambed. The streambed appears to consist of small gravel, sand, and silt and did not support any aquatic or aquatic emergent vegetation at the time of the survey.

5290 Overpass Road, Suite 108 Santa Barbara, California 93111

Phone: (805) 967-8512 Fax: (805) 967-4633

E-mail: anniella@silcom.com

EXHIBIT NO. 6

APPLICATION NO.

4 - 95 - 103

Hunt - p. 2 of 3

Despite this degree of disturbance, the surveyed reach of Mission Creek supports a fair diversity of aquatic invertebrate and terrestrial vertebrate species, especially birds, on a seasonal basis. The majority of these wildlife species are common, widespread generalists, including a number of non-native species. The surveyed reach of Mission Creek, from the ocean upstream to the Mason Street bridge, supports at least two protected fish. These are discussed below.

Tidewater Goby. In 1993 a population of tidewater gobies (Eucyclogobius newberryi), a Federally-listed Endangered species (Ambrose et al, 1993; U.S. Fish and Wildlife Service, 1994) was discovered in the small estuary below Cabrillo Boulevard. This small fish has experienced catastrophic declines or has been extirpated from at least 50% of its former range by a combination of development of the lower portions of watercourses, including terminal coastal lagoon habitats and changes in flow regimes. This fish is typically found in the upstream ends of coastal lagoons that form at the terminal ends of watercourses. The terminal lagoon on Mission Creek typically closes off during the summer, low-flow regime. Breaching of the sandbar that closes off these lagoons may be detrimental to gobies. It tolerates a narrow range of salinity, preferring brackish water and requires sandy/silty substrates for nesting. Nesting is typically concentrated at the freshwater ends of brackish lagoons, but can be found in thoroughly freshwater reaches far upstream (Swift et al, 1989; Hunt, pers. obs.). Breeding typically occurs during the spring and summer. Male gobies excavate burrows in coarse sand and this type of substrate appears necessary for successful reproduction and recruitment. Increased sediment loads, especially during the reproductive season, can significantly reduce breeding success (Swift et al, 1989).

The fish found in 1993 were captured by seining the lagoon, identified, then released. Gobies were found in Mission Creek between Cabrillo Boulevard and the ocean in 1995 following the winter storms (K. Lafferty, pers. comm., 1998). Identification was corroborated the following year, by Dr. Camm Swift, an expert of this species (Swift et al, 1989, Swift et al, 1993). Gobies were also found in three additional locations within 1.5-2.0 miles of Mission Creek: Laguna Channel, Sycamore Creek, and the Andree Clark Bird Refuge (Ambrose et al, 1993). Together with the Mission Creek population, fishes found in these other streams may form a metapopulation (i.e., a series of local populations genetically linked by dispersal), with Mission Creek lagoon serving as a potential colonization source for these local downcoast locations. Gobies may occur as far upstream as the Mason Street bridge (M. Capelli, pers. comm., 1998; K. Lafferty, pers. comm., 1998).

The narrow habitat requirements of tidewater gobies, coupled with the apparent one-year life span of most individuals, can make goby populations highly vulnerable to local extinction.

Southern Steelhead. The southern steelhead (Oncorhynchus mykiss) is an anadromous form of the native rainbow trout which spends much of its adult life in the ocean but returns to coastal streams and rivers to spawn. This fish is highly adaptable and can spend its entire life in freshwater if access to salt water is blocked. The genetic relationships between these resident rainbow trout and anadromous steelhead are not fully understood (Busby et al, 1996). Steelhead are a Federally-listed Threatened species (U.S. Fish and Wildlife Service, 1997).

Although the project site does not support steelhead spawning habitat, fish obviously must pass through the project site when moving between spawning sites in the upper watershed and the ocean or lagoon. Terminal lagoons at the mouths of coastal streams may provide important nursery habitat for young steelhead (Swift et al, 1993). The extent to which the terminal lagoon on Mission Creek functions in this regard is unknown.

Hunt - p. 3 of 3

- 3. Potential Biological Impacts. There were and continue to be short- and long-term biological impacts from this project. Increased sedimentation of the watercourse and lagoon during the construction process was a short-term impact. Long-term impacts include:
 - permanent loss of aquatic habitat within the footprint of the new retaining structure and;
 - destabilization of the channel bed and the northern (eastern) banks due to decreased conveyance arising from encroachment into the active channel.

Tidewater Goby. Short-term: Increased sedimentation of the lagoon while the work was in progress. This impact was likely adverse but not significant because gobies were found in the lagoon following the 1995 winter storms and the construction period for this project.

Long-term: Permanent loss of foraging and breeding habitat within the retaining wall footprint. This impact may be significant because gobies have been sighted throughout this reach of Mission Creek and may have used the project area for these purposes.

Southern Steelhead. Short-term: Increased sedimentation of the terminal lagoon during construction. This impact was likely adverse but not significant.

Long-term: Encroachment of the new retaining wall into the active channel has constricted the width of the channel and may reduce the ability of steelhead to move upstream and downstream. This impact is adverse but not significant.

Impacts to Other Wildlife Species. Impacts to non-sensitive wildlife were temporary and continue to be insignificant. However, the active streambed and conveyance ability of the channel in the project area has been reduced by the project. Channel constriction in this area may result in destabilization of the northern (western) bank during flood flows. Future channelization or similar construction practices to correct this effect could have significant impacts on sensitive and non-sensitive wildlife species.

4. Recommendations. The northern bank, forming the inside of a curve in the stream channel, likely experiences decreased flow velocities relative to the outside of the curve and is therefore an area of active deposition. Consequently, the northern bank could provide an area for habitat restoration which would effectively stabilize the bank and increase wildlife habitat values along this portion of the watercourse. Restoration should focus on the use of simple, hand-planting techniques and locally-collected, common, native species that can tolerate a wide range of salinity and water quality. For example, willows (Salix sp.), could be placed along the toe of the bank in a wattle arrangement to form a "living fence". These techniques could be a cost-effective approach to restoration of this reach of Mission Creek.

References

- Ambrose, R.F., K. Lafferty, J. Alstatt, C. Sandoval, P. Raimondi. 1993. Inventory of Coastal Wetlands in Santa Barbara County-Interim Report. Envir. Sci. and Engin. Program, UC-Los Angeles, 20 December 1993.
- Busby, P., T. Wainwright, G. Bryant, L. Lierheimer, R. Waples, F. Waknitz, and I. Lagomarsino. 1996. Status review of west coast steelhead from Washington, Idaho, Oregon, and California. U.S. Dept. Commerce, NOAA Tech. Memo. NMFS-NWFSC-27, 261 pp.

Hunt - p. 4 of 4

- Capelli, M. 1998. Senior Coastal Analyst, California Coastal Commission. Conversation regarding distribution of tidewater gobies and southern steelhead in Mission Creek. 2 March.
- Fayram, T.D. 1995. Deputy Director, Santa Barbara County Flood Control District. Letter to T. Romasanta re: Mission Creek retaining wall repairs. 24 February 1995.
- Lafferty, K. 1998. Reserve Manager, Coal Oil Point Natural Reserve, UC-Santa Barbara. Conversation regarding distribution of tidewater gobies in Mission Creek. 2 March.
- Swift, C.C., J.L. Nelson, C. Maslow, and T. Stein. 1989. Biology and distribution of the tidewater goby, Eucyclogobius newberryi (Pisces: Gobiidae) of California. Contr. in Sci., No. 404, Nat. Hist. Mus. of L.A. County, pp. 1-19.
- Swift, C., T. Haglund, M. Ruiz, and R. Fisher. 1993. The status and distribution of the freshwater fishes of southern California. Bull. So. Calif. Acad. Sci., 92(3): 101-167.
- U.S. Fish and Wildlife Service. 1994. Endangered and threatened wildlife and plants; Determination of endangered status for the tidewater goby. Federal Register, Vol. 59, No. 24, pp. 5494-5498.
- U.S. Fish and Wildlife Service. 1997. Endangered and threatened wildlife and plants; Determination of threatened status for the southern steelhead. Federal Register, Vol. 62, No. 18.

Please call me if you need additional information.

aurene EDA

Sincerely,

Lawrence E. Hunt



EXHIBIT NO. 7

APPLICATION NO.

4-95-103

111 EAST VICTORIA STREET P.O. BOX 98 SANTA BARBARA, CALIFORNIA 93102 505-963-9532 • FAX 805-966-9801 2530 FIN

3030 (SALIFORNIA 93030) S05-983-7499 • FAX 805-983-7499

W.O. 11,558.01

May 24, 1995

Mr. Antonio R. Romasanta 800 Garden Street, Suite K Santa Barbara, CA 93101

Subject: Flood Damage Repair

A.P.N. 033-102-12 1 State Street Santa Barbara, CA MAY 3 0 1995

CALIFORNIA

COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

Dear Mr. Romasanta:

On March 3, 1995, a plan and typical section was submitted to you showing the replacement timber structure constructed after the January 10, 1995 storm. The plan indicated that the structure encroached into the Mission Creek channel.

The project area is shown as zone AH on Flood Insurance Rate Map (FIRM) dated revised December 3, 1991 (copy attached). Zone AH is a special flood hazard area inundated by 100-year flood with flood depths of 1 to 3 feet. The base flood elevation in this area is approximately 10.5.

The project area is not therefor considered "floodway." However, we recommend that an area along the opposite side of the creek be excavated to provide approximate equavalent conveyance. Enclosed herewith are a plan and sections defining the proposed excavation. The following are comments regarding the plan.

- 1. The existing ground elevations and existing features are based on a topographic map prepared by Penfield and Smith and Pacific Western Aerial Surveys in April 1993.
- 2. The existing replacement timber structure is based on field measurements and field observation.
- 3. The location of the old damaged timber structure that was removed is based on the April 1993 topographic map.
- 4. The plan proposes to excavate a new 1½:1 slope and excavate the channel bottom approximately to elevation 0. The top of the slope would be approximately 51 to 52 feet from the replacement structure and transition to match the existing slope as shown on the plan.



Mr. Antonio Romasanta May 24, 1995 Page 2

- 5. The quantity of material to be excavated is approximately 400 cubic yards.
- 6. Sections A & B show that the cross sectional area of the proposed excavation will approximately equal the cross sectional area of the encroachment. Both the manning's roughness coefficient and the hydraulic radius for the sections would be approximately the same for the before and after condition. Therefore equivalent conveyance would be achieved.

It is therefore my opinion that if the excavation is completed as shown on the plan, approximate equivalent conveyance will be provided.

If you require additional information, please contact me.

Very truly yours,

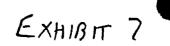
PENFIELD & SMITH

BRG: itp Enclosures

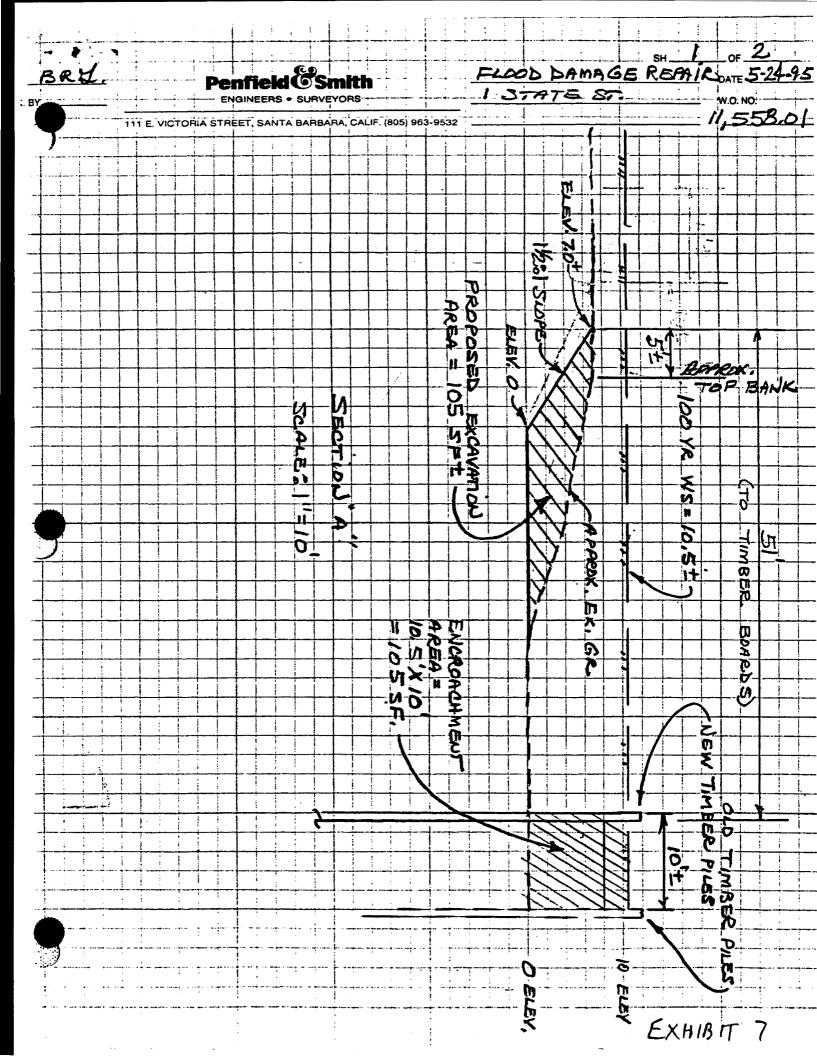
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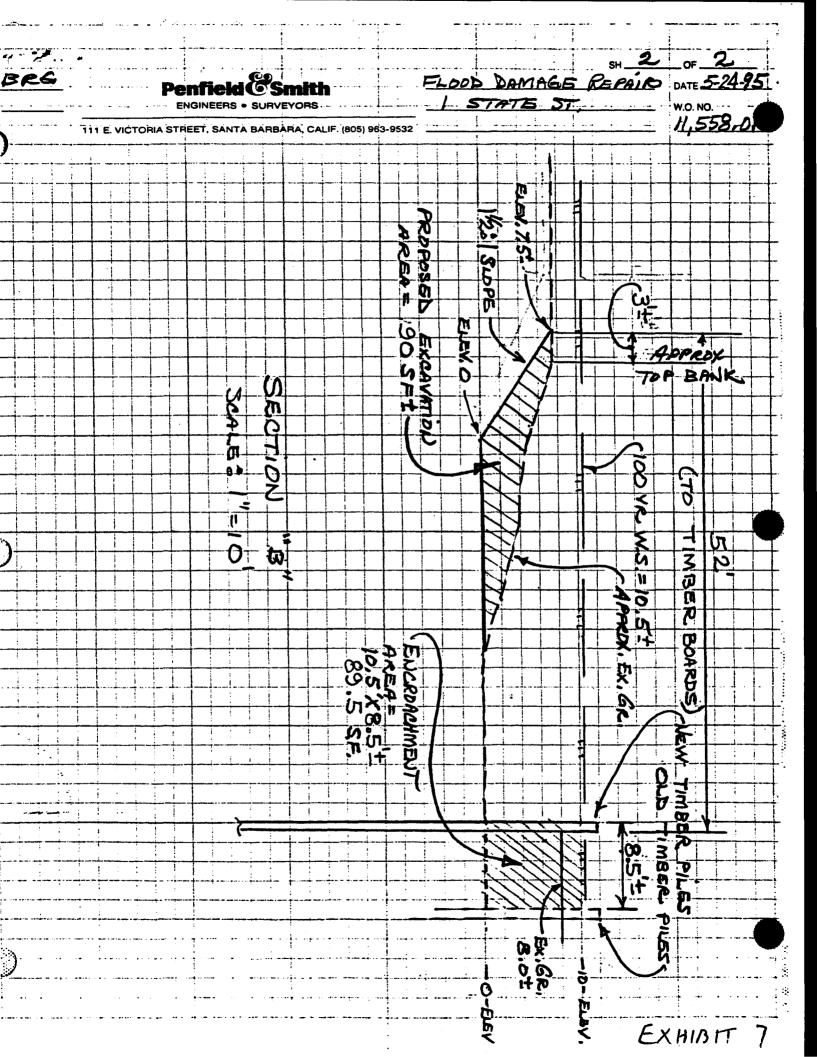
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APPLICATION NO.

4-95-103

210 EAST ENOS DRIVE SUITE A SANTA MARIA, CALIFORNIA 93454 805-925-2345 • FAX 805-925-1539 CORPORATE OFFICE
101 EAST VICTORIA STREET
P.O. BOX 98
SANTA BARBARA, CALIFORNIA 93102
805-963-9532 • FAX 805-966-9801

1327 DEL NORTE ROAD SUITE 200 -CAMARILLO, CALIFORNIA 93010 805-981-0706 • FAX 805-981-0251

W.O. 15034.01

October 22, 2002

Mr. Antonio Romasanta 800 Garden Street Santa Barbara, California 93101

Subject:

Emergency Replacement for Timber Bulkhead

Review and Comment

Dear Mr. Romasanta:

At your request, we have reviewed our files, reviewed photographs, made field visits and field measurements and photographically documented the existing (October 2002) situation of the timber bulkhead structure that is subject to an after-the-fact Coastal Commission permit. We have also reviewed the geotechnical review memorandum dated February 1, 2002, from Mark Johnsson, Staff Geologist.

Approach

We prepared Figure A – which shows the general alignment (post-1995) of Mission Creek at the subject location.

We attached a number of photographs, labeled for easier interpretation. We superimposed arcs representing the approximate flow path of the pre- and post-1995 channel. This allowed a qualitative review of the channel flow and impingement.

We spoke with representatives of Santa Barbara County Flood Control District that maintains the Mission Creek channel as well as referring to numerous reports and analyses prepared by Penfield & Smith for the City of Santa Barbara and the County of Santa Barbara regarding maintenance concerns.

Findings

Based on field observations and historic photographs we made the following findings:

- The northerly overbank is currently developed as a parking lot. The creek bank is heavily vegetated and stabilized with mature plants. See photo 3. The top of the bank is prepared in such a way as to filter storm water runoff prior to entering the Mission Creek.
- Using a constant radius arc, the flow direction and impingement for the approximate pre-1995 bulkhead alignment and the post-1995 bulkhead alignment were overlain onto the topographic mapping. Our analysis indicates

Mr. Antonio Romasanta October 22, 2002 Page 3

very little difference in the water direction and actually points to a slightly more beneficial trajectory for the post-1995 bulkhead alignment, given the bridge alignment.

Photographs taken in 1998 after the El Nino events were compared to photographs taken in October 2002, after several years of sub-average rainfall and stream flow. No significant agradation of the creek was observed. See photos 1 and 2. This combined with the fact that sediment removal at this location in Mission Creek has historically not been required indicates that reduction in creek capacity due to development of a point bar on the inside of the bend curvature is unlikely. In addition, the bulkhead encroachment occurs downstream of the maximum point of inflection of the creek curve, minimizing the hydraulic impacts on sediment deposition.

Recommendations

We make the following recommendations based on the findings above:

- 1. The construction of the post-1995 timber bulkhead has had little if any impact on the physical functionality of the channel and appurtenant structures.
- 2. The construction of the post-1995 timber bulkhead will likely have little, if any future impact on the physical functionality of the channel and appurtenant structures.
- 3. Although grading on the northerly creek bank has been proposed to provide equivalent flow conveyance, the grading of this bank along with the consequent destruction of the current vegetation is likely to cause more harm to the channel through sedimentation and disturbance than leaving it in the current condition. The loss of conveyance due to the construction of the timber bulkhead is quite insignificant when compared to the entire adjacent floodplain. Therefore, we recommend that the northerly channel bank be left in its current 2002 condition.

¹ Sediment removal in Lower Mission Creek typically occurs in the channel near the Union Pacific Railroad for coarse sediments and near Oak Park for cobbles. Both locations are upstream of this project. According to Karl Treiberg (telecommunication October 17, 2002), Santa Barbara County Flood Control District, in the period of his tenure at the District, no maintenance of the channel has been done downstream of Yanonali Street



Mr. Antonio Romasanta October 22, 2002 Page 3

If you have any questions, please call me at (805) 963-9538 ext 124.

Exp. 06-30-200

Very truly yours,

PENFIELD & SMITH

Craig A. Steward, P.E. Principal Engineer

RCE 37253

enclosures

CALIFORNIA COASTAL COMMISSION

25 PREMONT SUITE 200 SAN FRANCISCE CA 4410 22 NOTCE AND TOT 4415 404 505 PACE AND 404 546



1 February 2001

GEOTECHNICAL REVIEW MEMORANDUM

To: Abe Doherty, Enforcement Office From: Mark Johnsson, Staff Geologist

Re: Romasanta violation and CDP (V-4-95-006; CDP 4-95-103)

In reference to the above application, I have reviewed the following materials:

- 1) Penfield and Smith 1995. "Flood damage repair--APN 033-102-12. 1 State Street. Santa Barbara, California". 1 p. report letter dated 3 March 1995 and signed by B. R. Gateley (CE 21546).
- 2) Penfield and Smith 1995. "Flood damage repair--APN 033-102-12, 1 State Street, Santa Barbara, California", 1 p. report letter dated 24 May 1995 and signed by B. R. Gateley (CE 21546).
- 3) Penfield and Smith 1995. "Existing timber retaining structure and proposed excavation. APN 033-102-12, City of Santa Barbara", 1 p. architectural grawing gated May 1995 and signed by E. R. Gateley (CE 21546).
- 4) Penfield and Smith 1998. "Flood damage repair--APN 033-102-12. One State Street. Santa Barbara, California", 1 p. report letter dated 23 February 1998 and signed by E. R. Gateley (CE 21546).
- 5) Pacific Marine Laboratory 1998. "Subsurface soil analysis. Timber retaining structure/Mission Creek, 28 West Cabrillo Boulevard, Santa Barbara, California', 1 p. geotechnical report letter pated 12 March 1998 and signed by R. J. Pike (G.E.).
- *I have not had the opportunity to visit the site, but have seen photographs and maps that describe the site situation fairly well.

It is my understanding that an existing timber retaining wall was damaged during the flood of 10 January 1995, whereupon a new wall was constructed without a Coastal Development Permit. This new wall was built to specifications reviewed in reference (1), in which a licensed Civil Engineer certifies that the new wall was completed per plan and to excellent construction standards. Reference (4) confirms that the wall has performed very well during heavy flows during the winters of 1996, 1997, and 1998. This report also notes that "no significant stream bed erosion or siltation have occurred." Nevertheless, recognizing that the added encroachment of the new wall necessarily reduces the capacity of Mission Creek, reference (2) had previously the

- suggested excavating an area of approximately 400 cubic yards (approximately the

volume lost due to the encroachment, at bankfull discharge from the opposite bank of Mission Creek in order to mitigate for the encroachment. The report notes that the hydraulic radius and Manning's n would be approximately the same for the before and after conditions, suggesting that equivalent conveyance would be provided.

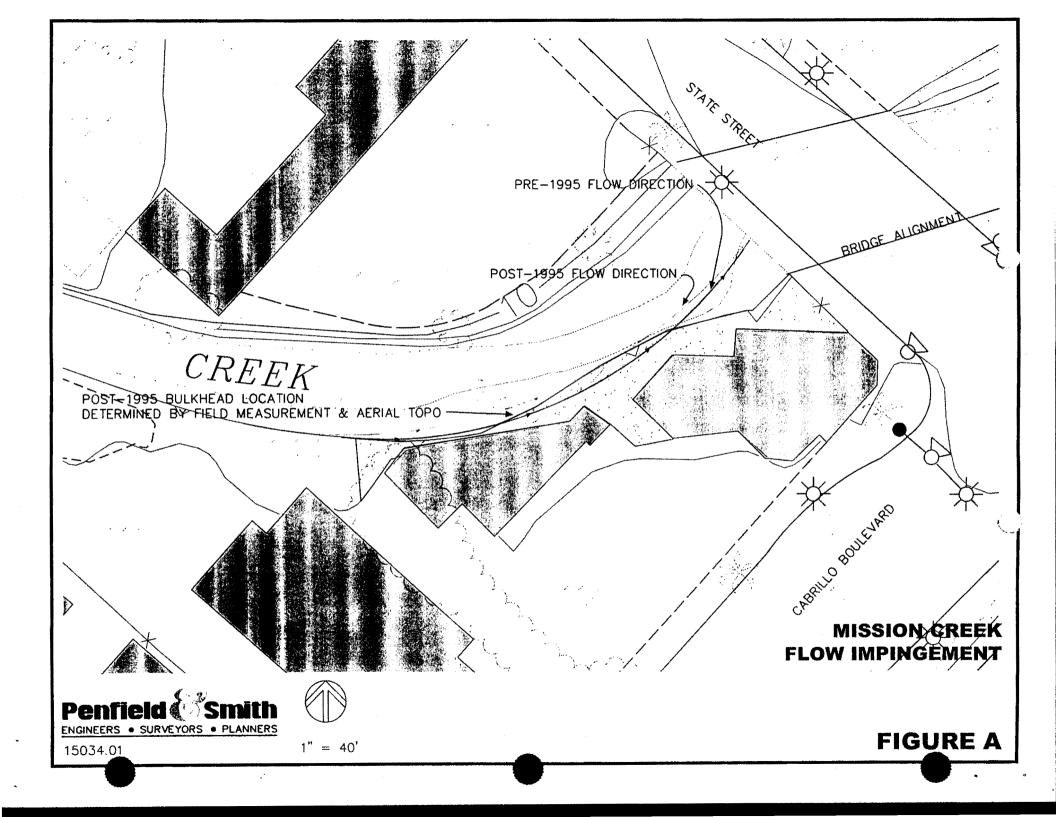
This conclusions assumes, however, that the excavation would remain open. Given the location of the proposed location on the inside bend of a meander loop, deposition might be expected at this site during low and moderate flows. Meandering rivers typically deposit sediment on the inner bank of meander loops, forming a point bar and erode the outer bank, leading to the type of erosion that damaged the previous timber wall. Although bank-full discharge might be expected to erode some of this material, the initial flood could occur in a channel of reduced capacity. Thus, more information concerning the nature of point bar dynamics at the subject site is necessary before the proposed mitigation can be fully evaluated.

In addition, examination of the site plans (reference 3) and photos indicates that the natural meander curvature has been altered by the encroaching timber wall. This suggests that the thalweg (line of maximum velocity) might be deflected away from it's natural position near the outer bank of the meander loop, and more towards the left bank downstream of the project site. Such a deflection could induce erosion near the northern abutment of the State Street Bridge. I recommend that this potential be fully evaluated before an after-the-fact permit be approved.

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

Sincerely

Mark Johnsson, Ph.D., CEG



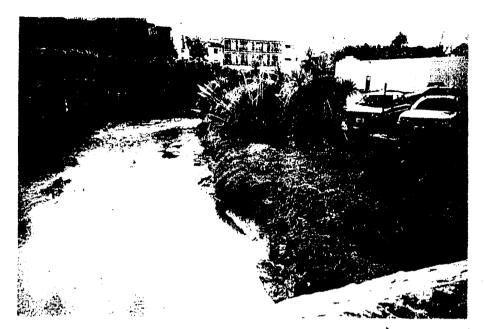


Photo 1 - Looking upstream from State Street Bridge - Feb 17, 1998

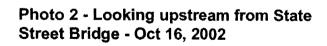






Photo 3 - Northerly Creek Bank

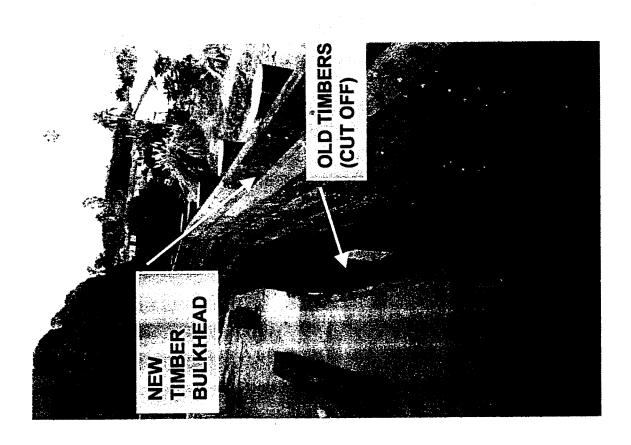


Photo 4 - During Timber Bulkhead Construction, 1995

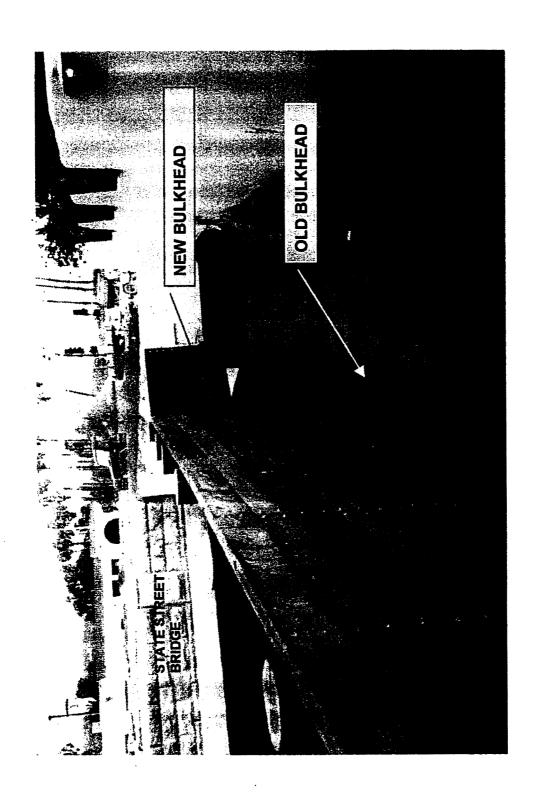


Photo 5 - During Construction - Looking Towards State Street

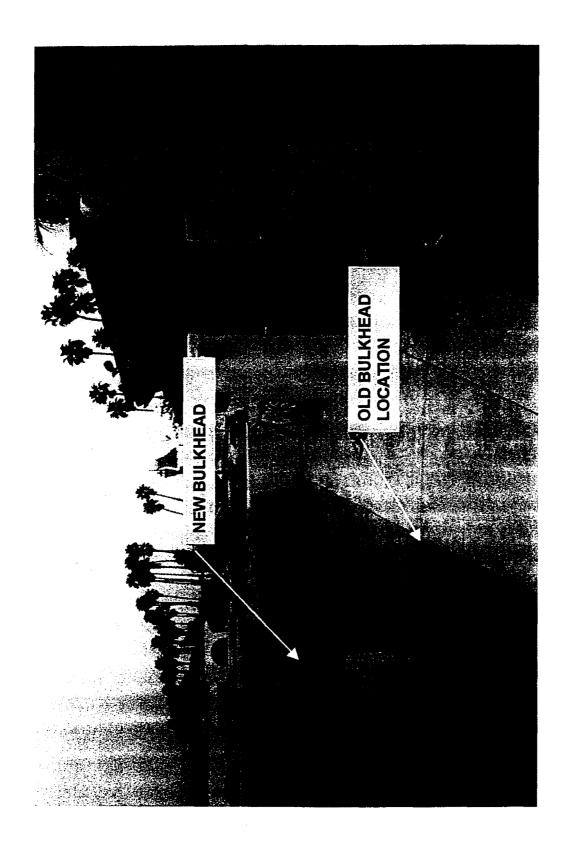
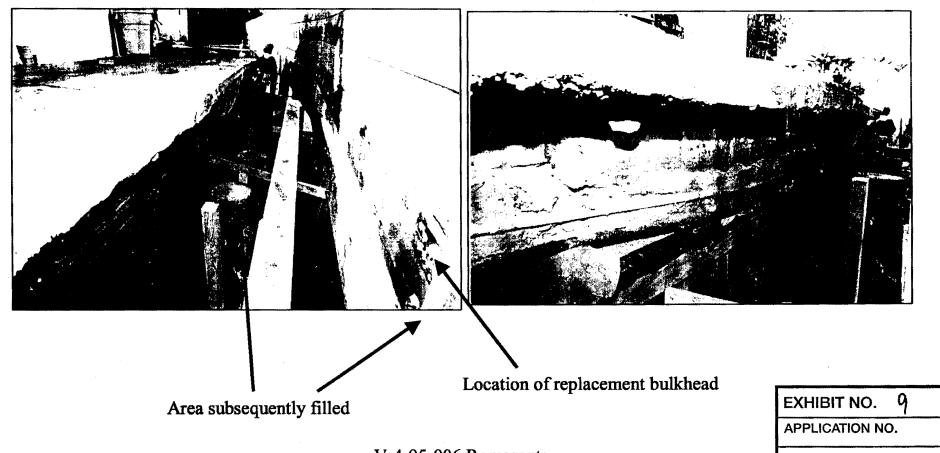


Photo 6 - After Construction Condition - Looking Towards State Street



Photo 7 - During Construction - Upstream Connection to Existing Bulkhead

Photographs Taken during Construction of New Bulkhead (January or February 1995)



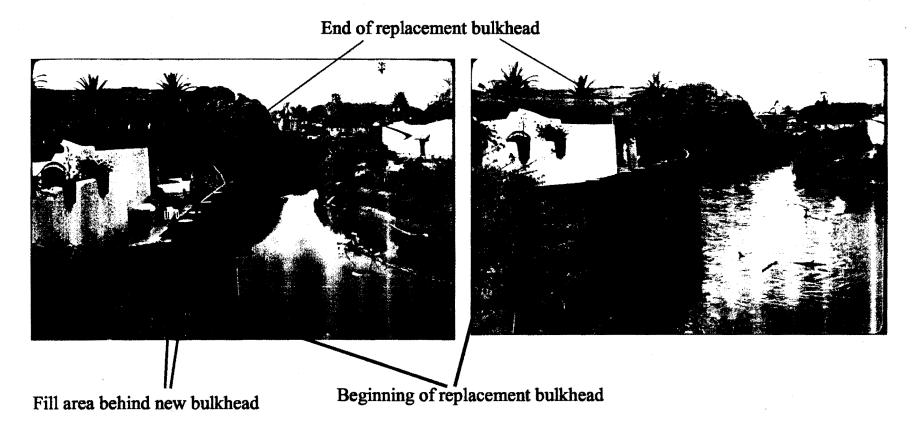
V-4-95-006 Romasanta

4-95-103

Photographs taken from the State St. Bridge in March 1995 after Construction of Bulkhead Completed

March 8, 1995 View of bulkhead and fill area

March 13, 1995 view of bulkhead during higher flow period



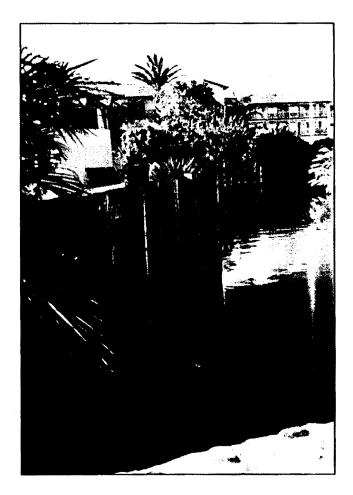
V-4-95-006 Romasanta

Views from State St. Bridge of Romasanta Violation

Replacement bulkhead during low flow period in 1995



12/3/98 photograph of replacement bulkhead with fill area being used by a restaurant employee to clean screens

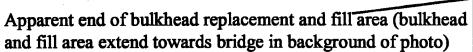


V-4-95-006 Romasanta

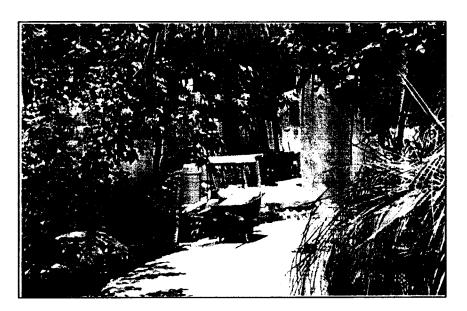
Photographs of Romasanta Violation Taken on July 18, 2001

Bulkhead with plywood boards added, presumably to hide views of construction (view from State St. Bridge) Area behind bulkhead, subject to on-going construction, and storage of construction materials





View of vegetation, path behind bulkhead





V-4-95-006 Romasanta

